



ACTUAL PROBLEMS OF
MODERN SCIENCE

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The Problems of Psychological and Pedagogical
Sciences in the Spatio-Temporal Situation of the XXI
Century (the Report at the RAE General Meeting)

The article reviews the features of modern human community revealing changes in all spheres of development; it considers the importance, sense-intensional essence of the present stage of social development. It is a question of education transformation, of formation of new principles, conditions, and forms of its organization: subject and intensional, structural, sense. The author pays attention to performance of the perspective basic researches, supposing comprehension of both a modern situation, and the person's anthropogenic changes, substantiation of forecasts of the development of education and growing people's socialization, methodological studies of innovative schemes, upbringing and education models, taking into account all-civilization trends.

Keywords: transformations, education, projects, XXI century.

The words of the famous pedagogue Friedrich Fröbel are topical today. He has asserted, "There is a time when education is placed in the center of the public interest".

This is the time we live in, the time of not simple changes and usual turnabouts, but the time of deep historically significant *transformations* when in the forefront there is a problem of the Person as a real subject of the historical process, capable to stability, active effectiveness, to solving of difficult, non-standard problems which he/she faces with a huge number of uncertainties and at the same time capable to preservation of all best *human* qualities, *human* potential.

This defines a special role of education which, by its direct destination (in broad understanding), is to arm the person with necessary knowledge in a choice of ways of action in the developed difficult situation, to teach him to understand, comprehend reality; these will presuppose the activation of his/her general development (intellectual, moral, esthetic, physical etc.), development/growth of his/her abilities and needs.



However not only the world the person lives in has changed; it is the person who has changed. He/she objectively lives in another space-time. Rhythms and speeds of his/her movement, life space have also changed.

And here, in Ilya Romanovich Prigozhin's, Nobel laureate's, honest view, "We face the problems which demand, first of all, the work of ... sociologists, psychologists, historians", teachers (that is declared by a well-known chemist). And in all its magnitude there is a problem of the person's education in a new space-time of his/her existence.

Emergence and aggravation of problems of education is connected not only with new requirements to the educational process, to the person's level of knowledge, not always adequate to a real situation, in particular, from the point of view of the pragmatically understood economic (instead of general – production, technological, social in broad understanding, human) efficiency, not only with the really fixed loss of the level of education, not only with the low-grade of knowledge, abilities, skills of pupils and not only with really inadmissible omissions in moral education and intellectual development of growing people, but, the main thing, with the loss of society's cultural potential and intellectual capital which growth becomes a necessity for the Person's further active progress.

Original roots of these problems are concealed in helplessness and inefficiency of the present education system in a modern situation of global transformations of a civilization scale (production, technical, sociocultural) when against an increasing number of so-called educational services it is harder to find educated people and (it is especially important) they do not fulfil a socially significant task being not a slogan, but a strict necessity of society's progressive development – a problem of providing conditions for the **person's self-realization** in new conditions of his/her life, in solving the problems of modern society.

Meanwhile 58 years ago, in 1954, in the article "The Forgotten Man in Education" Lawrence Kubie has said, "An ultimate goal of education is to help the individual to become the person in full". It is possible to do taking into account his objectively increased opportunities, including historically limited and historically differentiated. As Abraham Maslow has emphasized, in a difficult modern situation society needs a kind of person, capable to live in the continuously changing world taking into account own qualitative changes. Thus the person's self-improvement, his/her development, growth of the ability and need for self-actualization have objectively become the main purpose of the person and society in the XXI century. If in the 70–80 of the XX century in the conditions of fixation of the increased dynamism of society's development there was a question (see, in particular, the article in the



journal "Courier of UNESCO", April, 1978, by Charles Hummel (Switzerland)) concerning that the ability to adapt for changes *would be* more significant and important than having concrete skills and knowledge, now (at remaining dynamism of development) an actively increasing adaptation (which is always necessary, being actualized in a situation of significant changes) and a call for its activization cannot be considered adequately reflecting a situation in which in the increasing degree they form the problem of *development of transforming activity*, the person's activization, his/her ability to rise above a situation, *ability to solve strategic problems of society's movement and own growth-development*. It demands not only concrete skills, but also an appropriate level of the person's education. Due to the aggravation of the education problem of in a modern situation of social development there is a number of important tasks which performance is a necessary condition of its settlement, including development of both new theoretical concepts, and the strategy of its organization.

One of tasks is receiving a clear idea of reality in which there is a modern person.

Unfortunately, despite the numerous works devoted to research of features of modern human community, revealing changes in all spheres of development (economic, social, demographic, political, etc.), including the transformations changing the characteristics of its movement, revealing the whole depth of occurring motions, forcing scientists to speak about transition to a historically new stage, we still not fully comprehend the importance, intensional-sense essence of the present stage of social development.

Thus the problem of the person's development, his/her features, new opportunities, abilities, needs is not only the least intelligent, but also the least discussed, which is paradoxically enough. And after all, as "the father of cybernetics" Norbert Wiener claimed, "we have changed our environment so drastically that now we have to change ourselves to live in this new environment". But in spite of the fact that they write a lot about real change of such environment, including about the influence of information space on the person, about the role of social and intellectual networks in his/her development, about one or another extent of influence of information streams on his/her consciousness and behavior, it is necessary to recognize that the assessment of these concrete factors is rather relative and the problem of transformations which the phenomenon of the Person undergoes is far from studing in whole.

For us it is extremely important to understand that now the person, mankind, are in more difficult, polycharacteristically, qualitatively changing, multi-polar and diverse world where the sociocultural, information and psychologi-



cal space of life activity which is constantly testing the durability of people has essentially changed.

But as Igor Severyanin wrote about a hundred years ago,

“We live like in a dream unsolved,
On one of convenient planets...
There is a lot of what we do not need,
But there is nothing one wants.

And we want to learn, understand what the person is today, what he/she needs to act actively and productively in a difficult modern situation and thus to self-improve, self-actualize.

Today the person is not only and not simply in a difficult situation of multidimensional, multilevel transformations, but he/she is already in a historically *new space-time* caused by general dynamics of society's objective development. It is a question of some kind of historical boundary which has opened new space and has defined new time of the person's functioning. Today on the basis of the occurred and occurring changes, thanks to the Internet and television, in no time a person can jump over numerous geographical and political boundaries, visit different continents of the earth, the ocean floor and space that generates, in addition, the rupture of usual processes of cogitative activity and the rupture of well-established relationships, interdependences, and intellectual, emotional, physical, psychological intensity, instability. On the whole the perception of the person, his/her consciousness, thinking, motivational-need sphere changes in result of such transformations. It causes worry that these changes are rather vividly shown not only in terms of emergence of new opportunities, strengthening of the person's energy resource, but also regarding increasing shortcomings: egoism, cruelty, loss of moral guidelines, aspiration to wellbeing at any cost, which lead to numerous stresses. In particular, it is significant, that after the UN materials, today there are 450 million of people with disorders of mental and physical development. According to the World Health Organization calculations the number of such inhabitants of the Earth has already reached 13%.

The society, actively and productively reflexing all occurring events, the society capable to self-organization, that demands “serious intellectual work on developmental projects, on future projects” (as Vladimir Vladimirovich Putin emphasized addressing the general meeting of the Russian Academy of Sciences in May this year) is able to break catastrophically increasing negative tendencies in various spheres of the person's development.



Convergence, spiritual integration, cooperation and mutual understanding in *deep comprehension of reality, in ability to develop a clear, scientifically reasonable effective strategy is the only way of the human community survival and progressive development*. And in this plan the problems of organization of education become the most important components of society's development, providing the purpose of preparation of the real subject of this development.

In this situation it is important for us to understand the objective exhaustiveness of the classical pedagogical paradigm that is shown in the inefficiency of many traditional forms of education, its content.

Without managing to reflex the transformations which have occurred in the world, the education system ceased to meet the requirements to it.

The necessity of clear understanding of tendencies of progressive development of both society, and the person is obvious, and in this context it is obvious the necessity of definition of the purposes and problems of education. The education which was constructed in due time on the basis of growing differentiation of ways of comprehension of the world and branches of scientific knowledge, which was well working in former times, is not anymore capable to train the person who is creative, creatively thinking, focused not on imitation, not on repetition of the previous experience, not on its copying, but on creation of own, new way. Albert Einstein told, "Generally speaking, it is almost a miracle that present methods of training haven't absolutely stifled the person's sacred inquisitiveness" [12, p. 138]. General and special knowledge and skills acquired by pupils now should not only provide the level of their development corresponding to a current historical state, readiness for productive activity, but also strengthen abilities to own improvement, spiritual and creative growth, creative solution of problems and need for it, and (today it is especially significant) abilities to formulate problems and to define immediate and perspective tasks, to find ways of their effective solving in uncertainty conditions.

In this regard the role of psychological and pedagogical sciences called for suggestion, grounding the strategic concepts, doctrines significant in forming and solution of problems of the education corresponding to a new situation and purposes of the modern person's development increases. And here the honest, objective and deep analysis of this situation created nowadays is extremely necessary.

It is time to realize that now we are not **witnesses**, but **participants** of a landmark in the history of mankind. The well-known psychologist Abraham Maslow has observed, "There is an essential difference between yesterday and today, and it not a simple change of experts' likings or moods. It is



an empirically disclosed reality". In our reality the condition of people's life is characterized by the world crisis caused by not only an ecological, economic, anthropological crisis, but also by a crisis of morality, power and confidence in it. This systemically manifested crisis brought mankind to the brink of survival, though it takes place in conditions of search and growing of new alternative forms of life, development of new technologies and production structures, change of relations between knowledge and practical action. In fact, modern Society as a system has changed in all its parameters. Thus, now our sciences face a paramount task – to comprehend the existing reality, to understand what the modern person and the modern space of human life are today.

The bifurcational explosions which have really occurred in this space, which have changed the bases of society's organization and functioning, which have destroyed many essentially significant constructs of its construction, also predetermine qualitative changes of the person nowadays possessing the new type of thinking, the new type of consciousness and self-consciousness. Thus, as Yoshihiro Francis Fukuyama has noticed, "The ideal is more often focused on a dominant of the rights of a community members over their duties" that has far-reaching consequences since "in the forefront they move, impose as a norm of life material welfare, entertainments, relaxedness, and at the heart of all this there is a callous relation to other people, having a clear axiomatic base declaring that, first, everything is allowed, secondly, a person **is obliged** to nobody; thirdly, everyone **is obliged to** a person ... and it leads to the destruction of personality, "dilution" of intelligence, will" [7, V. 3, p. 1768].

And still the sharpness of the situation where is the human community at transition to a historically new, still fully unclear and differently called condition – anthropogenetic civilization, information civilization etc., – more and more intensively not only divides, but also **unites people** having, in fact, common destiny.

In a word, nowadays in the world there are significant transformations in all spheres of human life, there take place dynamic sociocultural processes putting him/her in a sharp position of search, asking, "How should I be for being, and not simply being, but being up to the mark?"

And here Russian society is in serious danger. According to Daniil Grinin's well-founded statement, "Its moral climate is intolerable" [5], including because of the ideological pluralism proclaimed in the 90 which has turned, on the one hand, into ideological chaos, and, on the other, to promotion of "the western column" of values as a universal ideal. Meanwhile even Anglo-American scientists, in particular S.F. Huntington in the book "Conflict of Civilizations and Redivision of the World Order" (London, 1998), prove that this



“column” “does not claim to be universal”. Especially it is simply impossible to assimilate the western samples not only because it threatens loss of our sovereignty but also because the West is in a deep, historically caused crisis nowadays.

The whole world, unfortunately, lives in the broken spaces today – political, economic, cultural, differently perceived by various people whose different generations are practically in a critical situation, in different existential framework of world outlook.

At the same time, after the already mentioned Ilya Prigozhin’s words, “changes which happen in the world nowadays raise our expectations for creation of more integrated, more integral picture” of **human life spaces** in modern time. This time supposes a special role of the growing generation of people, their proper education and cultural potential, and also intergenerational continuity in preservation and accumulation of this potential.

However, as a French psychologist has note as a joke, it looks like the present generation of young people differs from the generation lost in the past by nothing ... They also grow up. They also enter the lyc ee. They also smoke their first cigarette. They also leave the house. They also marry. They also give birth to children. But they do this in the reverse sequence ... At first they give birth to children. Then they marry. Then leave the house, etc. Yes, it so, but also not so at all. The time of modern historical transition divides people of different generations more, than before. The subject of intergenerational relations sounds especially sharply now. The modern generation of growing people and the generation which has built the modern world are really in different existential measurements, organizing “own” time differently.

Benjamin Franklin said that time is a fabric which forms life. Our present is a *section* of the current historical time. According to Augustine, “if nothing happened, there would be no past; if nothing happened, there would be no future; if nothing happened, there would be no present” (On a City of God). And the present of human life is not just another time, but another understanding, another use of time. And our ideas of time are social perceptions, as the foreign member of our Academy, French psychologist Serge Moscovici fairly claims. In fact, the whole development of modern civilization is a constant increase in time dynamism, improvement of ways of its use. It is what Max Weber emphasized briefly and cynically, “Time is money”. Unfortunately, the value of money led to depreciation of the main principles of life – morality, justice, spiritually weakening our time.

Time is a vector of orientation of the processes, events, phenomena differently perceived and experienced by the person. The rhythm, fastness of living, and its richness form the basis of the category of time. Common apho-



risms, such as “This person is ahead of the times” or “He fails to keep pace with life”, are not casual. And according to G. Landau, “those whose time will never come always wait for their day”.

Athanasius Fet wrote,

“What is a day or a century
Before infinity?
Though a human is not immortal,
Everything that is immortal is humane”.

The human time is a special phenomenon including historical, social, physical, biological, psychological components in their system integrity. And the major moment in functioning of the human time, which speed differs in various periods, is people’s relation to it supposing the need for its organization both at the public, and at the individual level, need for such organization and ability to it.

In this case we face a problem of structuring both time, and space of the person’s education.

Here I distinguish time and space especially because (at any their assessment) they are objectively a significant factor in the human life activity organization. It is a question of the degree and character of the richness of time, its naturally realized and purposefully structured rhythms in space (spaces) of human functioning, i.e. of the whole that gets special sense at understanding of the structure and content of the whole vertical of ontogenesis. Thus it is a question of comprehension of the space-time continuum of the organization of education and different stages of its system organization, especially in conditions of need for its transformation in a new *transformed* world and in conditions of new rhythms of society’s progress.

The “tiny researches” conducted nowadays do not give a clear picture of the modern world in the whole width and depth of its understanding where the person not simply lives in a certain space-time today, but really gradually enters an absolutely new, another in its essence space-time. In fact the person “creeps” in it not having guidelines and necessary scientifically provided training, moreover, poorly considering the reality of such transition.

Philosophers and economists, sociologists and culturologists try to understand, consider the features, specifics of influence of this space-time which has been opened to the person, where life rhythms, rates of movement, the structure and nature of people’s interaction have changed. But, let’s be honest, psychologists and pedagogues try to understand these things to a lesser extent. Namely first of all we need to see, understand, open the nature of the



person's changes to plan, build a trajectory of his/her development in the present changeable space-time of uncertainty.

The next important task we face in the context of the discussion and solution of education problems is disclosure of the features of functioning in a modern situation of the growing person, the definition of characteristics of the modern space-time of Childhood. The space-time of Childhood is an objective distance of the person's formation, special conditions and a necessary way of the child's existence-development when he/she, being socialized and being individualized, gradually more and more deeply forms a part of Society. Children's subculture which gives the chance for the child's self-realization, his/her phased approbation of himself/herself is a mechanism and form of this entry; it is a vector directing the person's further development.

It is significant that the whole life P.A. Florensky (1999) discovered the mystery of human genius, at the heart of which there is an objective, complete, deep, and real perception of the world in preservation of Childhood, children's intuition.

As the man of wisdom D.B. Elkonin has noted, "The children's culture is an original way of the child's assimilation of a new way of social reality and his/her self-assertion in it".

Yu.M. Lotman agreed with Elkonin, saying that it is children's subculture with its zone of variable development that is capable to develop the search mechanism of the development of culture as a whole since there is a potential of premonition, anticipation of a trajectory of development in it, highlighting the points of growth of universal culture. One of the most important moments of the development of children's subculture, development of Childhood is Society's *attitude* towards it. It presupposes not only care, protection, indulgence, but also the attitude of understanding of the child, when the child is a bearer of the future, and also the ability to see a Person in him/her. Hence, as Elkonin noted, each step of children's emancipation from adults conducts to deepening of their communication with Society life.

The outstanding pedagogue Janusz Korczak has formulated this position figuratively, "There are no children. There are people". As we know, he shared the tragic fate of the children, brutally destroyed by the Hitlerite degenerates. This year, in August, it will be 70 years since the heroic deed of this true schoolmaster who has refused twice the opportunity to escape by himself and entered a gas chamber with two kids on his hands; they were terrified, so he told them a tale. He has truly trampled on death by the death.

The importance of the *relation to Childhood* has been clearly highlighted now, when not only Society, but also Childhood has essentially changed, showing visible progress in the development of a child, who enters into more



and more wide space, successfully jumping through many former norms. It is important to find out how the modern child perceives the world, what are his/her abilities to assimilate necessary information, significant life norms, what are his relationships with contemporaries and adults, having considered Childhood in today's world. Especially when, as it was noted at the Federation Council meeting, "problems in the childhood sphere ... rise quicker, than we solve them". In definition of a condition of Childhood it is important to consider all its real characteristics starting from its real physical condition. As for the last, here the demographic data is dreadful. There is a "steady reduction in the number of children ... at a speed of 3% per a year" beneath our very eyes [8, p. 4–5]. As a result for the last decade the number of children under the age of 17 years was reduced from 31,6 million in 2002 to 25 million by this year, including 14 million of schoolchildren.

Rather difficult situation has also developed with children's health. According to the director of the Scientific Center of Children's Health of the Russian Academy of Medical Sciences Academician A.A. Baranov, it has become worse in comparison with the 80-ies of the last century for 17–20% approximately. We should note that children's neurotization level irrupted, not to speak of chronic diseases and functional deviations; 48.2 % of such children have borderline manifestations of clinical forms of mental disorders. By the time of going into the first form the percentage of mentally sane children makes only 39 % [2, p. 7]. Meanwhile during the period from 2005 to 2010, according to the auditor of the Chamber of Accounts of the Russian Federation Professor S.A. Agaptsev, at the general reduction of schools by 19.7%, and the number of schoolchildren by 12.7 %, the number of special schools has decreased by 8.3%.

Matters go from bad to worse concerning social health of growing people who need adult's love as a "nutrient medium" of their mental development [11, p. 371], but get less attention, endearment of adults, including parents. The changed interrelationship between the Adult World and Childhood are especially sharply shown both in understanding of the child, and in the real attitude towards him/her. Thus various forms of adults' violence against children have got a terrifying extent. It is established that 700 thousand of Russian children – potential victims of violence – live in socially dangerous conditions today. Thus, according to E. Bunimovich, Commissioner for the Rights of the Child in the city of Moscow, 40% of children assert that parents seldom show due care for them. Moreover, in 2011, for example, there were committed nearly 90 thousand serious crimes against children [8, p. 5].

Such a terrible phenomenon as pedophilia has appeared in the country. Over the last 10 years it has increased by 3–5 times in some regions. The



adult's insincerity towards the child is more clearly shown. The relations between adults and children became complicated. It is significant that during teenagers' survey which has been carried out in 73 regions of the Russian Federation, on a question concerning their bad behavior, bad studying, there was a definite answer, "We hate the situation when at home they say one thing, at school – the other, and on TV – the third one" [8, p. 14].

As it is established in a number of psychological researches, today it is no coincidence that boys can compassionate other children only under the age of 8 years, and the girls – under the age of 9–10 years. Boys can be glad for others' sake under the age of 7 years approximately; girls are not able to do it.

These facts visibly indicate weakening of the state's and society's duties in relation to Childhood; it turned out homeless to a considerable degree. It is enough to mention, that a number of real homeless children reaches (according to official figures) 1 million 300 thousand children in Russia today [5].

All these things occur against degradation of the educational component in education into which the economic term "educational service" has penetrated, turning education from the highest duty of society and its major value into a "service".

Meanwhile the upbringing function of education is a feature of our Russian system. Not casually in the book "Two Worlds of Childhood" (M., 1976) American psychologist U. Bronfenbrenner noted that in English there is no equivalent to the term "upbringing".

Unfortunately, today in our Society the well-established, habitual mechanisms of socialization and education of children which were very effective in recent times do not work. One can observe the loss of public control and involvement, loss of adults' responsibility for children. Being unable to act by a prohibition method nowadays, we still could not saturate Children's community with positive attitudes, could not arm growing people with abilities to choose, and could not offer children the forms of constructive activity adequate to their needs.

It is pleasant that in an interview with the newspaper "The First of September" the Minister for Education and Science of the Russian Federation Dmitry Viktorovich Livanov said, "There are all grounds to expect intensification of the upbringing component of our schools" [4, p. 2]. There is a strong wish to hope for it.

I have mentioned only a little bit of the problems connected with the characteristic of some moments of a condition of Childhood in Society – the characteristic far from being full, however indicating an obvious trouble and disgarmonization of *relations between Society and Childhood*. The necessity



of further analysis and deep scientific comprehension of real status of Childhood in Society is obvious.

The following block of problems, which demands our special attention, is connected with careful studying of features of a condition and the very *development of Childhood* which really occurs in the modern changing world. It is caused by both changes of the child, which are objectively determined by the general situation, and the *nature of self-development of Childhood in its historical movement*.

Starting from a prepreschool age the modern child gets into an absolutely other space, in comparison with his/her contemporary 20 years ago. Nowadays it is not simply another world, but another perception of this world, its space. Widely open, thanks to the Internet and television, practically the whole space of "universal life", the possibility to be in several temporary, historical, geographical, ethnocultural and other spaces at the same time, the general pressure of the huge undifferentiated information content quite often lead to stressful conditions, and the growing requirements for finished goods conducts to failures in the child's creative development.

Available data fix real failures, tension in the mental, psychophysiological, neuromental development of the child, being shown at all stages, all periods of Childhood.

Thus, children's studying, developed now, enables researchers to note the occurred progress already at an infantile stage of Childhood.

The data on changes which happen to the preschool child are even more clear expressed now. Thanks to deep studies which have been carried out in due time by D.B. Elkonin, M.I. Lisina, A.V. Zaporozhets, it was established that the development of motivational and need sphere is defining for preschool children; is ensured by the expansion of their communication. Thus, for example, it is known that the most effective type of communication for preschool children is the communication mixed in terms of age, when traditional types of children's activities and cultural norms are passed on from senior children to younger ones in a natural form. However, in the modern child's life this communication is practically absent because there prevail uniparous families, even-aged groups of kindergartens, there are no courtyards and so forth.

The received materials concerning the communicative ability in communication with the contemporary indicate an insufficient social competence (25%) of senior preschool children, their inability to resolve elementary conflicts. Thus more than 30% of children of 4–6 years show the aggressive type of behavior which is standard for them.

There are significant losses in other spheres of mental development of the



preschool child that is also connected with subjective factors. Thus, despite numerous protests of our psychologists, in the country there was a substitution of the leading type of activity of the child of this age (the game type) for a functioning form of education. This contradicts the essence of the age psychological development. Training programs with the **mobilization** of game actions are introduced all over preschool child-care facilities, whereas it is necessary to broaden, supplement, develop the preschool child's **game activity, bringing educational components in it**. As a result there is a considerable decrease in a level of the preschool child's subject-role game. It remains at the level of subject actions among the majority of children of 3–6 years. But a primitive undeveloped game does not carry out a "leading" activity function in the child's mental development. Consequently, new formations connected with the game (imagination, voluntariness, representational thought, etc.) remain undeveloped among preschool children. Shortcomings of the organization of the game space have resulted in that modern children of the late pre-school age can command themselves worse than their contemporaries 20 years ago. In fact, they do not form the ability to voluntary actions; mutual relations of children weaken considerably.

Losses in the preschool child's mental development affect the subsequent stages of ontogenesis.

For example, as the data obtained for 15 years (from 1997 to 2012) shows the number of children of 6, 7, 8, 9, 10 years with disturbance of speech development (from 40 to 60%, varying in different regions) has been significantly increased (almost twice). 50% of junior schoolchildren move up to the main school with undevelopment of writing skills. By the way, it is a visible sign of the "fault" in the "linear" thinking development. The increasing number of Russian children has serious problems with reading ability, ability to understand the text. Schoolchildren's reading literacy monitoring, carried out within the international research PISA, showed that if in 2000 our 15-year-old teenagers took the 27th place among children from 32 countries, in 2003 – the 32–34th places among children from 40 countries; in 2006 – the 37–40th places from 57 countries, in 2009 among 65 developed and developing countries our 15-year-old took the 42nd place, having shown thus a considerable deterioration in the process of maturation – from the elementary school to the main.

The most significant changes have happened at a teenage stage of mental development. In particular, activation of the socialization process, expansion of communication and the increased need for showing the self to the world are blocked by absence of the relevant structures adequate to needs and possibilities of the growing person. From here there is a disorderliness,



increased anxiety, access to new, including informal, associations, search of the other on the Internet.

In a word, there is a thorny problem of the teenager today. And the most unpleasant is that it is not revealed in its essence properly. It is in spite of the fact that during this age period there are formed stand in life, social position of the growing person entering youth, adulthood. It is the period when our blunders in education, upbringing are especially visible. It is shown in many facts. In particular, in such a specific alarming case when a senior pupil put the following post on a social networking site: "If the war begins tomorrow, I will immediately yield myself prisoner", that caused a lot of enthusiastic reviews. What do we face? Is it shocking behavior? Probably it is. However, according to various public opinion polls, more than a half of the interrogated senior pupils are ready to leave Russia at the first opportunity. It is a question of moral attitudes which are formed not only by a sensational TV series "School", but also by numerous publications in the mass media, inadmissible scenes shown by the Internet and television. As Woody Allen fairly marked, "they do not throw away the trash anymore; it is processed into television shows".

Matters are made worse because of the created sharp gap of an inter-generational character. According to P. Bucher, G.G. Kruger and M. Dubois, who have investigated the child of the beginning of our XXI century, "in some degree children began to pursue own aims, despite of instructions of pedagogues and parents. At the same time not only a possibility to choose, a possibility of autonomous action have increased; it has also increased the need for decision-making accompanied by a risk, stresses, vagueness, constant uncertainty and loss of traditional forms of the group support of the environment and family". Growing people – children, teenagers – are not guided anymore. In the educational space it is also connected, in particular, with the teachers of comprehensive schools who have failed to keep up with the pupils living in the computer world, whereas teachers only receive training in living in it, and they have to catch up with pupils in the technological aspect.

At all big words, said from high tribunes, *society's relation to pedagogical activity* has also critically changed. It is not a secret that many young men entering pedagogical institutes of higher education aren't pedagogues by vocation; they enter pedagogical institutes of higher education because they failed to enter more prestigious institutes. As a result, according to D.V. Livanov, "only five percent of students of teachers' training colleges see themselves as teachers in the future" [10]. And the best graduates of pedagogical institutes of higher education do not go for a professional job that creates the so-called double negative personnel selection. As a result a school teacher



turns into the employee providing much talked-about educational services, instead of being a mentor. Otto von Bismarck has accurately observed that “wars are won not by generals, but by school teachers”, emphasizing the teacher’s determining role in ensuring viability of the state and society. The business can move towards irreversible degradation of the pedagogical work as far as the old guard of teachers, who give themselves completely up to the cause of education-upbringing of children, departs.

Structuring the space of modern Childhood, we have to isolate the factors which influence the changes occurring in it more actively. Among these factors and facts defining the created condition of Childhood, the special place is occupied by the essentially changed information space which *has changed* both according to a character, content, volume, and according to the degree of influence on the growing person’s development. In the most expressed manner its structure-forming basis is shown on the Internet – a powerful tool of vision, comprehension of the world; it is a new space of the world which has been opened up before the person; it brings into the person’s world not only the progress opening, but also the “pressure” of information, the pressure structured in a complicated manner in its action which the growing person is not capable to comprehend properly. Meanwhile, it is important to note that the Internet “covers” the growing generation in the increasing degree. And if, according to the research of the TsIRKON group, 37% of adults use the Internet every day, 46% of adults never use the Internet, 93% (!) of teenagers not simply use the Internet constantly, but, in fact, live by means of the Internet – communicate with friends, exchange information, travel on a computer network.

As a result there are considerable changes in the child’s development, in his/her mentality, his/her *perception* of the world. During communication on the Internet with contemporaries and adults the child “grabs” only some fragments of diverse separate information that puts pressure on the process of thinking of the growing person, forming, in particular, the so-called “clip” thinking.

One may think that among many reasons of unwillingness to study among a considerable part of today’s schoolchildren there is also the possibility of the fast acquisition of knowledge (information in fact) through the Internet.

As one of known experts in the field of informatization Manuel Castells has noted analyzing the situation, the modern electronic and communication system differs by the ability to **construct a real virtuality**, authentically imitating reality on video equipment screens. As a result people start considering electronic models of reality as more true, than that they see in the daily environment [6, p. 265]. Sydney J. Harris writes, “The danger is not that



the computer will start thinking as the person, but that the person will start thinking as the computer”.

We, psychologists and pedagogues, face an urgent problem of studying of features, type of real influence of the computer, TV and the Internet on the growing person, his/her consciousness and behavior, type of occurring risks, especially as there are considerable risks in connection with their fast and all-round distribution. First of all, these are not simply risks of children’s escape from the real world into the virtual one, but risks to be subject to persecution, aggression, mockeries in the Internet (“cyberbullying”, “trolling”), risks of the Internet dependences and the risks connected with occupancy of the Internet with lots of sites, propagandizing anorexia, drugs, extremism, nationalism. There have appeared thousands of sites, not only calling children for hatred to another, but also persuading to harm and pain themselves.

According to the Interior Ministry of the Russian Federation in 2012, the number of the Internet sites containing materials with child pornography has increased by almost a third. The quantity of such Internet materials is twenty times greater (!). Is it any wonder that as a result we have the sharply changed personal orientation of children. For example, if in 1993 58% of teenagers were characterized by an altruistic spirit, nowadays, in 2012, such a type of orientation is noted only among 16%, i.e. it has decreased by 3.6 times. Nowadays growing people have pragmatistical attitudes, including aiming at a worthy level of existence, aspiration to live in the country of “clear tomorrow”, in the words of A.G. Asmolov, Academician of the RAE. However, they want to live according to a formula “the end justifies the means” that is a consequence of the atmosphere of the social alienation which surrounds the child both in the preschool, and school age.

Social networks, blogs, “LiveJournals”, chats where children “hang” for hours, informal communities, television soap operas and specific music which they watch and listen, – all these forms a corresponding relation to reality, corresponding outlook which form a corresponding models of behavior.

Not casually in frustration situations with adults in the behavior of modern schoolchildren intropunitive reactions of a self-protective type predominate against three leading symptom complexes: “anxiety towards adults”, “hostility towards adults” and “asthenisation” (weakness).

I doubt whether it is necessary to delve deeply into the questions of real influence of the information space on development of the modern person, the more so because thousands and thousands pages of scientific editions are devoted to it. In a word, the information space problem, first of all, the Internet, becomes one of the sharpest in education. The greatest achievement of mankind in the real situation of its distribution brings not only benefits, but



also causes a notable harm, especially for growing people. The Person who has created the powerful machine is not ready to its real productive control. From here there is a problem of formation of the culture of relation to the Internet. But this is where we have a serious failure since there is no sufficient number of observations received after specially developed programs; also there are no relevant empirical data and theoretical generalizations. There are no standard concepts of really functional load of the Internet in education and a *general theory of the influence* of the Internet on development of thinking and consciousness of the person, and also scientific bases of its use activation in the person's positive growth and development. Meanwhile creation of the theory of influence, in the whole complexity of the relevant information space organization, is one of the major psychological and pedagogical tasks now.

Studying real processes of the "Internet" information effect, the specifics of its mastering by the person, in particular, in correlation with text (book) information, characteristics of its perception, etc. are objectively necessary and actual in creation of bases of modern education where the Internet should play an appropriate part in a positive alignment of knowledge in the organization of education structures.

It is obvious that modern conditions of not simply changes, but of society's transition to the new historical state, causing objective changes in the person's development, first of all, the growing person's development, cannot help demanding and objectively demand an essentially new organization of such a major sphere as the education system responsible for the person's preparation for life, for formation of his/her cultural potential. It is not a question of any corrections, not of introduction of something new, but of **education transformation**, of formation of new principles, conditions, forms of its organization – subject and substantial, structural, sense. Thus, the need for introduction of basic changes into its developed content, which in many cases is unclaimed, both in school, and in after-school life of children, is one of the major lines. In present space-time we need education focused not on the ways of putting of the greatest amount of facts into children's heads with a minimum of time and effort spent. Facts "become old-fashioned at a furious pace ... as technical equipment also become old-fashioned" (A. Maslow), and a lot of knowledge, obtained by children, becomes old-fashioned even before they leave school and can use it that impedes formation of the necessary level of academic motivation, their understanding of the major things necessary for a man of culture. As a result, unlike the pupils of the XIX and the middle of the XX centuries, our children, first of all, at the juvenile age, do not consider that "knowledge is light and ignorance is darkness" any more, since education



ceased to be a bearer between ignorance and high culture and wellbeing. It is no longer carrying out a social lift function and it does not provide positive socialization of growing people in a necessary degree. As V.P. Zinchenko, Academician of the RAE, noted, "The system of our school education has "passed" a lot of things and endured an "action school", a "labour school", a "knowledge school", a "cooperation school", at absence, unfortunately, of a "school of being" and a "school of sense" [1, p. 7].

It is natural that the problem of change of the structure, form, methods, content of education is extremely difficult. It demands consideration and solution of many essentially new questions, including search of ways of coordination of the volume of knowledge necessary for the modern growing person and formation of the ability not only to its acquisition, but also to the creative attitude towards it with its participation in their further development. In fact, we face the whole complex of problems which decision we haven't even started. Therefore now it is very important to define a possible alignment of the forces involved in the educational space, to provide purposefulness of their actions.

I have only briefly mentioned a number of the major problems connected with the necessity of the time-space of the really changed Childhood and the growing person's education. It is necessary to notice that numerous changes which are fixed in development of the modern child, in his/her characteristics, during formation on the distance of ontogenesis, are far from being comprehended; they are not theoretically generalized. Caused by historical transformations which happened in the society development, they have to be considered in the context of these transformations. Meanwhile in the psychological and pedagogical researches conducted nowadays the child, as a rule, is considered "here and now", in a narrowly concrete, the best (more rare) in a concrete historical situation, without his/her injection in the historical process dynamics that is very defective in the modern world of global changes.

It should be noted that this acute problem concerns not only Russia.

Thus, in the Strategy of Education, developed by the European Union, in the interests of sustainable development they set pedagogues the task by 2014 "to pass from a simple transmission of knowledge, skills, abilities necessary for children for existence in modern society, to readiness to work and live in dynamic conditions, to participate in planning of social development, to learn to foreknow consequences".

On the whole education of our time acquires traits of a serious political problem, aiming at training of the person possessing necessary potential of knowledge, technologies and firm moral attitudes, the person who likes



changes who is ready to meet unforeseen situations boldly; after all he/she has already entered extraterrestrial outer space. It demands another level of world outlook, the developed heuristic thinking, formation of responsibility when utilitarian values act not as a purpose but as an instrument of formation of new spiritual values – mercy and honesty, justice and the ability to empathy, tolerance and decency, responsibility and consciousness of own dignity, patriotism and a sense of duty.

Such education, which is integrated in the modern historical and cultural space of our time, has to *be focused* not only on translation from generation to generation of the sociocultural experience including the experience of cognition, the experience of development of work methods and the experience of formation of value relations, but also, at preservation of all these, on education as formation of the active, effective person capable to optimum self-fulfillment, education supposing a permanent development of the person, capable to self-education, deeper self-determination with the expressed need for self-actualization and self-realization of creative abilities, both informative, and communicative and organizational.

There was a programme “Cultural Revolution” on TV recently. Artists, writers, musicians have discussed the mission of art. Suddenly one of participants said, “We have no request for the Person ... We have the request for the professional, but not the Person!” This position is even more actual for the education system. According to one of the most successful people of the present Bill Gates, there are three factors which determine the person’s value, importance, and competitiveness: first, it is his/her knowledge; secondly, it is the access to technology which connects him/her with those ones who possess necessary knowledge; thirdly, it is the environment which motivates the person on development.

Orientation on the development of the objectively specified new Person capable to work actively in the XXI century, assumes creation of a new strategy of education – education which promotes his/her socialization in its broad sense – not only as mastering the social world but also as including in this world as an *active figure*. It supposes, as it was noted, changes of the bases and principles of the organization of education. In particular, it demands introduction of new structural and substantial components in it, change of the system of relations in the educational space and expansion of the sphere of children’s training process, its forms and types: children’s going out of a classroom; changes of their place in the educational and upbringing space (by the way, creation of the project, heuristic training, technology of a collective thought-activity, business games and so forth are focused on this); creations of the out-of-school structures, new educational forms, including cardinal re-



organization of additional education as a sphere of open education. In this plan we find interesting the proposal of the French scientist Jacques Gonnet, who has proved the necessity of creation of the system of media education of children which will enable advanced reactions to changes in information space through their own information creativity acting as a way of self-realization of the growing person, and at the same time "bridging" with the Adult World. But we find the development of our Russian researcher Sergey Borisovich Tsybalenko not less interesting, though less known because we can't always recognize a prophet in our own country. In the psychology thesis he has generalized the materials of adolescent and youthful creativity in the information and psychological space which was carried out by the Orlenok camp together with a number of television channels.

However, considering the empirical findings promoting transformation of the education system, understanding the need for combination of the theoretical and methodological development of its bases and regard for of the practical experience of such activity, we cannot follow the path of formal unification of efforts of scientists and experts-pedagogues not to repeat a ridiculous story connected with names of Isadora Duncan and Bernard Shaw.

They said that the well-known ballerina Isadora Duncan once told Bernard Shaw, "We should think of what our child could be – with your intellect and my beauty". "Yes, yes, of course, – the great writer answered, – but it would be also necessary to consider what if the child inherits my beauty and your intellect".

Therefore we need a skillful combination of scientific prognostication and the test of hypotheses for a productive development of education, its content and forms, corresponding to human life in a new space-time of the XXI century.

Behind the modern person's back there are two thousand years of the new era and forty thousand years B.C., if we depart from Homo sapiens, and 6 thousand years of civilization – the time of accumulation of knowledge and social practices, technical and technological transformations which constantly change his/her possibilities, requirements, abilities, personal potential. Grandiose historically significant changes in the end of the XX – the beginning of the XXI century have posed a huge socially significant problem of self-determination of the person in the new world, providing conditions of his/her active self-development, further self-improvement on a qualitatively new basis of education assuming serious state protection of growing people from infanthly, illiteracy, immorality, i.e. from dehumanization.

It is significant that this year in June Vladimir Vladimirovich Putin signed the Decree "On National Strategy of Actions in the Interests of Children for



2012–2017” directed on providing of the comfortable and safe environment for life of each child, the environment where the person is the main capital; increase of the level of the person’s development will provide increase of the level of culture of the whole society. From here it is obvious that today’s major task is mobilization of forces of all sciences: anthropology and ethnology, pedagogics and psychology, physiology and medicine, sociology, etc., studying the person in his cognition in a situation of a historically new space-time and disclosure of its real opportunities, needs, abilities. The problem of elaboration of the strategy of the person’s education, certainly, is rigidly topical and acts as the leading in the system of the Russian Academy of Education called for opening of ideological and world outlook and also theoretical-methodological bases of the organization of education on the basis of complex psychological-pedagogical constructions. This should occur not only and simply in acquisition of a certain body of knowledge, but also in formation of the relation to knowledge as a whole, the relations to the world, to others, to self, formation of the need for expansion of knowledge and abilities, – the education providing definition and establishment of its place in modern space-time. New tasks demand not only new projects, but also appraisal and reappraisal of the positive fund of the accumulated data in the practice of organization and development of Russian education. Not casually now the Russian Academy of Education carries out a scientific audit of all institutes to distinguish the perspective researches from flimflam, to prevent falling of research activity, to liquidate the vacuum of theoretical ideas.

It should be noted that at all defects of our activity the team of researchers of the Academy has made a lot as a whole. Thus, teachers, specialists in didactics, methodologists have carried out a productive work on definition of the bases of selection and structuring the content of general secondary education. The important materials promoting modernization of professional education are received. Variable models of knowledge of different kinds of art are developed. In the field of pedagogical psychology and developmental psychology, besides many other practices, there are identified the psychodidactic bases of creation of developing educational technologies, design and examination of efficiency of the educational environment. In particular, in the sphere of age physiology the process of formation of the brain integrative activity as a basis of the child’s cognitive development is purposefully studied. Concerning the use of information and communication technologies there are revealed the ways of prevention of their possible negative consequences (the detailed report on the activity of institutes and members of the Academy is available on the RAE site, enabling to appraise the results of the carried out work in detail).



At the same time I would like to pay attention that soon we should execute a number of perspective basic researches planed by the presidium of the RAS, after a detailed discussion with the Academy members, heads of institutes, leading scientists, in 12 directions including more than 70 projects and over 200 subjects, assuming comprehension of both a modern situation, and anthropogenic changes of the person, substantiation of prognoses of the development of education and growing people's socialization, methodological studies of innovative schemes, training and education models taking into account all-civilization trends. Prominent scientists were scientific curators of these researches; a part of them are heads of academic institutions, and some of them perform this work as members of the Academy, being its out-of-staff members.

Certainly, all these directions, projects, subjects in their real performance will be specified, broadened, deepened as it is not simply a question of a new step, new planning for the next years, it is not simply a question of aspiration to improve quality indices in its organization, and it is not simply a question of introduction of something new. On the agenda there is, first of all, the consideration of the problems connected with the objective necessity of studying of the features of transformation of the modern growing person in the really transformed world, in a *new historical situation of functioning* when the person has turned out in the conditions of high-dynamic processes of such changes, in a condition of their confusion and vagueness, impeding distinguishing the tendencies of movement and perspective lines of development when there become complicated, in particular (but that is very important), communications and the nature of intergenerational interaction – the educated and the educating, pedagogues and pupils differently fitting in with a complicated world of objectively structured spaces of new knowledge and information fields. Secondly, and this is the main thing, decision of the problem of structuring the new education system focused on the clearly distinguished purposes, tasks, the formulated corresponding principles of organization, supposing new understanding of this sphere of the person's life activity at keeping of all the significant, effective in his/her cultural reproduction, achieved in the historical development of Russian society.

It is no coincidence that large groups of scientists go into these questions now, for example the Center of the problem analysis and the state and administrative projecting, the Center of strategic researches and development of Siberian Federal University, and also many other collectives carrying out perspective researches. But in these researches the leading role has to belong to our Academy, according to its status obliged to be engaged in development of problems, concepts and education theories.



In the space of our field of activity focused in the program of the distinguished 12 main directions, discussed in the structures of the RAE, supposing a scientific reflection of our community on social, psychological, psychophysiological changes of growing people and the nature of society's development, and also the action strategy on development of the new theoretical bases and the principles of the organization of education, it is possible to isolate some main spheres of the forthcoming creative work.

The first sphere consists in that in the cooperation with philosophers, historians, sociologists we should try to reveal, whenever possible, at least the main characteristics and parameters of changes of modern society as a stage of historical development in the context of the role of Culture acting as a way of reproduction of society and Education as a forming basis of the person's and its cultural potential. Here we should define an orientation of the purposes, needs, opportunities of education of the person of the XXI century at the real importance of the competences of the corresponding activity spheres. Thus, we should consider methodological and theoretical questions of prognostication of development of the person and society, on the principle that prognosis begins there and then, where and when the parameters of the expected development are determined.

The second sphere is connected with deep knowledge of the modern growing person, his/her new possibilities, features of his/her world perception, nature of the development of his/her thought-activity. Thus, we cannot further manage with point, local researches of different aspects of real changes, in the complex of situations fixed by different researchers, in different approaches, at application of different, sometimes casually chosen, and often outdated techniques.

On the basis of the studies carried out within the limits of the planned directions, understanding of projects, analysis of the carried-out subjects, the purposefully set consideration and generalization of findings it is important to develop an integral strategy of cognition of modern Childhood, deep theoretically substantiated, prolonged study of key parameters of its development at exarticulation of the characteristics necessary for understanding of all main features on which taking into account the searches of the necessary purposes, tasks, principles and conditions of education should be focused.

The third sphere supposes concentration of our efforts on a deep assessment of the structural and substantial, really presented features of the functioning system of modern education, identification of its effective structures, forms, tendencies of orientation to society development, its future, and also failure places, shortcomings, where lag, discrepancy are especially sharply



shown, i.e. on the analysis of what we have, how it works and where there is a failure in the system of modern education.

The fourth sphere is directed on constructing of a scientifically reasonable program of the development of new principles of the organization of education at determination of the nature of significant knowledge, its volume with orientation to formation of the need for their expansion, in deepening of forms of its presentation and the ability to this, at learning of children to get and accumulate knowledge, to carry out its choice. The task consists in that, besides vital knowledge in a modern situation, we should increase the cultural potential of each growing person as a condition of accumulation of the intellectual capital of society and a condition of its further cultural-historical development.

And at last, **the fifth sphere** will be formed by a difficult complex of works on comprehension and development of the system of researches of correlation of the effect of the focused and chaotically acquired information and their "knowledge choice" in the mass media and the knowledge acquired within the purposefully organized, constructed and scientifically substantiated forms of education – from the preschool to the high school level. Further, this complex of works will concern the identification of how information of the mass media (including noise) can develop into built knowledge structures in order to organize training on the basis of development of the integrated thinking taking into account the necessity of active use of a choice from a general flow of information of significant materials and formation of the program of training with wide use of ICT at maintenance of steadiness and active activity as the main basic text (book) information as a necessary condition of optimum development of intelligence and brainpower of pupils.

Constructing the whole of the multidimensional activity, the activity exclusively difficult, we understand that the transitivity of the modern era puts psychological-pedagogical sciences in an extremely difficult situation due to the lack of a national idea, underdevelopment of the purposes of education, ideals of the educated person in society. At the general understanding of that a new person (not a Nietzschean superperson, but the growing person of our time) has to be constructive and creative since he/she should project new reality and at the same time he/she has to be a man of considerable culture, according to Daniil Andreyev, "a person of the ennobled image" [9, p. 18], respectively we need to develop conceptual and theoretical schemes of the new content of education and new methods, forms, means of effective motivation of children, teenagers, young people to broadening of knowledge, growth of creative abilities and their realization in life, intensifying their self-construction. In this plan we need the organization of extensive scientific dis-



cussions for open comparison and competition of ideas on the most pressing problems and complex issues that will enable us to raise the general level of our professionalism in all lines – in methodology, theory, in the field of experiment, and also to provide consolidation of forces in deed, but not in word.

I would like to remind V.I. Vernadsky's opinion which is very urgent today. The great thinker wrote, "It doesn't perplex me that now the persons in whose deep spiritual force there is a huge, while invisible work, as though don't participate in life. Instead of them other people whose actions aren't restrained by a spiritual work are in the foreground. But the whole of this will disappear when there will be revealed the invisible in its external manifestations process which is a spiritual result of the world human consciousness. It ripens, its time will come, and it will say the last imperious word, and the powers of darkness which have emerged on a surface now, again will fall in a bottom ..." (On Russian intellectuals and education // Discoveries and Destinies. Moscow, 1993).

I'm sure that this fine foresight will come true very soon!

References

1. *Affekt i intellekt v obrazovanii* [Affect and intelligence in education]. Moscow, 1995.
2. Bol'nykh detei stanovitsia bol'she [There are more sick children]. *Uchitel'skaia gazeta – Teacher's Newspaper*, August 21, 2012, no. 34.
3. Vernadsky V.I. O russkoi intelligentsii i obrazovanii [On Russian intellectuals and education]. *Otkrytiia i sud'by – Discoveries and Destinies*, Moscow, 1993.
4. *Gazeta "Pervoe sentiabria" – "The First of September" newspaper*, June 23, 2012, no. 12.
5. Granin D. Nravstvennyi klimat v nashei strane nevyinosim [The moral climate of our country is intolerable]. *Uchitel'skaia gazeta – Teacher's Newspaper*, August 28, 2012, no. 35.
6. *Zhizn' v sisteme kommunikatsii* [Life in the communication system]. Moscow, 2010.
7. *Natsional'naia ideia Rossii* [The national idea of Russia]. Moscow, Nauchnyi ekspert Publ., 2012.
8. *Pedagogika – Pedagogics*, 2012, no. 5.
9. *Prilozhenie k zhurnalu "Ekspert" – Supplement to the journal "Expert"*, 2000, no. 1–2.
10. Rubenstein S.L. *Problemy obshchei psikhologii* [The problems of general psychology]. Moscow. 1976.
11. Einstein A. *Fizika i real'nost'* [Physics and reality]. Moscow, Nauka Publ., 1965.