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SELF-ORGANIZATION OF CHILDREN OF THE DIGITAL GENERATION IN THE SYSTEM OF EDUCATION

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Abstract

The article refers the problem of self-organization of children belonging to the digital generation; the concept of self-organization in the sphere of education is described; the thesis of the ability to self-organization as the essential characteristic of the digital generation is justified. The authors conclusions basing on their own interpretation of the theory of generations considering Russian historical reality; they describe the contradictions between the participants of the educational relations and propose the ways of developing self-organization in the modern school. The effectiveness of the pedagogical activity today depends on understanding the request of the students for the attention to them from the teachers. The students think that it is related to the inability to present their subject brightly and clearly (40% of students share this opinion); to communicate with the children friendly and openly (37% of the respondents); to consider real needs and interests of the children (35% of the participants); to provide the space for self-independence and creativity, to give up excessive regulation and control (32% of respondents). The appeal of the digital generation is "Talk to us, understand our interests, give us more freedom of choice, trust us!" Thus, it is important to shorten the gap between the generations, to build up the bridges of cooperation, to create the conditions for self-organization of the children and adults, and that will help our school to correspond the actual challenges of the 21st century.

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1.   Introduction

A new generation is entering the system of education during the last decade. Those are the people who were born and grown up in the network society, which has been called the Digital generation. They are characterized by the fact that they do not just use the Internet, they live by means of it. According to the PhD in Psychology and the Doctor of Pedagogical Sciences Tsymbalenko (2018), today the new living environment of the humanity has been formed: the Internet-network and the information space in general are the extension, the emphasis of the personal and group social space. The research of the characteristics of the use of information-communication technologies in various online contexts by the modern Russian children and adolescents has allowed the group under the leadership of the corresponding member of the Russian Academy of Education, the Doctor of Psychological Sciences Soldatova (2018) making a number of conclusions concerning the phenomenon of media-multitasking and the mode of multitask activity of the children and adolescents. The digital world reality allowed to the researchers registering the emergence of the new situation of development of the modern child, the main component of which is the Internet.

The existing situation cannot be ignored in the interactions between different generations in the system of education. But before moving to this issue we would like to mention that it was noticed for the first time by the founders of the Theory of generations William Strauss and Niel Howe. The authors defined the category "generation" as the unity of all people who was born in a certain period of time or having passed during the same period one of the life phases: childhood, youth, the middle or the old age. In certain life phases the representatives of one generation share the same historical epoch, face the same key events, have same mutual beliefs and behavioural models (Howe & Strauss, 1991).

We have found it appropriate to interpret this theory considering the Russian reality and those historical events, that influenced the representatives of different generations and, first of all, those who now exist in the educational space. Each of those generations (the generation of the Children of the Victory – 1944-1957; the last Soviet generation – 1958-1978; the first post-Soviet generation – 1979-1999; the digital generation – 2000s) possess their special set of values, interests, characteristics. And although the contradictions between "fathers and sons" always existed, in the beginning of the 21st century they have aggravated considerably (Howe & Strauss, 1991). Today's senior students are not just the Internet-generation, they are the network generation, and that fact explains the priority of the horizontal system of relations against the vertical ones.

Because of the "network origin" of the modern children and adolescents it is impossible to make them to do something. It is possible to create conditions for their self-organization. However, this idea is accepted by the parents and pedagogues with difficulty and that leads to various conflicts either at school or at home.

Thus, the research aimed at studying the essence of self-organization, the principles and conditions of its development in the system of education, defining the most significant characteristics of the digital generation and other issues get a special priority. The current work describes the results of the long-term fundamental research carried out in the Institute of Studying Childhood, Family and Nurture of the Russian Academy of Education under the leadership of M. R. Miroshkina "Theoretical and methodological basics of self-organization of children and adults" № 27.9389.2017/8.9 (Evladova, 2016, 2018; Lobyntseva, 2017a,b; Miroshkina, 2017a,b,c,d; Rozhkov, 2002).

First of all, this scientific work has allowed establishing the fact that the digital generation exists on the basis of self-organization due to which they realize their essential needs in the horizontal communication, the opportunities of choosing the direction of activity, easily exist in the conditions of instability and uncertainty which are typical for the modern world.

2. Problem Statement

The education formed in the framework of the tasks of the 20th century has exhausted itself. Definitely, particular changes and particular innovations cannot help the situation. It is necessary to start thinking of designing new conceptions of education, reflected the essential requirements of the 21st century. One of the aspects of such conception can be the theory of self-organization: the direction, which is considered to be one of the most promising in the modern pedagogical theory and practice. Besides, it is self-organization, which is the most important characteristic of the digital generation.

However, the legal acts regulating education sometimes ignore this feature of the modern children and adolescents. Intending to regulate their life in the conditions of educational organizations their authors first of all are guided by the interests of the generation of the pedagogues and parents. That contains the basic contradiction of the modern pedagogy: the pedagogical efforts of the adults' community in mass practice are oriented on the self-preservation of the adults instead of actual development of a young man. Today the traditional for the Soviet pedagogy position of the adult "near and a bit further" a child is out of date. These are the children, who are a bit further. The 21st century is the time of their life. Self-organization is considered as the internal process, connected with realization of the goals of a person, or as the process integrating the activity of various groups of people.

Vital demands of addressing to those issues are connected with the changes of the character of the inter-generational connections where the teachers and parents represent other generations with other values and interests. The situation becomes cuter in the space of school where in the mass practice the traditional classes-and-lessons organization of activity and "knowledge" system of education dominates. The search of ways and of the most effective conditions of development of self-organization in the educational institutions will help to release the pressure between the generations, to master the skill of interacting with each other and finally, assist to creating the educational environment corresponding to the global demands of the 21st century.

3. Research Questions

3.1. What are the characteristics of the digital generation and main problems of their interaction with other members of the educational relations?

3.2. What are the principles and conditions of self-organization at school?

4. Purpose of the Study

Defining the pedagogical essence of self-organization of the children and adolescents; describing methodological basis and principles of its development in education, revealing the means of pedagogical support of self-organization of a child and self-organization of children's communities basing on the theory of generations and existential approach to nurture. The search for the points of divergence, concordance

and the points of growth of mutual understanding between the generations in the context of education and nurture.

5. Research Methods

The mass distance survey by questionnaire of the subjects of the modern educational relations in the Internet; analysis and interpretation of the Russian and foreign literature concerning the sphere of the research; studying the practice of self- organization of the subjects of educational relations in the educational organizations; defining the characteristics of inter-generational relations of the participants of the educational process: students; parents and teachers.

6. Findings

Our research of self-organization is based on the leading statements of the philosophy of self-organization (Branskiy & Pozharsky, 2003; Haken, 2003), on the existential approach to nurture (Rozhkov, 2002), concepts of synergetics of education and nurture (Knyazeva & Kurdyumov, 2011), concepts of pre-adaptation to uncertainty (Asmolov, 2017), conclusions of emergence of the new situation of development of a child Tsymbalenko (2018) and Soldatova (2018), actual approaches to designing modern programmes of nurture (Wagner, 2016).

Basing on the synergetic approach, we at the same time are marking out the following statements:

- Self-organization is the process of systematization of chaos, emerged as the result of breaching the existing symmetry. Chaos is inherent to all complex systems, in is their intrinsic quality. But the degree of the chaotic condition depends of the level of considering. Elements that seem to be chaotic on the micro-level reveal themselves in the form of the organized structure at the macro-level (Haken, 2003).

- Nurture potential of the social institutes of childhood: family, school, children's organization, adolescent-youth club, institution of optional education, is more resistant in the conditions of instability and risk if they are based on self-organization of their subjects.

Self-organization is considered by the most of the scientists as a kind of human activity, demanding a range of skills such as: planning, goal-setting, ranking, regulation etc. The result of self-organization as a process is personal self-discipline, which is the essential personality quality of the representative of the digital generation. Self- discipline like any other personality quality is understood as the holistic system of motivational-meaning as well as instrumental-style characteristics, existing in a certain relation with each other and demonstrating its complex, multidimensional functional organization.

Self-organization of children and adults in the system of education is considered by us as the process of transformation of the subjective uncertainty to the certainty as well as spontaneous creation of small informal social sectors (groups, associations, societies, teams), the source of which is the factor-impulse, the essence are effective mutual interactions for overcoming uncertainty and the basis of existence are the social interactions and intra-personal communication (Miroshkina, 2017a).

The contents of the adult's activity in the process of self-organization of children is in creating conditions for support and realization of the interest, aroused as the result of emergence of the factor-impulse, enhancement of interaction of the participants of self-organizing activity as well as the analysis of opportunities of development of the process of self-organization and creation new factor-impulses. We

reckon the following factors as the main potential of a child's or a young man's self-organization: 1. Social-adaption potential (knowledge of one's abilities and resources, finding one's own place in the system of social relations, recognizing the importance of a personal contribution in achieving common result); 2. Mobilization and motivating potential (developing goal-setting skills for a person and for a group; forming the value of achieving the goal; emotional experience of success as the result of making group and personal efforts); 3. Transforming and regulating potential (rise of effectiveness of solving life tasks, active progressive-creative change of activity methods, forming volition qualities and ability to personal self-organization).

Self-organization in the social aspect is the process of uniting people for achieving a group goal without specific external influence. The result of self- organization is emergence of new social connections, providing interaction of the participants of the activity and communication. Self-organization in children's communities has its own specifics. The children are constantly in interaction with the adults (parents, pedagogues etc.), regulating their activity. That is why self-organization of children always proceeds with this interaction as the background. Self-organization of communities of children and adults is considered by us as a spontaneous process of creation of small informal social sectors (groups, associations, societies, teams), the source of which is the factor-impulse, the essence are effective mutual interactions for overcoming uncertainty and the basis of existence are the social interactions and intra-personal communication. Self-organization emerges as the result of breaching the existing symmetry in the system of relations, activity, communication of children and adults, caused by the factor-impulse: an idea, an object, a phenomenon, an event, leading to arousal of interest in a person or in a group and "launching" the process of self-organization. The analogue of synergetic chaos in self-organization are the conditions of co-existence of children and adults on the basis of unstable and short- term emotional-psychological involvement, social interaction and intra-personal communications in a certain social space (place of living, school, educational institution, children's health-improving camp) (Miroshkina, 2017d; Lobyntseva, 2017a,b).

When observing the self-organization experience in the educational organizations of general and optional education of children, represented in various documents and publications on the web-sites of those organizations, different levels of self-organization have been marked out (declarative, searching, dialog, free), which define different types of self-organization in the educational organizations (Evladova, 2017).

We shall specify the kinds of self-organization, most typical for our education.

The formal one, which can be named the "freedom allowed": the type of self- organization, intrinsic for the institution realizing the principles of the "knowledge- reproductive" paradigm of education, which is oriented first of all on the learning achievements of the students. Development of self-independence and the initiative of the students considers being important, however, in the framework of traditional courses and certain creative tasks, research projects, performed either according to the certain algorithms or under the supervision of an adult. In the learning and extra-curriculum activity, a pedagogue has a leading role although he or she recognizes the importance of cooperation and developing personal freedom of children, but still works in the traditional "subject-object" system.

Compromise or "substitute" type of self-organization is realized by the institution, trying to humanize the education-nurture process, to widen the cultural space of the school or institution of optional education. Development of self-organization is considered as the opportunity to include the largest possible

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number of students in the self-government institutions. They lay the main hopes on stimulating the social activity of children. In this case the pedagogues grant a special space to the students, in the framework of which they can make their own independent decisions, rule small teams of students. However, in most of the cases children just copy the adults' behaviour trying to imitate them voluntary or involuntary.

The open one or the "open child-adult community" is the type of self- organization which is intrinsic for an institution realizing value-oriented education. In such institution, the education is build on the culturological principle (where the main attention is paying to the development of the cultural mobility of children and adults, interaction of the children's culture and the culture of the adults. including teachers) and on the synergetic principle (orienting on the search for opportunities for self- development, self-realization, self-organization of children and adults). At such school, the social-cultural environment presents the opportunity to master the norms of the modern open society not as a system of conceptual principles, but as a field of certain opportunities and values, allowing realizing a unique biography of non-standard (modern) course of life.

The social-oriented type is characterized by the development of common forms of vital activity of pedagogues, students and parents for the purposes of the fullest manifestation of their individuality. The specific of the school work is in following the principles of self-government, self-organization and free self-determination of the pedagogues, students and parents. Designing the rules and norms for the school to live, children start to realize their importance not for the normal existence of their group but as the opportunity for providing conditions for the creative development of every member. The value of such type of educational institution is in the fact that it represents an effective organizational model of forming the civic stand. In the conditions of general social instability, the school climate can become the main educational value.

The self-developing type can be also defined as a "network interaction of children and adults". In this case we deal with the educational institution in the mode of self-organization. It is characterized by creating horizontal structures of regulation on the basis of self-regulating temporal creative teams; using the collective forms of the activity, development of skills of team-working, which encourages forming the sources of self-development (points of personal growth); performing project activity. Carrying out the team projects the students gain the experience of coordination of their results with other members of the school community and of planning the research work in advance. Thus, performing various forms of activity among the subjects of educational activity rich educational self-organized environment can be created, where self- development of all the subjects of educational activity occurs.

Self-organization in various groups of people is conditioned by the motive of the group action, which appears as the result of emergence of the factor-impulse and defines the characteristics of this process in the groups. The motive of the group action is defined by the integration of the goal of the group not representing at the same time the sum of individual motives. It is defined by the aspiration for the common activity of achieving common goals ("We want"). It is this motive that is the moving force of self-organization and represents the synergetic factor of this process.

One of the directions of self-organization in the school community is the pedagogical support of developing school self-government, which provides developing self-independence of the children in realization of their decisions. It should be emphasized that the interaction of the students and pedagogues is based on their cooperation, which is provided by the accepted by the pedagogues and children rules

(norms) of relations, delegating to the students the real governmental authority, creating the conditions of mutual responsibility and mutual trust. The pedagogical support of self-organization supposes including adolescents in the activity significant for them basing on considering their individual characteristics and social-psychological factors influencing their behaviour and education, creating situations of the conscious choice of the means for goals achievement, assistance in designing and realization by children the programmes of their self-development.

Pedagogical support of self-organization of children, children's communities, associations of children and adults depends on the realization of the complex of principles.

The principle of the free choice, contributing to development of creative thought, limited by the freedom of the other person only, when a certain unity of people is forming and the system of social relations is emerging, the internal self-evaluation of a person occurs, the cognition of the value of one's ego and the processes of self- organization run.

The principle of the optimistic strategy, which is oriented to the belief in success of self-organization of either a pedagogue or a child. It also supposes that the subjects of the pedagogical support are the carriers of the positive life experience. The real belief in the potential of the personal growth of a pupil is needed. A pedagogue should see, first of all, a positive component of the choice made by the children. The pedagogue should suggest the children that the difficulties and problems, arisen in the process of self-organization will be settled if making certain efforts.

The principle of actualization of the future, influencing the present, defining the meanings and contents of activity of the person, oriented to the conscious image of the future. By the global uncertainty of the future a person should be prepared to design and to realize his/her (non-contradictive to oneself) life project, but not to follow a "canalized" logics of the guidelines. In the process of supporting self-organization a reflexive-valued reconsideration of the late experience is needed, using its results for fulfilling actual demands and conscious reflection of the future. The activation of the internal search activity connected with a mental enumeration of methods and means for their fulfilment considering the conditions of social-cultural environment is needed.

The principle of the network interaction, which allows performing either a short- term or strategic initiative activity oriented to realization of the pressing demands of the children and adults, united by the common goals settings, principles of the organization of activity, common information space and opportunity of access to the organizational, material and information resources.

The principle of the emphatic interaction, which supposes the trust of a child to the pedagogue, combining with the perception of him/her as a referent person. Such interactions should be based on the moral ground and not limit self-independence of a child, widening the subjective image of the world. It is important to soften the contradictions between different generations, to improve understanding and contribute to creating the educational environment corresponding to the global demands of the 21st century (Miroshkina, 2017a, b; Rozhnov, 2002).

These principles get the effective realization in the system of extra-curriculum activity and optional education. These spheres, the alternatives of the formalized education, give the most opportunities for nurturing an active, creative person, able to act in the conditions of uncertainty. Besides, the optional education of the children, which represents the kind of education with its own value, provides mastering culture, its values and defining oneself in the culture; contributes to finding purpose of life and one's place

in it; relieves the stress caused by uncertainty and instability of the world around; motivates to the conscious search for the personal growth and professional carrier; helps in forming subjective position in common projecting goals, process and results with the pedagogue and parents (Evladova, 2018).

Because of the described features self-organization can become a prospective opportunity of development of the modern generation of the children, who have got the name the digital generation. This generation is characterized by aspiration for creative activity, cooperation, informal communication. The representatives of this generation can easily find possible solutions of their pressing problems even in the conditions of uncertainty and instability. That is why it is so important to encourage the development of various forms of self-organization and the creation of conditions for developing creative activity of children via various social media communities, personal communication and regular interaction between children and adults. Moreover, self- organization is a natural way of existence of a person in education.

Thus, for preparing the growing generation to life in a constantly changing and instable world it is important to develop their mechanisms of self-organization, to study the theory and practice of self-organization. The proofs of it are the data of the research carried out under the leadership of M.R.Miroshkina in 2015-2017 aimed at studying different generations working in the system of education (these are the generation of the Children of the Victory, last Soviet generations – of the Krushchev's Liberalization and of the Stagnation; first post-Soviet generation and the digital generation). As the result of it appeared the opportunity to understand and concretize the characteristics of those generations, to understand the main contradictions of their values, reasons of their lack of understanding, possible points of interaction (Miroshkina, 2017c).

Let us show some significant examples which help to understand the values of the digital generation, their correspondence and discrepancies to the views of their teachers. It is necessary to create the effective conditions for developing self- organization reflecting the demands of the students in the pedagogical practice.

The points of intersection of the values of different generations are connected with understanding the functions of the modern school. Answering to this question the representatives of almost all the generations agree that the most important function of the Russian school of the 21st century is mastering the necessary knowledge, skills and competencies. That choice is made by from 69% to 73% of the teachers and parents and about 63% of senior students.

The other consolidated opinion is noticed when answering the question concerning the importance of the role of the school for forming the civic stand, diligence, respect to the Motherland, the family. The positive answer is received from 32-41% of adults and about 27% of students.

Almost the same number of the positive answers is received for the question concerning the necessity of creating conditions for providing the rights and freedoms of children, realization their educational needs. This position is marked as the important one about 21% either of the teachers and parents or of the students. The absence of discrepancy in this answer has surprised the researchers most of all. However, further studying the digital generation speaks for not just the waiver personal freedoms of young people, but, on the one hand, for misunderstanding this fundamental right, and on the other, for insufficient belief in its realization in the modern school. That is clear from the answers for the questions mentioned below.

The discrepancy points are observed in the answers at the question "What qualities the modern teacher is lacking?" Considering the obtained results in the light of belonging of the respondents to different generations, we have to mention, that the effectiveness of the pedagogical activity today depends on understanding the request of the students for the attention to them from the teachers. On the opinion of the pupils, it is the attention of the pedagogues that is lacking. The students think that it is related to inability to present their subject brightly and clearly (40% of students share this opinion); to communicate with the children friendly and openly (37% of the respondents); to consider real needs and interests of the children (35% of the participants); to provide the space for self-independence and creativity, to give up excessive regulation and control (32% of respondents). The last opinion is more significant as it has perplexed us because of relatively low level of interest of the students to the attitude connected with granting the personal freedom at school. However, if not the opportunity of the institution is meant, but the human factor (in this case the role of pedagogue is considered), then the aspiration of the senior students to widening the sphere of their spontaneous activity and realization of their opportunities is enhancing. But unfortunately, the teachers themselves do not share this opinion and consider their main disadvantage impeding their professional activity the lack of computer skills (31% of the respondents). As for other problems, although the teachers recognize their presence, they consider them insufficient (Miroshkina, 2017c).

The abilities of mutual understanding of different generations can be enhanced if the teachers, who frequently do not understand the demands of the students, could listen to their parents, who are close to them in age (or even belong to the same generation). The parents of the modern senior students as a rule support their children in the demand for understanding the specifics of the modern children's population, their generational features, their ways of obtaining knowledge; for their readiness to communicate with the children in the space of their life, but not by the guidelines of their own youth. In other words, they can become the binding thread, which can unite the generations and help to make themselves heard by the pedagogues, to bring them the appeal of the digital generation, which is "Talk to us, understand our interests, give us more freedom of choice, trust us!" The other direction of development of mutual understanding of different generations is in the search of extra resources either for the teachers or for the students. According to the research data about 42% of the pedagogues have marked out the lack of time for an effective pedagogical activity. This problem has already left the professional boundaries. Such feature in the work of constantly hurrying teachers has been noticed and felt by the representatives of the digital generation (69%). Hence, to change the existing situation for a better one, it is necessary to grant the teachers the opportunity not just to remain the "lessons-givers" but to be well-educated personalities. The students should have the time for the search for those knowledge and kinds of activity which correspond their intellectual, psychological and creative potential (Miroshkina, 2017d). Recognizing the complexity of those and other problems, it is necessary, however, to notice them and to stand up for their enormous social significance. Without doubt, the very first steps in this direction can help to shorten the gap between the generations, to build up the bridges of cooperation, to create the conditions for self-organization of the children and adults, and that will help our school to correspond the actual challenges of the 21st century.

7. Conclusion

The research allowed coming to the following conclusions:

1. Self-organization is the essential characteristic of the digital generation.

2.Self-organization is the most effective way of solving the issues, connected with the difference in the interests, demands, guidelines of the members of educational process, the representatives of different generations.

3.The representatives of different generations have their points of divergence, the points of intersection of their interests and the points of development to be considered in the pedagogical practice when developing self-organization and improving the effectiveness of the educational process.

The theory of generations (and first of all, its pedagogical adaptation performed by M.R.Miroskina) should be considered as the conceptual idea of nurturing digital generation and developing positive self-organization (self-organization, oriented at the personal growth and enhancement of the social activity).

Acknowledgments

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