EEIA-2017  
2017 International conference  
"Education Environment for the Information Age"  

POSTMODERN IDEAS’ INFLUENCE ON EDUCATION  
(ILLUSTRATED BY THE USA EXPERIENCE)  

Svetlana V. Ivanova (a), Tatiana N. Bokova (b)*  
*Corresponding author  

(a) Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, Russia,  
(b) Volgograd Socio-pedagogical University, Volgograd, Russia, tnbokova@mail*  

Abstract  

The present study shows post-modernism as a philosophical movement and its ideas’ influence on education. The research develops in two directions: firstly – in defining and studying specific traits of post-modernism (including its various theoretical concepts) that have the potential to influence the education system and that really influenced the structure, content and organizational forms of educational process; secondly, in demonstrating the real impact in modern conditions (at the end of the 20th – the beginning of the 21st centuries) on the total education in the United States by studying the changes in U.S. schools. The value of this work lies in the fact that, for the first time, it examines the influence of postmodernism ideas in this formulation of problems and their specific solutions. For the first time, the problem of post-modernism influence as a philosophical movement is considered not only through theoretical analysis but also through the study of practice in the following complex: via regulations, norms, reports, research papers, reflective analysis of changes in USA high school. The authors believe (and the study proves it) that in the United States of America the influence of postmodern ideas on education (namely: schools) has appeared the most profound and, to a certain extent, productive. The size of this article and the present state of research does not allow to reflect the results of the survey of the USA schools’ practitioners as evidence of our ideas, which will be presented later.  

© 2017 Published by Future Academy www.FutureAcademy.org.UK  

Keywords: Postmodernism, education, multiplicity, rhizome, decentration.
1. Introduction

In the introduction to this paper, the authors draw attention to some salient points related to the reasons for the emergence of the idea to study the postmodernism influencing the education in general and secondary education in the United States in particular.

For the past dozen years, we have witnessed the close attention of philosophers in the U.S. and Europe to the philosophical movement called postmodernism. Researchers-teachers in the United States have been studying the manifestation of postmodern ideas in education for approximately thirty years (Dmitriev, 2007). However, all this has not led to a significant consideration of this ideological, spiritual, intellectual, mental phenomena in any sphere of human activity, also in education and pedagogical science. Some researchers believe that in Russia there is no understanding of the postmodernism impact on education, neither at the theoretical nor at the application levels (Garifullin, 2012).

In this connection, the authors have many times been tempted to turn to the words of Gilles Deleuze and Guattari:

"Post-Kant philosophers revolved in a circle of the universal encyclopedia of the concept linking his work with pure subjectivity instead of having to deal with a more modest issue, pedagogy of the concept, analyzing the conditions of creation as factors of the moments, remaining single. If the three stages of the concept development are encyclopedia, pedagogy and vocational - commercial training, only the second of them may prevent us from falling from the vertices of the first one into the gap of the third one — into this absolute failure of thought, whatever its advantages from the point of view of world capitalism were" (Deleuze & Guattari, 2009).

Appealing to this passage is not accidental, here is the emergence of the authors’ idea to investigate the influence of postmodernism on education, and not by separate references to its specific manifestations in the education system, but by a comprehensive theoretical study and analysis of the key ideas of postmodernism implemented in practice.

The authors examine the specified impact as an event represented in the world of education. It is obvious that the conditions of the education system’s existence have changed, but the question is how this is interpreted. It can be stated that until now, pedagogics has been sometimes trying to do without a philosophical understanding of reality. However, in this case pedagogy cannot be free enough to propose new concepts, to maintain its value as a science, able to solve problems and generate new meanings, to create new organizational forms and structures based on methodological grounds, built on modern philosophical approaches.

Promoting "making plans and raising issues", "creating concepts", Deleuze and Guattari did not mean pedagogy, because this science exists in a constant condition of the necessity to create "concepts for necessarily changing problems" (Holland, 2013).

In our view, we can confidently assume that, from which it follows that thus a postmodern philosophical project of understanding the modern educational reality is presented. In fact it is a call for the creation of new concepts in new conditions, in the "era of changes" (as the ancient people called the turning points in history), in which we appeared to be.

An important assumption of the postmodern: the interpretation of reality may be incomplete and even incorrect, theories and concepts may not produce the desired result over time, but the problem lies
elsewhere. The problem is that there is a lack of understanding and lack of new ideas, generated by the new time.

And again, we speak about the new time not randomly; we associate the ideas of postmodernism, waiting for being registered in the educational theory and reality.

It is significant for our study to clarify what different researchers understand using the term "postmodernism", what this concept describes.

Postmodernism as opposed to modernism, both as non-classical (the early 20th century) and post-non-classical (since the end of the 20th century) method of philosophical thinking, as a style of art is understood in the usual logics of modernity, as something that "follows...". But it's not defined that much in the discourse of the phenomenon itself that denies precise definitions, rigid frames, the thought connection to some specifics, which has a tendency for disorder, multiplicity, fuzziness, irrationality, once criticized by Guénon (2012). Postmodernism has spawned a new vocabulary, a new attitude to thought and senses, a new method of thinking about the world, a new attitude to it. Consequently, a new acceptance of the world must be born, based on other reasons, others than in a situation of modernity (Ivanova, 2012).

By Umberto Eco’s definition, postmodernism is primarily a style of thinking typical of the modern era (Eco, 2007).

It is known that as a philosophical trend postmodernism is not homogeneous in nature. According to Ilyin, similar to the opinion of a number of other researchers, postmodernism "started to be comprehended as an expression of "time spirit" in all spheres of human activity: art, sociology, philosophy, science, economics, politics and so on" (Ilyin, 2001). Postmodernists, describing the phenomenon of postmodernism, of course, rely on the values and ideals of the classical culture, criticizing them, at the same time. In the world of postmodernism there is no escape from the sometimes overly broad and shaky interpretations that creates the whole field of discourses, or of larger "canvases" of interpretation, penetrating and altering politics, law, religion, morality. Of course, education is no exception from this series.

The term "postmodernism" often indicates structurally similar phenomena in the world of social life, the culture of the second half of the XX century (Dianova, 2003). This broad definition has a right to exist, because even among the postmodernists there is no agreement in the understanding of the postmodernism phenomenon. On the one hand, fundamentally: do we really need to define it, as long as everything in the world is constantly flowing and changing? On the other hand, any term is a social and individual construct and, therefore, there may be many definitions of postmodernism, as the more of them you have, the deeper one can get into the essence of the phenomenon.

There is also another definition saying that postmodernism "is a special way to reflect the major trends and benchmarks of the society which has reached a certain level of development. Postmodernism as a complex ideological trend represents the quintessence of the spirit of the time, as it most adequately reflects the understanding of the world in our days, which is associated with a sense of unacceptability of previously dominant views about the world and man in the new socio-cultural realities" (Emelin, 2000). Umberto Eco suggested that postmodernism is not a chronologically fixed phenomenon, but a spiritual condition. In his opinion, the phrase that every era has its own postmodernism is absolutely true (Eco, 2007). According to Mankovskaya, the multiplicity of interpretations, encoded in the postmodernism, the
change of spiritual values, a pluralist trend of history interpretation made postmodernism a form of social life, with its instability, unpredictability, risk of reversibility (Mankovskaya, 2000).

Veith says that postmodernism consists of the following positions and doctrines: 1. Social constructivism. The meaning, morality and truth do not exist objectively; they are created by society. 2. Cultural determinism. People are fully formed by cultural forces. Language for example determines what we can think of. 3. Abandoning one’s own individuality. People exist primarily as members of groups. 4. Rejection of humanism. Values emphasizing human creativity, independence and priorities are inappropriate. There is no universal humanity, as each culture creates its own reality. Traditional humanistic values are canons of exclusion, oppression and crimes against nature. Groups should be given the opportunity to defend their own values (Veith, 1994).

Giving a brief summary of postmodernism characteristics, it can be argued that the conceptual essence of postmodernism can be expressed using the following terms: eclecticism, deconstruction, plurality, otherness, inclusiveness of all participants, the artistic perception of reality, interdisciplinarity, pluralism, multiculturalism, the meta-story, interactivity, uncertainty, incompleteness, openness, dialogue, doubt, irrationality and recognition of the presumption of the unconscious individual and collective attitudes. All this is reflected in the variability of educational content, allocation of management functions, individual construction of learning, etc. Interfering with the classical representation, these approaches generate divergent aspirations: how to maintain stability, to strengthen control, and to destroy the canons, to search for the new.

These ideas, which appeared originally in the French postmodernism, gradually penetrated into the American society, and later began to define some of the features of the American system of education. For example, a center was established in California, analyzing the postmodern world. In the Center, there were defined the features of postmodern society: 1) post-anthropocentric view of life in harmony with nature, not separated from it, expressed with the human desire to control and exploit; 2) a post-competitive quality of relations based on cooperation, instead of individualism or oppression of a man by another man; 3) a post-war belief that any conflicts can be resolved through peaceful negotiations; 4) a post-patriarchal vision of a society in which the age-old religious, social, political and economic subordination of women will be replaced by a social structure based on equality of "feminine" and "masculine"; 5) a post-European view, in which the values and practices of the European tradition will be regarded as higher in relation to other traditions and will be imposed on all peoples, and the right of other cultures to have a wisdom of their own will be respected; 6) a post-scientific belief that the natural sciences have only one (not exceptional!) method of obtaining knowledge and that in the world there are also other moral, religious and aesthetic etymologies with a great potential in the discovery of truths, so they should also be the center of world perception and public policy; 7) a post-disciplinary concept of scientific research, including ecologically related view of the space instead of a modernist engineer’s mechanistic idea of controlling the Universe and 8) a post-nationalist view, in which individualism and nationalism will be replaced by a planetary consciousness, concerned primarily with the welfare of the Earth and all of the individuals and communities that inhabit it (Dmitriev, 2007).

It is important to refer to another construct of Gilles Deleuze (1998). In his paper "Logic of sense" he proposed a modelling concept of reality in the form of intercultural, inter-individual interactions, expressed in the concept of "nomadology". Nomadology represents, on the one hand, some concept, a
"plan" of the inter-subjective interactions reality (meanings, languages, interpretations, opinions); on the other hand, it is some kind of idea on the construction of anti-centralized, discrete, differential interaction space. Thus, nomadology is some model of worldview, which is based on isolationist, the understanding of reality as a non-structural whole. A "rhizome" is the key concept of a nomadological project and is directly opposed to the concept of structure as a systematic and hierarchical organization (Cormier, 2008). Rhizomatism (from French "rhizome" – system of roots), outside of the biological sciences, is nowadays understood in different ways, depending on the researchers’ positions.

It can be characterization as a way of thinking, a concept of knowledge, and as a model of society, as an attitude and as a strategy. Speaking about the types of mazes, Umberto Eco notes: "A rhizome is constructed so that its each track has the opportunity to cross with another. There is no center, no periphery, no exit. Potentially, such a structure is infinite" (Eco, 2007).

One of postmodernism ideologists Liotard stressed that postmodernism is a style of thinking that permeates all spheres of life, like a rhizome, changes a person's thinking and his/her attitude to other people, creating a whole space of rhizomatic links. It is important to imagine that the rhizomatic structure in itself is contingent and boundless, because it expresses fundamental for the educational reality of postmodernism idea of the presumption of the destruction of traditional concepts of education being a centered and stably definite structure. Such a perspective allows us to identify alternative to radically closed and static linear structures, assuming a strict axis orientation (Liotard, 1994).

In this part of the work, the authors showed those characteristics, specific features of postmodernism, which, as they will show later, have a very serious impact on the educational system.

2. Research Questions

The paper described the theoretical concepts of postmodernism, which are able to influence the educational system, primarily in the didactic aspect. The analysis of the impact on practice of education is illustrated with the example of the general educational system of the USA as the example of rather lengthy and, in this respect, deep influence that led to major structural and substantive changes in educational organizations in the United States.

3. Purpose of the Study

In this part of the work, the authors showed those characteristics, specific features of postmodernism, which, as they will show later, have a very serious impact on the educational system.

4. Research Methods

In the introduction we considered the main bulk of postmodern ideas, which are able to exert influence on social development in general and education in particular. Now we’re going to use the example of the educational system of the United States to demonstrate how postmodern ideas have had an impact and what the results of this influence for the general education system in the United States are.

It is important to have an idea about why the United States and why the general educational system were chosen for the study. First of all, the results of our study will contain a fairly complete answer.
However, it should be noted at once that some features of a postmodern society were found in the United States. These features are not abstract, but actually introduced and gradually entering the mainstream of the society. It is in the scientific community and in educational practice where the analysis of new traits (characteristics) of social development was carried out. Apparently, here earlier than in other countries, they began to reflect on the possibility of the postmodernism philosophical ideas’ influence on the world, referred to as the postmodern era. Besides, the first postmodern theoretical constructs appeared in Europe, particularly in France and Italy. Considering the U.S. education system, one has to mention the specific character of its formation, which is more in touch with social trends, the decisions taken by the government being connected with public opinion.

In our view, the changes in secondary education in the United States throughout the twentieth century were influenced by two factors. The first factor is connected with the peculiarities of the educational policy and the teaching community’s reaction to them. Among these features one needs to highlight the fact that many of the state-social problems had not been solved, despite the actual legislation and ongoing reforms. The second important factor is the so-called "Time spirit" of the second half of the 20th century, which reflected the philosophical mindset of the society, later analyzed by the humanitarian scientific community (Williams, 2008, Mondale, 2001, Mockler, 2006). These attitudes certainly impacted on the school as a part of the society. For this reason, we turned to the analysis of philosophical-pedagogical ideas of postmodernism, which, in the view of some researchers, had a certain influence on the system of secondary education in the United States.

5. Findings

We can note that the principle of rhizomatism is being developed in several basic characteristics of education in the postmodern era. They are important because they set the new contours of the design, description and explanation of reality in general and the pedagogical reality in particular. Let us consider some characteristics.

5.1. Decentration

Decentration – the lack of any defined structural center. It is important that post-modernist ideas set the direction of society decentralization, which is revealed in the pursuit of any social processes rhizomatism, including the process of education. Education is inevitably decentralized, like the society. Rhizome is opposed to the notion of structure as a systematic and hierarchical organization. This concept’s introduction into the philosophical turnover captures an active expansion of deconstruction strategy, or, in other words, the recognition of the pluralism of meanings (Derrida, 2007).

Postmodernism represents a radical non-classical cultural project, which is based on the principle of deconstruction, decentralization of culture as a holistic matter. The main contribution of postmodernism into the philosophy of culture is the idea of overcoming the "centrism". Later, we will refer in more detail to this problem of postmodernists’ criticism of the subject concept, as it embodies, in the postmodernists’ opinion, the spirit of "centrism", because the subject is not eliminated from the educational process (Deleuze, 1987).
5.2. Connectivity and heterogeneity

Connectivity and heterogeneity – the lack of center, clear boundaries or a hierarchy. Biological and social rhizome is constantly growing, giving new "roots" from the outgrowths. Accession shall be effected in all directions, connecting the areas, which, it would seem, can’t be connected. Everything is connected, but the shoots are almost independent, they do not follow a unified scheme of growth: every element of the rhizome can and, most likely, must be associated with any other element. It is paradoxical that a rhizomatic system involves uncertainty, and it is a trait that can't be typical of education in its traditional sense. This uncertainty primarily explains the secret of homogeneity, in which no hierarchical orders of magnitude can be manifested.

5.3. Multiplicity

Is actually the continuation (if not development) of decentration and heterogeneity features. There is no single center, but there are many nodes and links, there is heterogeneity, but no hierarchy or difference. In the end, the focus is that the system is reduced not to a single, but to a multiple matter. It can be understood in the framework of a single multitude, of the self, which is different from itself without a reason, which surpasses itself, crossing its boundaries, constantly changing shape (Coley, Lockwood, O’Meara, 2012). Each subject as rhizome, as a multitude of subjects, there are many intersections, exchanges of knowledge, constructs, bearing constant changes, but not in the form of pure knowledge, pure achievements, but as the development and assimilation of something imported and associated, perhaps, not the knowledge, but information. The education outcome is not measured by quantitative indicators of "how many (units of knowledge, people, etc.)" and "in what terms", but using models "I can" and "I understand". If the received information is regarded as useful for the society or is justified as the applied one, it is considered to be knowledge. Society, therefore, gets the possibility to create knowledge outside the specified context, and to make it a new link of the existing and constantly being created chain.

The understanding of reality as a multiple, decentered, and open structure is proved by a "nomadology project" of postmodernism. This project is a conceptual model of the decentered environment characterized by a fundamental emphasis for postmodernism to refuse from typical presumptions of classical metaphysics, namely: a) a rigid structural organization of life; b) the space being interpreted as discretely differentiated by means of semantically and axiologically defining points. Nomadism (remember that the word comes from "nomad" – a tramp?) has the property of deterritorialization. It has been less rooted in genesis, which is typical of a modern man. A working or entertaining on the Internet subject overcomes the governmental and other boundaries, communicating without financial obstacles. His world is atopic, having no location. Decentration is the central element of deconstruction and, as pointed out by Jacques Derrida, a necessary condition for criticism of the whole European spiritual culture, the formed world view, especially of metaphysics (Derrida, 2007).

5.4. Discontinuity

Is the intermittent separation of structure. Here we turn to the concept of the rhizome again — root, which can be broken in some place, but which will resume the existence of one of its old lines or on the new lines. Every rhizome contains the split points, in which there are new branches, ready to break in
their new areas and to establish new points of various compounds. Discontinuity supports decentration, connectivity, multiplicity, and consistency. This feature also shows the total connectedness of all of the previously listed traits, the “branching” of the rhizome, even in the method of its anti-structural, dislocational organization. This feature flows into the next.

5.5. Cartography

Cartography means that the rhizome does not fit in any structural model. The rhizome is a map, not reproducible without the awareness of one’s close contact with reality. Any new rhizome, every new branch can’t be repeated according to the old schemes, samples and templates. In this case, once created, it can be broken, ignored, adapted to all stages of mounting, reworked in favor of a particular person, group or social formation. It can be painted on the wall, conceived as a work of art, can be used in political activities or meditation. Gilles Deleuze and Guattari also use the term deterritorialization and reterritorialization to demonstrate the constant process of change. Deterritorialization is the process of destruction of something that has already been done, but this destruction happens because of the desire to move permanently. The movement is done in the unpredictable direction; it is based on the need to build, not to destruct. Therefore, reterritorialization comes after the destruction, creating new forms and new models with the new forces (Holland, 2013).

5.6. Event construction of reality

The reality is an open, deterritorialised space consisting of various artifacts, including legends, myths, autobiographies and biographies, personal notions of history and modernity. This reality is populated by entities with their own vision of reality, their goals and aspirations. This trait can be seen in different examples, let us refer to the world of education. The result of the teachings should be – and this is important in the postmodern understanding of education – the student’s ability to give his personal values to the things he studies. The teacher's task is to provide conditions in which students can explore different cultural perspectives and values. The teacher should always have a set of approaches to democratic decision-making about what should be the content of the lesson, about how to draw conclusions, made at the lesson, work in progress and open to other representations and interpretations. Between the teacher and the student there should be a permanent dialogue in the search for truth (Ivanova, 1998).

Understanding the educational process as a designed process means that students must create knowledge for themselves, each learner individually (and socially) constructs meaning. Meaning is a conceptual core of learning but we must constantly learn to build the meaning. The task of constructing a meaning is taken by a teacher.

To construct the meaning in the learning process, one requires two essential preconditions:

- firstly, the teacher should focus on the student as on a subject of learning rather than on the content. Postmodern pedagogy refuses from the model, according to which learning must be based solely on a bulk of knowledge given by the teacher, while the student must accept it passively. In such a situation, the principle of hierarchy between the teacher and the student, whereby the teacher gives the student the knowledge "from above", through directives and instructions, is excluded. This idea was defended by Rogers (1994), who discussed the role of
the teacher-facilitator and who created the situation of equality in the educational process. This idea was elaborated by one of the authors in an earlier paper (Ivanova, 1998);

- secondly, we proceed from the statement that there is no knowledge independent of the learning subject. Learning is a personal and social construction of meaning from a vast array of personal experience, which itself does not have any uniform procedure or structure. Thus, knowledge and education is the result of studying the real world faced by the teacher and the student, and this world, as we know from the sphere of psychology, depends on the perception of both teacher and learner (Bokova, & Pluzhnikova, 2016).

5.7. The rejection of binarism

The rejection of binarism as the principle that gives reality its structure, hierarchy. It also needs to be considered in connection with training in its following sense: as an equal collaboration, the content of which continually changes and restructures. If in a modernist model of education training was carried out through a rigid hierarchical system of "teacher − student", in which only one component — the teacher — had the presumption of power, then postmodernism encourages to destroy such a binarism of teacher and student. Not accidentally, one of the major postmodernism techniques is that of overcoming and even deliberate destruction of binary oppositions. The teacher and the student are no longer seen as binary oppositions to each other. They are equal components of the single learning process, who jointly structure the interaction space. Postmodernists understand any binarism as violence and oppression of a human. According to Dmitriev, unjust power relations lead to oppression and exploitation of one man by another man (Dmitriev, 2007). Many American postmodernists consider this issue not so much from the social and economic position, but also from personal and cultural ones, exploring, for example, gender, family, religious, linguistic, and psychological oppression. An example of gender oppression can be, for example, adherence to the stereotype that girls are less capable of studying mathematics and physics than boys. Being "oppressed" by the teacher through language ("stupid," "can't understand simple things" and other sayings of this sort can be often heard at school, where one can observe the relevant negative emotions: students can show indecision and timidity, be depressed, lose faith in their own abilities.

5.8. Individualization and humanization of the educational process

Is a reflection of the specific circumstances and conditions in which the educational process, adapted to the reality and the student’s experience occurs. In this sense, not the final result but the process is important in the educational environment. The teacher should have the ability to find individual approach to different students, to be ready for the ideas of humanization of education, associated with the postmodern era, for implementing the features of postmodernism described above. Much new, needed to be added into training, may not be transferred in the traditional technology of teachers’ professional training. The professional development goes beyond the teachers’ acquisition of new skills or knowledge.

6. Discussion

Firstly, it is important to identify what is postmodern pedagogy refuses the word "theory" and replaces it with the word "theorizing". Any theory appears to be a finished product, and it's done by
theorists, generally, academics, who need to give their students clear, complete definitions of terms so that their knowledge could be checked at the exam. The research staff of research institutions are also involved in theory, but they are far from school and practice, though, as well as practitioners, they are under pressure of the order of companies which produce tests and of the authorities’ administrative resource, that is why their theories are not too inclusive either. Theorizing excludes the domination of one discourse, of narrative, interpretation method of educational content or its individual parts. The main magazine of teachers-postmodernists in the United States is called "An Interdisciplinary Journal of Curriculum Theorizing". If this change of terminology is fixed, as K. Marsh and J. Williams believe, “theory-practice” dichotomy will disappear”, as here everybody becomes practitioners who talk about their experiences of teaching and learning" (Dmitriev, 2007).

In addition, the post-modern project of education focuses on the use of knowledge for practical purposes – as a guarantor of success. Knowledge, ideas and language are created by people, and not because they are "true" but rather because they are useful. Truth does not exist or it is unknowable. Truth is considered in its relation to culture. For example, in American textbooks when describing the "American creed", which includes the God-given rights to life, liberty and property, it is often assumed that these rights can be true for Americans, but people in other countries and cultures see it differently. This view reflects the deep influence of the postmodernism ideas on the modern system of education. Postmodernists, following structuralists, believe that the truth is determined by each individual culture on its own. Truth is relative, not universal. Postmodernists replace the word "truth" with such words as "prospects," "constructs" or "point of view". So they say: the best we can do is to describe how various groups perceive the world; but we can't assume that it is actually true (Cormier, 2008).

The process of postmodernism impact has affected teachers, schools that began moving from the traditional state (let's call it so) to finding something new, namely to the desire to make educational process and the student’s being at school comfortable, the move towards the individualization of learning based on individual differences, needs and abilities. The concept of lifelong education was initiated, which states that learning occurs throughout the individual’s life, and that the teacher also becomes a student in this process.

Teachers who perceive the modern ideas of the postmodern, began to see their task in changing the learning process from influencing (and therefore suppressive) for the process of interaction, to help the student to get rid of pressure, to unlock their potential and abilities, and, ultimately, to self-actualize. The teacher should understand that his activities may either liberate the disciple from the oppression and self-oppression or to impose more of those. Any forms of open imposition are regarded by postmodernists as an environment of violence. So, Derrida writes that violence is a necessary environment of education as a part of the culture since every type education involves the identification of non-identity, that is, the collision of two unequal positions — of the teacher and the student. Only in the process of verbal communication it is possible to level such differences, so the reality is an open pan-textual environment.

Moreover, a verbal environment is not only the atmosphere of words that denote something, this is, first and foremost, the atmosphere of meanings that dictate the rules, prescribe the behavior to active entities of the interaction – to the student and the teacher. Thus, language mixing, unification promotes a multivariate dialogue between the student and the teacher. Here a special educational problem occurs: that of representation and interpretation of information linking the teacher - student communication (Derrida,
2007). Russian scientists also possess the understanding of the role of a dialogue in the educational environment, in the same years; the works on this subject appear in Russia (Ivanova, 1998, Serikov, 1997, Slastenin & Shiyanyov, 1996, Tkachenko, 1995). We shall also emphasize the connection of this idea with postmodernism, according to Gilles Deleuze, any oppositions (male – female, teacher– student, past– future) give some stiffened forms to the reality, as if "blocking" the active space of its being created by many participants (Deleuze, Guattari, 1976).

Like there is no dedicated centre in the rhizome, there is no person as an object in the rhizomatic educational environment (rhizome-like – the issue of terminology is to be discussed, however, it is the topic of another paper). Educational environment broadcasts a multivariate model of knowledge that is being continually constructed during interaction which creates quite a dynamic educational environment. The student in this environment cannot be an object for the teacher; he becomes an equal subject of the narrative interaction, engaged in the learning process as well as the teacher. The teacher avoids becoming the authority, producing knowledge, but becomes a moderator, a mediator, a facilitator who creates the conditions for the successful production of new knowledge, its interpretation and assimilation. We should remember Michel Foucault, who claimed that the idea of a man as the object of pedagogical study is a fallacy. Making a person the object, the pedagogical science as well as Humanities as a whole, according to Foucault, dissolve the person, lose sight of him, as the person as the subject is not within the interaction, but as if appears beyond them (Foucault, 1999).

Reality as a space of interactions is always intersubjective because the meaning is the point of bonding of other meanings’ plurality that exist here and now (Deleuze, 1998).

To explain this, postmodernists introduced the idea of a "concept". In this context, the concept refers to as a personal act of "grasping" meanings from the textual reality of interaction. Reality consists of multiplicity of "meanings" points that are correlated with other meanings, which are constantly born out of each other, giving it "depth" or "surface". It is a certain microenvironment in which the same meanings are born among the individuals, in other words, the space of understanding is created. Interacting together, the concepts form some sort of "events horizon" or "the desert of reality" (according to the famous statement of R. Bart), which means nothing in itself, but is significant with its interpretations. Reality is an infinitely self-reproducing history of events in which perspectives and interpretation of certain people are significant.

Postmodern concepts consider the role of the subject in cognition to be absolute. They attach particular importance to the subject’s ability to interpret the world, to build his knowledge, to give proper meaning to the phenomena and events, regardless of what others think of them. Take the striking example of different approaches to the study of History. For example, if modern usually views history as something distant in time and space, the postmodern accepted method of learning based on interpretation, which makes the students learn to interpret historical events as if they participate in them personally. Hence the two approaches to the study and understanding of history appear: the first act from the standpoint of logical positivism and analytical philosophy and protect a chronological study of history, while others insist on its existential treatment as a multi-discursive interpretation depending on cultural, scientific and other ideas and their own experience. "Postmodern theorists of the education content challenge those who claim that historical interpretation must confirm the knowledge and values of the
dominant modernist paradigm. Slattery writes that postmodernism celebrates eclecticism, innovation, revision, irony and subjectivity in the interpretation of history" (Slattery, 2013).

Theoretically, it should be clear that the concept of narrative is an analog of the rhizomatic reality. It gives, in our opinion, understanding of the rhizomatic educational system principles. Let us consider a narrative that indicates the processuality, the continued reproduction of textual, verbal reality. The constant reproduction of texts and language structures does not affect the reality and the subjects themselves, but only organizes some symbolic activities between them, creates the atmosphere of game, creative interaction. Any interaction of the subjects "merge" into the hypertext which is the game space of the language (the space of language games, like L.Wittgenstein has it). It is a flexible and dynamic co-creation through language interaction, manipulation through language. Narrative is the space of concepts, a kind of semiotic system, which affects the subjects of interaction, for example, in order to manipulate.

If you apply narrative discourse to pedagogical communication basing on the triad "teacher – training material – learner", then the narrative is presented as the most important "learning tool" in each element (Bukharov, 2011). The teacher acts as a "repeater" or as the creator of the narrative. In the latter case, he/she can use stories from his personal experience, achieving a double effect: 1) to give a vivid illustration of the subject, making it understandable; 2) to qualitatively change the relationship with the students, facilitated with the transformation of the narrator at the same time into the hero of the narrative and the emergence of a personal vision. The study material of almost every discipline includes its history, a review of the current condition, biographies of major scientists and their discoveries. If the teacher balances between generalizations and details and is able to find his own analogy and connections, the rule of structuring the narrative appears – the selection of facts and their organization into "episodes of the story." With such a balance of generalization (objectification) and detail (individual-evaluation component) the goal of the message is achieved, a holistic image of the phenomenon is created. Students, creating a narrative on the research topic (project) consciously receive the new knowledge, thus developing cognitive abilities, and unconsciously they obtain a narrative group identity (communicative skills). Thus, the narrative project is as endless reproduction of statements that only indicate something, not telling about it, where the procedural organization as a way of a narrative ("generalizing" according to Bart) text’s existence is important.

It is important to refer to the meta-narration here. Liotard understands meta-narration as the principle of organizing historic or other narrative events in a particular structural sequence (Liotard, 1994). Therefore, you need to refuse from such meta-narratives, because any of them restricts thinking. For example, in 1976, the American writer R. Federman published a novel that can be read at the discretion of the reader (it's called "At your discretion") from any passage, shuffling the unnumbered unfastened pages. This aleatoric literature soon became computerized, it can be read on the computer display only: press the button and switch to the background of the hero, press another and change the bad ending to a good one or vice versa (Rudnev, 1997).

Thus, postmodernism is based on the assumption that what people consider to be knowledge, actually only consists of "constructs" (world views), not the "truth". The basic idea is that all the knowledge is invented or "created" in the people’s minds. In other words, teachers teach and students learn basing on the knowledge - structures created by people. An important feature of this pilot, relativistic (pragmatic) concept of knowledge is the equal value of knowledge created by a student, a
teacher or scientists. Under these conditions, the creation of a supportive learning environment is encouraged. Here the students can improve their knowledge. Teachers say in such cases that it is necessary to become a "teacher of the future" instead of being a "sage on the stage" (Pinar, 2004). "The teacher of the future", obviously, is the most important pedagogical project in the modern concept of American education. It is the result of close ties with postmodernism, with a special emphasis on the "Discovery learning" technique (education as a discovery), on "creative spelling" (writing creative dictations), on group projects and other social movements, which is an additional manifestation of postmodern thinking.

So what is the content of education for post-modernists? If to go back to the original meaning of the word "curriculum" in its ancient Greek meaning (currere – direction), then the content of education should lead the student. The American researcher Pinar suggests that this term can be seen as synonymous with curriculum that is the result of rethinking of the educational experience, so it can often be changed: "One can say that "currere" is an ongoing project of self-understanding in which a person becomes an active co-author of the pedagogical action as an intellectual" (Rogers, 1994). Thus the curriculum should always reflect life experiences, using ideas from the past, present and future, to create a living and changing educational environment, which is, therefore, adapted to different innovations.

According to Rowlands (2001), the content of education should focus on the student’s personal experience, not on external training purposes. Targets may appear during the learning process. To nominate these goals or targets is, primarily, the student’s prerogative, not the teacher’s, who only suggests something for the mutual consideration in the course of a dialogue and negotiation. Like G. Dewey in the early twentieth century (Rogacheva, 2006), postmodernists choose the experience to be a source of educational content. For Kincheloe, the postmodern vision of education is based on what he calls a "postformal thinking", the main feature of which is the "generation of one’s own knowledge" (Kincheloe, 1999). The teacher with a postformal thinking helps the students not to reproduce someone else's knowledge, but to produce their own; to re-interpret their own lives, to discover new opportunities and talents, to realize their potential; to see the connection between opposite things (he calls it a metamorphic learning); to connect logical and emotional aspects in learning; to consider evidence not in isolation but as part of the whole; to develop empathy; to contextualize the content of education; to understand the interactions between the specific and the general; to go beyond the simplistic understanding of causality; to see the world as a text to be interpreted, not explained; to establish links between mind and ecosystem.

Postmodernism invites teachers to abandon the generated "conditioned reflex to the content of education" (according to Slattery’s terminology) as a set of general and specific objectives, lesson plans and learning outcomes and to look at it as at something uncertain, aesthetic, autobiographical, intuitive, eclectic, and mystical. Postmodern education has no pre-defined common objectives or standards, or, moreover, specific behavioral objectives or expected outcomes of education. The content of education for them is a constantly (up to every lesson) renewing, emerging and changing phenomenon.

Following postmodernist thinking, the purpose of education shifts from transferring academic knowledge and skills to providing educational environment where students create their own knowledge. National educational standards of the USA and the Federal Curriculum (The New Federal Curriculum and How It's Enforced, 2002) adhere to a postmodern worldview. The national Council of social studies,
having examined the educational standards, defined the purpose of education from the students’ position as the formation of their own "constructions", that is, the standards define "knowledge" as "constructions".

Let’s consider another concrete example. Mathematics and its teaching are also influenced by postmodernism. New Maths (its names are "integrated math", "fuzzy math", "constructivist math", "Chicago" math and "Every Day math"), based on the ideology of postmodernity, is now studied by the third of students in the United States, although it is known that the integrated mathematics is inferior to traditional.

School textbooks are permeated with postmodern ideas, here even the fundamental principles of the United States are just constructions created by the culture. For this reason, the U.S. Constitution and the American creed are studied as insignificant.

Today the teachers’ professional development also means the need for teachers to critically reflect on new knowledge and beliefs about content and pedagogy on students and to try them out in practice. This requires: 1) to invite teachers to solve specific tasks of teaching, assessment, observation and reflection, which demonstrate the learning processes; 2) to be demand, reflection and experimentation-driven, run by the participants of the process; 3) to collaborate with educators through the exchange of knowledge and to focus on communities of teachers rather than on individual teachers; 4) to get involved in the experience of other teachers; 5) to be sustainable, long-lasting, intensive and supported by modeling, coaching and collective solutions of concrete problems in practice; 6) to deal with other aspects of school changes.

Professional development of this kind signals the refusal from old norms and models of teacher’s upgrade. The changed program and the content of professional development pedagogy define a new policy, which generates new structures and institutional arrangements for the training of teachers.

The teachers learn by reading and reflection (as well as students); monitoring students’ work; collaborating with other teachers and exchanging experiences. This training allows the teachers to succeed in practice, since in addition to a strong base of theoretical knowledge it is based on teachers’ real problems.

The modern world is undergoing social, economic, political and cultural transformations. Social geography of postmodernity is the only place where roles are becoming less segregated while borders become increasingly irrelevant ("What was "out there" is now "here"”). This has serious implications for teachers and school administrators (Hargreaves, 1998). Not only the social geography of schooling is changing, leading to the blurring of the boundaries between schools and the outside world (by various communities and institutions) but also the social geography of professional learning (growing networks). The content of professional training must be broader and deeper (Little, 1990). What kind of outside world should we have? This topic has been raised in the authors’ papers (Ivanova, 2010), however, it requires deepening, because this is a very important factor of the modern educational organization effectiveness.

According to postmodernism, the school is no place for officials. A director must not sit on the top of the hierarchy, which in fact does not exist. "Postmodernism rejects the idea of differentiation based on order and hierarchy" (English, 2003). A "scoop" structure of the educational organization is supposed where the student is the center of attention of those who are interested (the director, his deputies and
assistants, heads of departments, advisers, faculty and staff), the student is the center of education. The first segment of the oval – teachers – includes those who are with the students daily and know their needs, support their success. The next segment of the oval includes the deputy, the head assistants, the heads of departments, advisers, and teachers. In traditional school practice, it is known as division and specialization of labor, which means the separation of functions. The division of labor was developed for obtaining the specialization to make each employee aware of his/her responsibilities. The director has always been regarded as the head, but this position was misinterpreted. The principal’s deputy and assistants usually have different roles and are responsible for specific levels of the system. Heads of departments directly affect the quality of teaching in the subject area, teachers are responsible for its planning.

"Postmodernists reject such claims, arguing that the conflict represents only the tip of the iceberg..." (English, 2003).

7. Conclusion

Postmodernism, because of its flexibility, implies a permanent dynamics. Thus, the postmodern era together with the era of post-industrial society development has its demands to education, which include not only providing high quality teaching, but also the rejection of universal theories and knowledge paradigms; the transition to the multiplicity and the continuous updating of the content; offering each teacher to develop their own approaches, not to give "ready" knowledge, but to reflect in a dialogue with the student, creating the content of education directly in the communication, relying not on the plan and a summary of the lesson but on the personal experience of the learner (Ivanova, 2012).

The postmodernism ideas are the base for a radical reform of the old system of education with the understanding that a single method or style of teaching/management for all students and teachers does not exist. Supporters of postmodernism emphasize the uniqueness both of each learner who needs special forms of education, individual educational plans and of each employee of the institution, who brings their own talents and skills into their work. Moreover, the Person him/herself, his moral position, multifaceted natural operations and culture, education, professional competence are proclaimed the basis for the development of a separate country and of all the mankind, (Novikov, 2011).

We cannot deny the fact that the postmodern paradigm significantly affects the nature of social change, primarily, in the sphere of education. Becoming the style of the era, postmodernism has created and continues to create preconditions for changes in the traditional educational system with its inherent rigid hierarchy, structuring and stereotyped teaching methods. Postmodernism calls to abandon traditional teaching methods, laying down the principles of the rhizomatic model of education and culture (Ivanova, & Elkina, 2016). The purpose of education in this case is to show the young man the path of knowledge, to create an interdisciplinary vision of the world, not to fill his consciousness with particular knowledge and skills. Principles of post-modernism have found their application in certain strategies of educational process organization, which will be explored in the future.

The paper is prepared within implementation of the State Assignment of the Institute for Strategy of Education Development of the Russian Academy of Education No. 27.8520.2017/BCh.
References

Bokova T.N., Pluzhnikova N.N. (2016) School concept as an instrument of socio-cultural changes in postmodern philosophy of education: from theory to practice. SHS Web of Conferences, Volume 29, 2016 International Conference “Education Environment for the Information Age” (EEIA-2016), Moscow, Russia, June 6-7, 2016 / S.V. Ivanova and E.V. Nikulchev (Eds.). Retrieved from URL: http://www.shs-conferences.org/articles/shsconf/abs/2016/07/contents/contents.html (last access date: 02/01/17). DOI: http://dx.doi.org/10.1051/shsconf/20162901012


Ivanova S.V. (2012) To the problem of the methodological origins of didactics. Domestic and foreign pedagogy. No. 5. P. 4-24


