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**REPRESENTATIONS OF TEENAGERS ABOUT SCHOOL OF THE  
FUTURE**

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**Abstract**

The article discusses the ideas that exist regarding the transformation of school education as a social institution in the present and future, implemented in the format of mass education. The aim of the study was to identify the perceptions of adolescents about the school of the future and to determine the common and different between these perceptions among students of different historical eras. For comparison, statements were taken about the school of the future adolescents of the late 1970s and early 2010s. The assumption was tested that these ideas will be based on knowledge and personal experience interacting with new technologies, and the nature of the interaction will determine the features of these ideas. A comparative analysis showed the existence of common and different in the ideas of adolescents about the school of the future: the common is to preserve the basic elements of a traditional school, provided they are equipped with new technologies; different - in the personification of the educational process for adolescents of our time and the presence of conflicts for adolescents from the 20th century. The views of adolescents of the 21st century are more dependent on their experience of interacting with new technologies and less fantastic, and the views of adolescents of the second half of the 20th century have more unrealistic representations for the level of development of technologies of that time.

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*Keywords:* Adolescents, education, digitalization, ideas about the school of the future



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## 1. Introduction

The phrase “The future is closer than we think” fully describes the speed of changes in the modern world. It is changing, taking all that is its pillars. These include modern education and its basic component - the traditional comprehensive school.

In connection with the change in the next technological structure, the classroom lesson system, founded by the great enlightener Ya.A. Komensky began to be recognized by a number of researchers as having lost its relevance. Authoritarianism is noted, the lack of an individual approach is taken into account along with its positive aspects (Akhmedov, 2014); frontal education is rejected, the transition to its individualization within the framework of the general educational team is put forward (Lebedintsev, 2013). There is a whole cohort of those among the figures of science and education, who advocate cardinal reforms of the education system and explain the resistance of part of society to these changes by their unwillingness to change the usual image of the school (Skripchenko, 2013).

What is the image of the school in the future? One of the options was proposed in the Education 2030 foresight project, which involves its customization - dividing into three inequitable and unequal levels: a school for future managers, a public school and a school for the lower classes (Evezrezov & Mayer, 2014a). It is assumed that the bulk of the training will take place in a game using smartphones and computers, outside the school taking a full day according to an individual plan (using augmented reality, using the effect of presence and staying in virtuality is immersive learning) for most students, and the school will provide basic knowledge (Evezrezov & Mayer, 2014b). The change plans include the use of the latest achievements in pharmacology, genetics and neurosurgery: from the use of biofeedback to the use of special drugs, the use of non-stop learning opportunities, the creation of genetic profiles and, finally, implantation. (Evezrezov & Mayer, 2014b). The main motto of education transformers is to ensure ease of learning and solving the issue of motivating students through the latest advances in science and technology (Koller, 2019). Another image of the school, based on the ideas of free education, is laid down in the School-Park educational system developed by M. Balaban, who believed that the classroom lesson system excludes the possibility of teaching children (Skripchenko, 2013). It is obvious that plans for the transformation of mass education lead to its reduction and intensification: in fact, it ceases to be mass, but remains high-quality, and on the other hand, while remaining mass it ceases to be education, regressing to elimination of illiteracy.

At the present stage of digitalization (Krylova et al., 2019), the school has been given the task of educating schoolchildren using digital technologies and equipment: personal computers with training programs that teach using multimedia technologies; various expert systems in subjects; remote industry knowledge bases and means of remote communication: e-mail, web conferences, chats, forums. Organization of education is provided by electronic diaries, class schedules; monitoring and assessing the quality of education. The developers suggest that all this will allow the student to determine the rhythm and pace of the exercise in accordance with their capabilities, which will serve the benefit; it is important that the teacher of the future possess the necessary competencies for teaching in the school of the future (Ally, 2019); the school requires smart teachers (Nikulenkov, 2020). However, the acute question is that a practical model is needed that describes the main elements of the school using digital technologies and

analyzing methods of working with them. Such a model is the IDI school, an innovative digital school model (Ilomäki & Lakkala, 2018). When thinking about projects related to the 21st century school, sixteen “weak signals” need to be considered, especially those related to personalizing instruction (McGrath & Fischetti, 2019).

The domestic practice of introducing digital technologies into school education dates back to 2016: then, an experiment to introduce new technologies started in Moscow schools. Modern Moscow schoolchildren know how they work: an interactive blackboard, homework in Moscow electronic school (MES), electronic diaries, journals that “write” themselves, some of the students have a laptop, tablet or smartphone, with which they connect with an interactive whiteboard and so on (Chetverikova, 2019). In the near future, the Internet of things will appear in the education system, in particular in higher education - Internet of things (Hodenkova, 2020). Best practices are being distributed now and will continue to apply to other regions of the country.

What image of the school seems most suitable for the future to our contemporaries?

## **2. Problem Statement**

The image of the future is associated with the active construction of its preferred option (Knyazev, 2010) and with the formation of the subject-object relationship of a person with the future (Naletova, 2014). Such construction through representations (secondary images) is largely based on the values and attitudes of a person and is limited by the possibilities of perception in the present, but the creative nature can lead him out of these limitations (Knyazev, 2010). On the one hand, the current perception of the future is associated with increasing nostalgia for the past, dissatisfaction with the future due to its increasing uncertainty and the loss of belief that in the future a person will be able to overcome expected and unexpected changes (Lowenthal, 1995), on the other hand, a vision of the future, which seems implausible is the first step towards its possibility (Huenteo, 2019). The ability to operate with categories of the future is so important for a person that disorders in episodic thinking about the future (about his personal future), associated with a number of mental disorders, are subjected to a targeted teaching effect that can have a positive effect (Hallford et al., 2020).

There are two forms of operating with phenomena of the past and future: individual and collective (Michaelian & Sutton, 2019). A study of collective perceptions of the future (Angheloiu et al., 2020) aimed at studying youth perceptions of the future showed their homogeneity and overindividualism. The difference between the past and the future is due to the certainty of the past and the openness of the future (Andreoletti, 2020) and to the peculiarities of the phenomenon of selfhood in them (Popa, 2017). In terms of deepening the temporal perspective of the future, one can cite examples of thoughts about changing the Martian culture of the colonialists regarding the different cultures of the Earth inhabitants of Mars (Szocik et al., 2020) and studying the influence of four factors (need, dignity, sympathy and similarity) in relation to their “I in the future” from the point of view of the relationship “as to oneself” or “as to another” (Molouki & Bartels, 2020), as well as feelings of connection with the future “I” and ideas about personal future, when the presence of a closer connection affected the episodic richness of the imagined future (McCuea et al., 2019). Thus, in science there are ideas about the importance of studying ideas about the future and the

factors influencing these ideas, starting from the closest to the present moment, and that future, which may not happen during the lives of the generations now living.

The basis for shaping the image of the future is their own experience and those images contained in the representations of memory and imagination. These images are assimilated from works of art, however, we are not talking about the participatory design of fiction (Duggan et al., 2017) and communication with experienced people.

The modern young generation can absorb the images of the past era and be not only witnesses, but also participants in the current transformation processes, in particular, affecting school education, as they have the opportunity to get acquainted with technological innovations that are already used in a number of experimental schools and will be used in education in the near future. Novelties are exhibited at Technoparks, or are shown directly at schools in fact-finding classes. In technology parks, students are given the opportunity to participate in research and experiments, in the development and design of virtual worlds and robotics objects. In addition, children will learn about the possibilities of the near future at the household level. They already know the basics of digital technology. These ideas allow them to form ideas about the school of the future.

### **3. Research Questions**

- Variants of images that would form the basis of ideas about the school of the future for modern students, as well as for their predecessors, are diverse.

In our study, we intend to find out:

- What ideas about the school of the future are common for schoolchildren from the 20th and 21st centuries.
- What is different in these views?
- The grounds on which the ideas about the school of the future are based.
- The measure of remoteness of ideas about technological achievements in the school of the future from the corresponding modernity.

### **4. Purpose of the Study**

The purpose of this study is to identify students' perceptions of the fate of the school in the future. We suggested that these ideas will be based to a greater extent on the knowledge and personal experience of interacting with new technologies, and the nature of this interaction will determine the characteristics of the representations themselves.

### **5. Research Methods**

A method was used to analyze the statements of students from different historical periods presented in the media with a further comparison of these ideas among themselves to identify the features of ideas about the school of the future.

The material for the study was taken from the writings of adolescents from a secondary school in a small northern city, published in the district newspaper in 1979 and the statements of adolescents studying at non-mass secondary schools published on the Internet in 2013.

## 6. Findings

The article “School and a teenager in the XXI century”, published in the regional newspaper of a small northern town, in the fall of 1979, contains excerpts from the works of seventh graders on the theme: “School and a teenager in the 21st century”. The editors of the newspaper identified six categories in essays: about the school of the future, about the duration of studies in it, about the availability of lessons and grades, about technical means of instruction, about holidays, classes, conflicts between children and what to take to the future school from the present.

According to students, the school will change dramatically in the future (Shkola i podrostok v XXI veke, 1979): lessons will be organized in the study area, for example, in history or geography. Duration of training will be reduced, new subjects will appear, the amount of knowledge and requirements for them will increase by a multiple, the lesson schedule and grades will change, the latter may possibly be canceled as unnecessary. “Inborn knowledge” will appear. Complex machines will come to the aid of the teacher, although perhaps a robot will replace him. However, an adult will observe order and discipline. But there is an option of a “room” robot, which will teach at home, following a certain schedule. In the school of the future there will be many circles and thematic schools, swimming pools; excursions to different parts of the Earth will be conducted. Disputes and conflicts with adults will remain. The school of the future should preserve the protection of historical memory, patronage of work, teachers, friendship, cheerfulness and fun, equality, knowledge of the world and holidays.

The Internet published the opinions of schoolchildren in the early 2010s about what awaits education in the future. The schoolchildren felt that the school would become more technologically advanced, its organization would change radically: the training would become personified, according to interests, non-practical knowledge would be thrown out; the students will compose a schedule for themselves and study subjects at a convenient time online or watch a video of a missed lesson. New practice-oriented project objects will appear. Perhaps training will become a team one, including for the implementation of the project students with interests in different fields of knowledge. Self-study will be allocated more time. Textbooks, exercise books will be placed on tablets, there will be more illustrations, moreover dynamic ones; a physical education lesson will be held by a hologram. The use of an implanted chip evokes conflicting feelings: on the one hand, the desire to learn everything at once and without effort, on the other, the fear of losing interest in knowledge and their individual perception. Some schoolchildren indicate that digital technologies should be available only from a certain age: elementary school students need to learn school knowledge the old fashioned way. Teachers will play the role of tutors, assistants, and the student will decide on the content of the lesson. It is expected that teachers will remain, they will not be replaced by robots, but they will become kinder and will teach interestingly. Some students believe that the teacher will not lose his role as mentor and leader-inspirer and educator. Students are aware of the limitations of technology compared to humans. The grading system will be changed - everyone will evaluate the projects: both students and teachers, perhaps the USE system will remain. Circles and additional classes are not

selected as a separate category, but are included in the sphere of choice of the student, who determines the schedule. Some schoolchildren believe that the school as a physical object will be preserved, partly - that learning will be virtual. A description of the school as a building is not provided in these answers. Students believe that live communication will be replaced by virtual, networked. Some of them regret it.

## 7. Conclusion

There are images of the school, the traditional and the school of the future in the modern information and cultural spaces. The ideas of the transformation of the modern school of varying degrees of their radicalism and revolutionism have been present in the professional community and pro-government circles for more than a dozen years. And only in recent years, the possibility of realizing the most radical of them was close to realizing.

Our study showed that ideas about the school of the future adolescents of the late 70s last century and the beginning of the 10s. of our century relate in many respects to the same categories: the educational process, knowledge, teacher, communication, control, self-realization.

The common idea of the school of the future is that all adolescents anticipated changes in the volume and content of knowledge and did not deny their significance; most of them considered the figure of the teacher to be important; most adolescents imagined moving in space over considerable distances to obtain knowledge from primary sources; an important need for all adolescents remains the desire for greater freedom and a decrease in control over them, however, many recognize its necessity. Live communication remains important.

The differences between the ideas are that adolescents from the 21st century consider it important to personalize education, following their desires and preferences in obtaining knowledge. Teens from the 20th century acknowledge conflicts in a future school.

In general, the ideas about the school of the future teenagers of the last century are more fantastic than the ideas of teenagers from the 21st century. The ideas of the latter are mainly based on their acquaintance with technical innovations and the presence of ideas about other educational experience.

Basically, the assumptions about the results of the study were confirmed: ideas about the school of the future largely depend on the social and cultural situations and living conditions of adolescents, on the filling of their information space with information about possible options and scenarios for the future. We see that a lot of the fantasies of these teenagers have come true or are starting to come true from the height of today.

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