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# Problems of Teaching "Digital" Children

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#### Abstract

The article analyzes various pedagogical systems that are used to educate modern children. The authors compare the pedagogical systems of a traditional school, Waldorf schools, Zankov's school, Russian classical school, online schools and home schooling. The study revealed differences in the levels of educational motivation of students studying in classes with different pedagogical systems, significant differences in the hierarchies of values of students and their psychological well-being.

Keywords: education, culture, digital children, psychological characteristics, pedagogical system.

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#### Introduction

Current negative trends in education, such as a decrease in the quality of knowledge, increased conflicts between teachers, students and parents, an increasing amount of information with a decreasing motivation for learning, indicate that the modern school does not take into account the main social changes and needs of modern society and ignores the psychological characteristics of digital children. First, scientists include superficiality and fragmentation of thinking, introversion in real space, a change in value orientations from idealism (I want to become an astronaut, I like to study in general) to pragmatism in choosing a profession and attitude to education (I will only study what I need).

The problem, in our opinion, lies in the choice of such an approach to the education of modern children, which would not only take into account modern technological achievements and the specifics of digital children, but would also allow these children to socialize in real space while maintaining the traditional value system.

## Purpose and objectives of the study

The purpose of the article is to identify key positions in the secondary education of modern children and adolescents.

## Literature review

Consider the most common approaches to education today. These include the "traditional" form of education (accepted in ordinary state comprehensive schools), home schooling, and Waldorf pedagogy. By home schooling, we mean any form of home-based education (home schooling itself, family education, and distance learning). Additionally, training will be considered on Zankov's system and on the restored system of the classical Russian school (Zankov, 1999).

# "Traditional" school

1. An ordinary modern public school can be called "traditional" very conditionally (Zimnyaya, 2008). Indeed, the education system that prevailed in the Soviet era experienced significant changes. However, some problems remained: the modern system of school education is mainly aimed at the transfer of knowledge, and the information transmitted to students does not largely correspond not only to their current interests and needs that they will have at the end of school in connection with entering an adult life, but also the needs of modern society; the form of supply of material does not correspond to the conditions

of the present. Indeed, children quickly learn how to find the information they need on the Internet. In this situation, the ability to critically analyze inconsistent material, separate facts from their interpretations, and structure the information received in the mind comes to the forefront, while revealing the relationship between different information.

In addition, in the supply of educational material there is no worldview integrity. This is the Russian language, this is physics, and this is geography, biology, mathematics.

In the minds of children, different subjects are little related. As a result, a holistic picture of the world is not formed, in the knowledge of which various educational disciplines would mutually complement each other. This circumstance exacerbates the fragmentation mentioned above, which is characteristic of the worldview of modern children. There is also an inverse relationship: the fragmentation of children's worldviews is exacerbated by the fragmentation of school subjects.

Of course, we have not indicated here all the causes of the crisis in the traditional school system. However, this is enough for this study. It is important to note that the considered education system is officially considered as a standard for all other educational projects.

## **Online learning**

Online learning is gaining in popularity. Its indisputable advantages include accessibility, the absence of problems associated with moving to the physical location of the school, the ability (for school) to attract good teachers to teaching, and for students the opportunity to listen to lectures (lessons) and receive advice from these teachers, even when being far from outback or in a medical institution. There is also the opportunity at a time convenient for the student to listen to the lesson even to pass the test certification (with the exception of final exams). The possibility of free time planning opens up new opportunities for the child to develop circles, trips, communication, hobbies and more. Thanks to this, the life of the child as a whole can become more eventful and interesting. Thus, more favorable conditions are created for the formation of the personality of the child. Of course, this happens on the condition that the parents contribute to this process, especially until they reach older teens or younger teens.

At the same time, during distance learning, the formalization of the educational process is strengthened (compared to a regular school) and the factor of human contact with the teacher is weakened (almost to its complete disappearance). There is completely no experience of belonging to the collective of the class and interpersonal relations in the class. Subsequently, this can lead to problems of socialization, especially

socialization in the team. Of course, this can be avoided if the child finds himself in another team, such as a circle, sports team, etc.

## Full-time study at home (home and family)

Home schooling is permitted only if the child has the appropriate medical conditions. At the same time, teachers of a regular school visit the student. There are advantages of individual learning (personal contact, a higher opportunity to receive answers to questions) and its disadvantages (lack of communication with peers, participation in class life, etc.).

The family form of education is different in that it is available for any healthy child. Parents must attach the child to the school, the charter of which provides for the possibility of family education.

Further, parents are faced with a choice: educate the child themselves or invite teachers. In the first case, parents are faced with a psychological problem associated with the combination of two roles: the teacher and the parent. These roles may conflict with each other.

Indeed, the teacher sometimes needs to be strict and uncompromising in his pedagogical exactingness. The role of the parent is to psychologically support the child with his unconditional love and acceptance. Such a balance creates favorable conditions for successful learning.

If the parent assumes the role of teacher, then this can lead either to conflict with the child or to connivance. The conflict with the child is associated with the internal conflict of the parent, since his affectionate part remains unmanifest. If this happens regularly, it is fraught with deformation of the identity of the parent and his relationship with the child. If the roles of teacher and loving are shared between parents, it is likely to deform family relationships and conflicts between parents and family relationships, where on one side there is a parent teacher and family members supporting him, and on the other a loving parent with a child and those who support them.

It follows the natural conclusion that comes with the majority of parents who have chosen a family form of education for their children: to hire teachers. For most parents, it's too expensive. That's why many parents join with their own kind to hire teachers together.

This option reduces the cost of training to an affordable level while hiring suitable teachers. The advantages of this kind of education compared to a regular school are the ability to conduct education in a more suitable form for children and parents, to take more into account the individual characteristics of children, their need for movement and age-appropriate manner of education, to apply non-traditional

pedagogical approaches. Of course, the official requirements remain the same as in a normal "traditional" school, but there is ample scope to level the shortcomings of the latter.

## Classical Russian school

The approach of the classical Russian school, based on the pedagogy of Ushinsky (Konduktorova, 2016), is now taking on a new life. This approach is based on the development of interest in school knowledge through the combination of theory and practice, education based on the work of morality, as a combination of discipline, humanity, honesty and diligence, as well as self-esteem combined with modesty. The basis includes high demands on the teacher: the integrity of his personality, the sincerity of the soul and the child's freshness of perception, characteristic of people inquisitive and inquisitive. Thus, we are talking about the importance of the teacher's personal contact with the students. Ushinsky's approach is quite consistent with the modern orientation towards the humanization of education. Fundamentally and to this day it is relevant to consider the preparation of students for adult life as the main task of education. The value of the family and the care of the transmission of national culture to children, first of all the native language in all its richness, as well as the combination of mental, moral and physical development are also relevant.

Gus'kova (2016) concludes that the modern domestic school follows the principles of education developed by Ushinsky. The above does not allow us to fully accept this statement. However, there is a significant caveat: the norms of modern national education provide many opportunities to apply in practice both the pedagogical principles of Ushinsky and many other approaches.

Waldorf's pedagogical system (Pegov, 2016) is quite well known and finds its use in Russia. It is based on the Anthroposophical representations of R. Steiner in the early 20th century and has become widespread in Germany, Austria and some Scandinavian countries.

The undeniable advantage of this approach is the focus on the development of the child. Much attention is paid to the development not only of intelligence, but also of emotional sphere and physicality, and most importantly the interaction of these spheres. Much importance is attached to acquiring the practical skills associated with the knowledge gained. Interesting method of time periods ("epochs"), when the child is fully immersed in a certain subject (training discipline) and lives it. This contributes to the deep assimilation of the material based on the "residence" of the child's entire mental system (Vygotskij, 2009).

The primacy of the principle "Not information, but the pursuit of truth" determines the form of learning. Students are encouraged to learn on their own and to identify patterns. Based on understanding their own

observations and studies, children formulate the pattern they discovered. On this basis, they understand the laws of nature. Students record their research and results in homemade textbooks, replacing them with ordinary school textbooks. In this way, creative independence develops.

Based on this, you may get an impression about the idealness of Waldorf system (Pinskij, 2003). However, it is not without its drawbacks. The main problem faced by students of Waldorf schools is that many Waldorf schools in Russia do not have high schools. As a result, the pupil has to go to a regular school when he reaches the appropriate age. Adapting to a regular school after the usual conditions of the Waldorf school can be very difficult.

Vasil'ev (2007) quite rightly criticizes the Anthroposophical ideas of the physical world that have become ridiculous from the point of view of modern science. In the case of Waldorf education, however, he noted only some risk that such views might be broadcast to students. At the same time, he also notes that almost in Waldorf schools this is not done.

## Zankov's System

Zankov's system (Zankov, 1999) is focused on optimizing the development of the intellectual, emotional and moral spheres of students' personality. The main focus here is on combining the difficulties of learning (working in the "near-development zone", aimed at developing the individual abilities of each student, with care in relation to his inner world. The complexity (systemicity) of development is provided by a combination of a whole set of tasks in one task. The liveliness of learning is due to practical experiments and discussions. The pace of learning is high.

As a result, children develop faster than in a normal school, more independent and creative. In addition to the high requirements for students, the system of Zankov imposes high demands on teachers. They should be creative, proactive, respectful and loving children, psychological (they need to see the makings of a child, and establish mental contact with him). This is the main drawback of this system.

Other drawbacks include a large amount of homework, the difficulty of the material and the lack of its consolidation due to the minimization of repetitions passed. It can be difficult for a child who has missed a few days to catch up. However, there are virtually no of the above-mentioned shortcomings of the ordinary school in the system, except the orientation of physical education mainly on sport and possibly. The approach is good for children, which combine curiosity, ingenuity and creative activity. Of course, if you have a good teacher specializing in this approach.

## Methodology

The study involved 344 respondents, of which primary school students (173 respondents); students in grades 5–9 (87 respondents), students in grades 10–11 (84 respondents). The study used the following diagnostic tools:

Research methods: theoretical analysis, analysis of documents (class journals), stating experiment a block of psychodiagnostic methods and questionnaires for studying the motivation of students; a block of methods for studying the value orientations of students of different ages (Rokeach method (2000) and its modification for primary school); interviews to determine the general psychological climate, sociometry to determine the sociometric status of the student and the structure of the group.

# Experiment description and procedure

The experiment took place in two stages. In the first phase, groups of respondents were singled out in the form of education and the relevant educational programs were analyzed. In the second stage, respondents of the identified groups analyzed the state of psychological protection in the educational environment, educational motivation, values orientations, and sociometric indicators.

# Results

In the first phase, six groups of schoolchildren were allocated on priority education: the first group was students of a traditional school (87 respondents); the second group is home-schooled students (56 children); the third group is students of online schools (68 children); the fourth group is students of the Russian classical school (48 pupils); the fifth group are students of Waldorf system (35 children), the sixth group are primary school students under the system of Zankov (50 schoolchildren).

It should be noted that in the fourth, fifth and sixth groups, in addition to the current students in grades 1 to 4, there were teenagers and high school students who had previously been enrolled in schools under these systems. Luskanova's method (Luskanova, 1999) of diagnosing educational motivation was applied to elementary school students [figure 1].

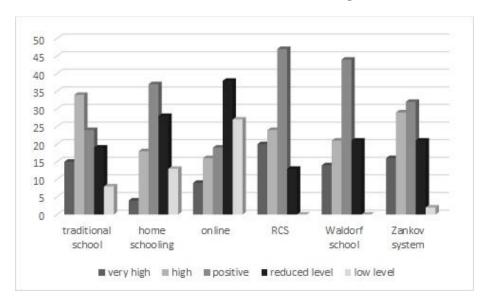


Figure 1. Distribution by school motivation levels of primary school students

As can be seen in picture 1, the largest number of students with a high level of educational motivation was revealed in the Russian Classical School (RCS) system. It should be noted that the decrease in motivation becomes apparent in the education of online and in some schoolchildren who are in home schooling.

The study found a tendency to reduce educational motivation in students already in primary school, regardless of the forms of education. However, reliable differences have already been revealed in second-graders. Children who study online and are home-schooled have lower motivations than their peers in experimental classes and traditional schools ( $\rho$  =0,05). In the third and fourth grades, the number of low motivated children prevailed in online schools and home schooling. The tendency to increase low-motivated children is becoming stronger.

The educational motivation of secondary and high school students was assessed by teachers who have more than 5 years of experience in the school, the results of questionnaires and the method of analysis of classroom journals. The study highlighted five levels of educational motivation, as in the case of primary school students.

In the course of the study, we analyzed the educational motivation of students who were in the 5 to 11 grades in a traditional school, but in elementary school studied on one of the experimental programs [figure 2].

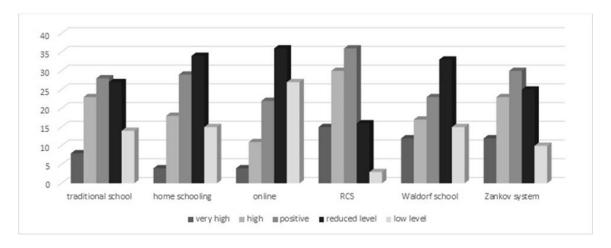


Figure 2. Distribution by school motivation levels of students in grades 5 through 9

As can be seen in Figure 2, the most problematic groups are students who are in online and home teaching. There are certain problems for students studying in the traditional school from the first grade by the sixth grade the number of children with low educational motivation increases dramatically. The Russian Classical School is the most promising in terms of maintaining interest in learning. In grades 5 through 9, children with low learning motivation from those who had previously studied under the RCS system, no more than 19%. While Waldorf School has 48% of children with reduced educational motivation, and among schoolchildren enrolled in primary school under the system of Zankov 35%, traditional school 41%, children in home education 49%, education online 63%.

It should be noted that there are differences in the number of students with reduced motivation of high school and depending on the form of education: the traditional form of education - 54% of respondents, home form - 67% of respondents, when studying online - 66% of schoolchildren, in experimental classes according to the method of Zankov - 44%, Russian classical school - 25%, Waldorf School - 30%) [figure 3].

We explain this situation with the peculiarities of adolescence associated with a change in the leading type of activity and the peculiarities of training for each of these systems.

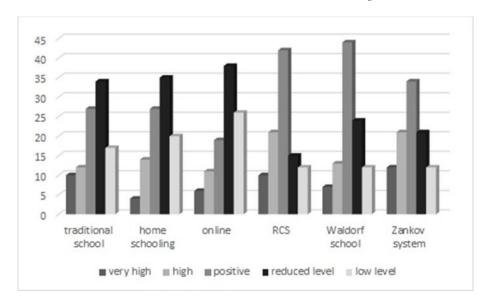


Figure 3. Distribution by school motivation levels of pupils in grades 10 through 11

A study of the student values system and the comparison of individual student value systems with the traditional value system revealed differences in the respective hierarchies and made it possible to highlight the leading values for each group, depending on the age and form of learning. Thus, for primary school students in the traditional form of education, the most important are the values of friendship (57% of respondents put them first in the hierarchy), the values of public recognition (52% of schoolchildren explain the desire for learning social motives), the values of an active life position (43% of schoolchildren note the importance of this value and put it in the third position). The values of cognition are in the top ten, but are not a priority for the entire sample of subjects.

For students in experimental classes, engaged in the methodology of the Russian Classical School the most preferable were the values of responsibility and cognition and (68% and 54% respectively). In third place is the value of friendship (51% of the subjects noted the importance of this goal).

For schoolchildren studying under the system of Zankov, the most relevant are the values of cognition (67% of the subjects put these values first), the values of friendship (59% of subjects put this value in first or second place), the value of public recognition chose more than 43% of subjects, putting it in the third place.

For 87% of schoolchildren studying online and at home schooling, all types of values are poorly expressed. However, in the conversation, the children mention the desire to return to the traditional school because they do not have enough communication with friends.

Students in grades 5 through 9 gravitate towards the values of communication and the importance of the Other. However, already at this age, more than 23% of students choose the values of learning. Comparative analysis of the value systems of adolescents in grades 5 through 9 did not reveal any reliable differences in the hierarchy of adolescent values, regardless of form and system of education.

At the same time, high school students have differences in the hierarchy of values depending on the previously selected forms of education.

Thus, for high school students of 10 through 11 classes of traditional form the most relevant values in the top three were the values of active, active life (61% of respondents), the values of love (60% of subjects this value indicates the first three positions; values of material well-being and the value of friendship 47% of the subjects note these values as leading). Values of knowledge, professional values are among the top ten of all subjects of this group, but do not occupy the first three places.

For senior students who are studying online, the values of friendship, freedom and creativity have become the most significant (choice in 1-3 places is 34%, 32%, 30%, respectively).

For senior students in home schooling, the first three values included the values of friendship, knowledge and creativity.

Interesting results of the study of values orientations in high school students, previously studying under the system of Zankov or the Russian Classical School. Interesting results of the study of values orientations in high school students, previously studying under the system of Zankov or the Russian Classical School. Thus, students of 10-11 classes, previously studying under the system of Zankov in the first place bring the values of knowledge, self-confidence, independence of judgment (56%, 51%, 48% respectively). High school students who previously study under the RCS system choose the values of cognition, vital wisdom, independence as independence in judgments and assessments (66%, 63%, 58% respectively).

The study showed differences in the values of students of different ages depending on the choice of the learning system.

Another important aspect of the study of students' psychological comfort was the study of sociometric status of students [figures 4-6].

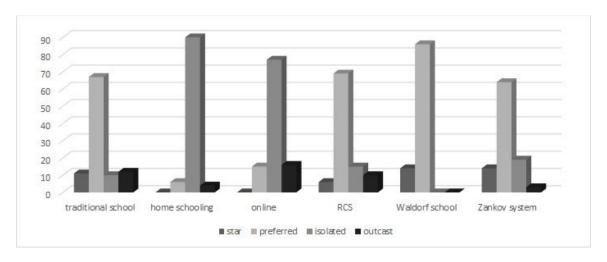


Figure 4. Sociometric picture in study groups (primary school)

As can be seen in Figure 4, the most problematic in primary school were children who were in home schooling and learning online. These children, naturally, have low sociometric statuses (often isolated) in classes to which they are attached and often suffer from a lack of communication.

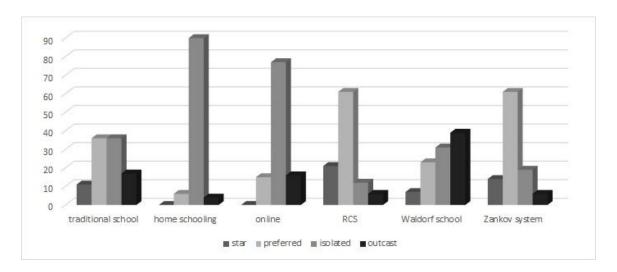


Figure 5. Sociometric picture in study groups (5-9 classes)

In the main secondary school, differences in sociometric structures are most pronounced. Adolescence plays an important role. It should be noted, however, that the number of low-status children was identified in the groups where the children from Waldorf School were enrolled; in a group of children with online and

home schooling. At the same time, children who had previously studied according to the methods of Waldorf School were the least prepared to interact with the class in a traditional school.

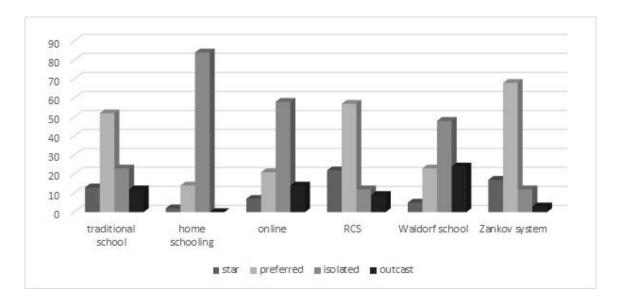


Figure 6. Sociometric picture in study groups (high school)

In high school, social statuses are aligned. The exceptions are high school students who were previously trained in the methods of Waldorf's School.

# **Discussions**

The study provided a number of issues that needed to be discussed:

The first question relates to the choice of a system of education for the current generation of children. Which system is the most productive and useful for schoolchildren?

The second issue relates to modern requirements for the upbringing of children. How is the educational component of each learning system taken into account?

## Conclusion

1. Existing forms of education for modern children and adolescents actualyze the contradiction between the technologicalization and universalization of education on the one hand and the need for individual approach and human contact on the other.

2. The approach to the education of modern children and adolescents should take into account their psychological readiness for this education it is educational motivation, place of education in the system of values of the child and society and their consistency, the peculiarities of perception of educational material and the degree of psychological comfort of the student in the learning process.

#### Recommendations

The results allow you to choose the most effective form of implementation of educational programs, taking into account the characteristics of students.

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