

The impact of the COVID-19 on the formation of a new type of higher school

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Abstract. The article analyzes the problems of modern higher school that trains personnel for the agro-industrial complex functioning, which were manifested by the COVID-19 coronavirus pandemic, which with the 1st and 2nd World Wars, has become an event of a planetary scale, revealing not only the school problems, but also the societal problems of the entire global megasocium. It has generated a lot of discussions about creation of a new person type, a new educational space and universities without teachers. "Pedagogical relations" are a type of social relations with all the internal contradictions of society (political, economic, demographic, social, ethnic, religious, gender, etc.) and external contradictions of nature and man himself. The mental, existential and moral security of the individual is under threat. Such problems include the forced return to home schooling, transition to distance learning, which in turn has certain inconveniences for students and teachers. At the same time, attention is paid to such a social background as the growth of conditions for working remotely at home, alternating work at home with work in institutions. The factor of working at home allows family members, including students, not only to communicate more, but also to bring closer the learning process and material and spiritual production in the likely prospect.

1 Introduction

The pandemic did not cause so many new problems, as it exacerbated the ones of human civilization development already existing at the beginning of the 3rd millennium. First of all, its eternal problem – the problem of production. Production, in the broadest sense, represents the unity of two processes: the first is the production of material and spiritual conditions of human life and the second is the production of man himself. And only in the unity of these processes a society appears: primitive ("simple") or complicated.

The manifestations in time and space of human relations/interactions (synergy, cooperation, competition, exploitation, struggle, etc.) are fixed in the form of being in various societies. Societies include: megasociums are the global human civilization (currently loose, but still already a planetary community, experiencing an intense but painful process of formation), regional civilizations, the system of international relations, interstate unions (interactions), supranational organizations, macro-societies – states, large social groups; microsociums are small groups (collectives) and individuals. We also consider an individual

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as a special society or personality, as a set of all social relations. All social systems are considered to be open super-complex systems. A primitive society is called "simple" conditionally, therefore, quotation marks are used in the name. The problem is that real "pedagogical relations" do not meet the needs of a modern man, and are not able to solve educational tasks in the conditions of a changed image of the world, in which all kinds of social relations, including pedagogical ones, become a resource for human creation, especially taking into account the virtualization of life in the conditions of overcoming the consequences of the pandemic.

2 Materials and methods

It is advisable to use philosophical methods and principles: dialectical, systemic, structural and functional as well as comparative studies and combinations of the concrete historical and logical. The methodological principle of historicism will allow us to consider the evolution of the school in various types of society in close connection with the history of our country. Within the framework of the socio-philosophical approach, the school will be considered as a type of social relations and the dominant of educational activity, where heterogeneous groups, subjects of education with different goals, tasks and interests interact non-linearly in a single space of society. The main principles of the socio-historical approach are: consideration of the subjects of pedagogical relations as the main subjects of higher education, identification of the features of interaction in the field of higher education of paired communities of students and teachers of students and trainees as well as the impact on the educational process of family, production, business, culture, science, management, etc. The content analysis is used in order to analyze a large amount of texts during the research. The study uses the analysis of social synergetics interdisciplinary principles of the synergetic approach: duality, complementarity, complexity, fractality, nonlinearity, polyfundamentality, holism as well as constructive ideas of the theory of fractals that complement synergetics in the context of the proposed approach to derive particular research principles. The materials and methods of empirical research are the assessments of ideas about the expected models of "pedagogical relations" in modern digital society and the risk factors formed by them, which are the costs of digitalization in pedagogical practices, changed working conditions, the economic downturn after the pandemic, on the materials of articles in magazines and newspapers, sources on the Internet, from the largest sites for teachers and students, the target audience is the professional community of teachers as well as students of different levels, in the headings of articles and comments, which contained the keywords "modern learning models", "forms of interaction of subjects of the educational space", "risks of digital learning", "inclusive education", "distrust in pedagogical practices", "communicative distancing in the educational space", "problems of employment of graduates", "teachers' salaries", "part-time work", "loads", "personnel", "stress" in the pedagogical space, "features of work in a pandemic" and others that meet the criteria for analyzing the necessary factors.

3 Results

In a "simple" society the unity of production of the material and spiritual conditions of human existence and of man himself was natural. Children grew up around their closest relatives and were involved not only in the process of consuming products of production, but also gradually in the production process itself, watching adults and learning from them. The oldest and easiest way to get children in production is to involve them in picking berries and mushrooms in their garden or in the forest. A little more difficult is to teach how to fish.

In our country the majority of the population were peasants until the beginning of the twentieth century, thus, i.e. by gradually attracting their children to work on their farm, implemented the process of socialization, which at the same time was a technology of human production in an agrarian society. But in a complex society there can be a single system of human production no longer. To meet the needs of dominant social groups (classes) even within the framework of an agrarian society, the institution of a school arises and, consequently, educational systems are formed (the concept of a school as a social institution is broader than the concept of an "education system"). The education received at school allows to change (raise) the status of its bearer under certain conditions. An institutionalized school in the scale of society with the content of its proposed education and upbringing becomes an additional factor to production in a broad sense, influencing human production, social achievements or failures of a particular state.

3.1 School as a model of scientific society

The appearance of the school did not completely annul the forms of home education and education, but reduced the space of its (home education) influence, reduced the quality of consistency of pedagogical and social impact on the emerging personality. It contributed to the emergence of the problem of different generations (fathers and children). The formed students' personalities either break away from the family for a long time in closed educational institutions or they are outside the family for a long time during the day. But we emphasize: the primary education and education of the ruling classes in the Middle Ages was also, as a rule, at home. And then education continued after graduation and upbringing. It continued outside the school in the process of improving the social functions (warrior, official, judge), i.e. the developing personality further uses society as a school (school of life).

The needs of improving human production in industrial society contributed to a clear differentiation of schools by levels: primary, secondary and higher. The trend of breeding home and school (public) education is increasing. Mass school focuses mainly on the task of assimilation of academic knowledge, the organicity, naturalness, inclusion of learning in the production, activity, creative process is lost.

However, this aspect of learning is preserved in the institute of apprenticeship or mentoring: in the relationship of a master and a student (apprentice). This institute moved from a medieval workshop and moved to large factories and factories. We have always had master students in the field of art. The preparation by scientists of their replacement from the most talented students is also, in fact, still carried out according to the same scheme: a master (professor) and an apprentice (graduate student, assistant). Once established, the school becomes an instrument of politics in the hands of the dominant classes.

The school of industrial society (and today this type of school dominates) is at the peak of separation from the family and separation of the learning process (consisting mainly of academic studies), from inclusion in the labor production process for schoolchildren. Despite the fact that the academic load on students of children and adolescents has increased and is increasing, most children are not engaged in real work, but the most conscientious of them are suffocating under the weight of academic load, which adversely affects their health, their physical development. Despite the fact that unscrupulous students do not study and do not receive work skills, it is unfavorable for the process of moral education. However, secondary vocational educational institutions are in a more advantageous position: they allow younger family members to get involved in the work process faster.

3.2 School of education

Since the end of the 2nd and the beginning of the 3rd millennia, the information society has been declaring the need for a new school. Is it possible to achieve the degree of synergy, the unity of the production of objective conditions of human existence and the production of man himself, which existed in a "simple" society today? It seems to us that some trends that are already emerging today allow us to answer this question positively. The concept of "information society" seems to us not quite accurate. But we will use it. Due to its popularity. Although, in our opinion, the term "scientific society" is closer to defining the essence of the emerging new stage of social development, but it is not entirely accurate either. It is assumed that the most accurate project of a new school could be defined as follows: school as a model of a society of real humanism.

Pandemic. The pandemic of the COVID-19 coronavirus and new strains do not just interfere with the normal functioning of the school, they reveal the overall inconsistency of higher school that trains personnel for the agro-industrial complex with the requirements of modern society [1-7]. Whatever versions are put forward regarding the causes of its ("COVID-19") occurrence, its appearance in itself is evidence of the weakness of human civilization in the face of planetary challenges. No matter how hostile the countries and peoples inhabiting the planet Earth are to each other, all States, all peoples, regardless of their economic and geographical location, suffer to one degree or another from the pandemic. In this regard, the pandemic is one of the last signals, bells, reminding humanity that it is no longer possible to live in enmity on the planet Earth. But the pandemic is probably not the most terrible test of human civilization before the upcoming planetary and cosmic challenges.

The main strategic goals of the formation of a new type of school should be sought in the society itself. Are there any trends in the development of society as a whole and the school itself as a social institution that indicate the possibility of forming a new school? We are in accordance with the synergetic paradigm and our goal is to identify these trends. The society that is commonly called "informational" is not a society of empty surfing in the information. This is a society of researchers, a society of science, a society for the search for knowledge in all its diversity, including non-scientific knowledge confirmed by practice and experience: religious, artistic, philosophical, ethical (moral), political. This is a society in which research and creative work become the main occupation of people.

Of course, the reality of bourgeois society orients scientists to subordinate research to the search for means to increase competitiveness, their laboratories, their institutes, universities, regions, countries. But on the scale of the earth's civilization, the development of knowledge is carried out not for the sake of rating, not for the sake of profit, but for the sake of predicting crises and catastrophes threatening man and nature, such as COVID-19, climate change, collisions with large meteorites, etc. And in modern conditions, the probability of threats of a socio-anthropological nature is especially increasing: environmental disasters, epidemics, (natural or artificial), military conflicts, the outbreak of a world hot war, etc.

The solution to the problems of the school, which the pandemic has discovered and exacerbated, lies in the creating conditions for synergy of the family, school, science, culture in general and production. The rationale for providing such conditions is the methodological provision on identity in a certain aspect of society and school.

Society as a School. The school as a fractal of society reproduces the main characteristics of society. If gathering and hunting are a vital activity in society, then the main goal for the "school" is the training of the collector and hunter, if agricultural production is vital in society, then the "school" is engaged in the training of farmers, if the leading activity is the invention of machines, mechanisms, then the school is engaged in the training of engineers, inventors, mechanics, masters of using various kinds of machines.

And at the same time, all elements of society as a living organism act as a school in relation to the individual. In society, almost all individuals are obliged to get the status of a

student, who is taught, and a student, who teaches, and be always ready to receive these statuses again and again; some professions oblige professionals to be both a teacher and a student at the same time: managers and bosses of different ranks, writers, journalists, production masters, etc. The student will already be able to consolidate the fruits of his apprenticeship in his student activity to the extent and to the extent that he himself learns to teach himself (to learn) and to teach others. In addition, the student teaches the teacher with his problems, i.e., while studying, he teaches (unconsciously). In the pedagogical space of society, each individual is a teacher and a student in one person, potentially or in reality.

4 Discussion results

There are already many areas in society in which professional activity is absolutely inseparable from the continuous replenishment of an employee with new knowledge: education, science, medicine, military affairs, public service, art. Modern production is also increasingly in need of workers who continuously replenish their knowledge: "Live forever – learn forever". This allocation of subject/object elements of the system means the coincidence of school and society. In a word, society as a whole, as a self-learning – self-developing system, is at the same time a space for the transformation of pedagogical relations into social ones, the basis of which is industrial relations [8-11].

The duality of society as a school. The pedagogical space of society as a school (society as a school of life) can perform both self-creating and self-destructive functions. The role of the technologically enhanced mass media is especially obvious in this regard. It is not for nothing that the militants of the banned organizations seek to attribute to themselves all the any noticeable atrocities committed by terrorist acts and report it on the air, send on the air footage depicting the executions of the prisoners who got to them. Such use of the media often becomes a source of darkness – lies and slander, misconceptions, superstitions. The goal of the militants is obvious – to sow terror in the ranks of their opponents, demoralize them, break the will to resist. One of the highest human scientific and technical achievements, instead of becoming a source of enlightenment, a source of light of knowledge, turns into a means of stupefying or debilitating.

In a complex society, the criminal world constantly strives to reproduce itself, creates schools for training criminal-type personalities. In the information society "bear hunters", "burglars" and other criminal "professionals" are being squeezed by new representatives of the criminal world: "black hackers". The emergence of the Internet has caused the practice of using it for criminal purposes and training criminal personalities, cybercriminals using the Internet and mobile communications for criminal purposes. Filling the media with fake and spam is negative in many respects. The first fiddle in this regard is played by information that claims to be advertising, but often is not.

In the interests of civil society every state should keep the content of mass media broadcasts (content) under control not political, but moral and legal. But this is not enough, it is necessary to fill the broadcasting with the content of the best world and national works, masterpieces for educational and educational purposes. For innovative, but controversial works and programs, platforms should be left, but the functioning of these platforms should be monitored and accompanied by an assessment of their content from different positions and notifications addressed to consumers regarding their goals [12-17].

Yes, society as a school (school of life) with the weakening of the government's attention to the problems of upbringing and education through the media can negatively affect the consciousness of the population, especially young people. And still, at the same time, only society as a school is the place where geniuses are born: prophets, scientists, inventors, generals, artists, politicians. A school without synergy with society is not capable of this. Why? Firstly, because society gives a request. Secondly, only society as a whole creates the

conditions necessary for the realization of the abilities of outstanding people. Outstanding personalities are equally harmful and excessively praised up to deification and excessive humiliation of them (harassment). There are many examples of this in history (the fate of Socrates, Jesus Christ, Giordano Bruno, Jan Huss, Martin Luther King and many other recognized and not recognized outstanding personalities). At the same time, the achievements of outstanding people (inventions, discoveries, creations) are wrong to consider them as only their personal achievements. They are universal.

At all times the school has claimed to be a school of education: education is not an end in itself, education is a means. And the core of education has always been ethical (moral) education. In this capacity society as a school appears as an ethical cognitive system and performs one of the functions that make up the essence of human existence: the generation and processing of moral information necessary for self-preservation and development /improvement of society.

People have always talked among themselves: about "good and bad", about due and deviations from it. Human conversations always have a direct or indirect relation to morality to some extent. I say it means, in the end, "I moralize". Moralizing means I lead a human social life and in this moralizing I summarize my social and life experience and set its probable parameters for the future. Human language is full of axiological modal motives. The presence of these motives gives him the opportunity to serve and be the language of "ethics". We refer to language not only the language of speaking (utterance), but also the language of action. While "moralizing" in the negative sense is limited only to speaking. So, the school of information society should be a school of education, not just education.

It is stated above that the information society is a society in which research and creative work become the main occupation of people. Consequently, the main direction of improvement and development of the school in the modern era is the preparation of the researcher and creator. The experience of functioning of such schools has already been and is. But still, these schools were and are mainly for the elite. In such schools, mostly already selected children study, who have shown and are showing abilities: musical, mathematical, artistic, etc. Only they have been and are getting into such schools. This selection of the most capable and talented children and young people is widespread all over the world. In Russia, for example, various elite educational institutions "Letovo" and Khoroshkola are quite widespread, separate elements of infrastructure have been formed, such as children's technoparks, CMITs, Sirius-type educational centers.

However, regarding this trend of selecting particularly gifted children, there are concerns that the work on identifying gifted children may be ruined by formalism. The very principle calling for dividing schoolchildren into gifted and everyone else is pernicious. Schools should provide equal educational opportunities for all children. The school education system in Finland is recognized as an example of such a system.

The Governor's Svetlensky Lyceum, functioning in Tomsk, stands out favorably against the background of elite educational institutions. This educational institution presents itself as elite in terms of the content of education and not in terms of the kind of students. In the lyceum, located in a suburban rural village, everyone studies. All schools should be elite in terms of the content of education. And then the identification of outstanding personalities will be much more effective. For in fact, elite educational institutions narrow the field of search by their closeness.

The school should be in interaction with material and spiritual production. A very important feature of the school of information society is the connection with material and spiritual production. The attachment to the production should ensure the interaction of the school with production enterprises, as well as organizations and institutions of state administration, self-government and culture: courts, theaters, museums, studios, etc. Acquaintance with the production or participation in it should take from half to one third of

the educational process. Perhaps, for one reason or another, the interaction is direct and remote. What gives reason to believe about the possibility of alternating educational and industrial work? In the pedagogical system created by A. S. Makarenko, pupils studied for 4 hours every day at school or at the faculty (i.e. in fact, at the university), and they worked for four hours in production (they produced power tools and FED cameras, from the implementation of which the collective of communards had the means for their maintenance, expansion of production, the self-financing introduced helped communards to see the fruits of their labor, they formed a sense of ownership).

All the above said can be summarized in the following Table 1.

Table 1. A new type of school.

A new type of school	
material production	spiritual production. culture
scientific knowledge generator	creative studio

In earlier publications we have already emphasized that "there are already many spheres in the society in which the professional activity is absolutely inseparable from the continuous replenishment of the employee with new knowledge: education, science, medicine, military affairs, civil service, art. The agro-industrial complex (AIC) has already belonged to such a sphere and increasingly needs employees who continuously enrich their knowledge" [18].

5 Conclusion

The school is not only a consumer, but also a generator of scientific knowledge. In the information society, the connection of a school with a university should not be a privilege of only some of them. Even if a school located in a rural hinterland, it should be connected with one or another university or maybe with two or three. And teachers and students should have access to laboratories, scientific institutes and university classrooms.

The school is a creative studio. Cultural and art organizations (museums, theaters, galleries, studios) also should become open areas for schoolchildren in a modern school. And they should be given the right to stay there not only as readers, listeners, viewers of finished works, but also as participants in creative processes.

The general conditions for the functioning of a school in a pandemic are determined by the government of a particular state. Some governments of countries closed their schools (192) or transferred to distance learning (50) – these figures are quoted by UNESCO, some were allowed to continue working as usual. But the universal problems of the information society will insist on the trends that determine the formation of a new school in which learning and the production process form a synergy:

1. Ensuring regular interaction between family and school, communication between parents, children and teachers.

2. Labor and creative activity, or acquaintance with it in one form or another, takes from one third to half of the school time of students.

3. Attaching all schools, not just selected ones, to universities and research institutes (at least remotely), providing opportunities for both teachers and students to attend laboratories and training sessions at attached universities.

4. Opening of production facilities at schools or attaching them to production enterprises as well as to organizations and institutions of state administration and self-government and culture: courts, theaters, museums, studios, etc.

5. Reducing the number of students in classes and groups, especially for the period of distance learning sessions.

6. Systematization of socio-humanitarian and natural science knowledge (philosophical, scientific and didactic) to facilitate their assimilation, their use and determination of the directions of human civilization development is the main academic goal of the school (both secondary and higher).

Overcoming negative trends is possible only by overcoming the fetishization of machines in the learning process, a real increase in interpersonal human communication in the teacher–student system, improving the quality of the teaching staff and the actual humanization of the educational space. The use of the possibilities of the information and pedagogical space of society as a school as a whole (for good or for harm) will depend on the conscientious or unscrupulous fulfillment of their duty by all those staying in the pedagogical space and realizing their stay in it as a duty to the country, humanity, God.

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