Explanation of creativity in postmodern educational ideas

Afzal-os-sadat Hossienie a, *, Samane Khalili b

a PH.D OF Tehran Univesity, Faculty of Psychology and Education, University of Tehran, Jalale Ale-Ahamad Ave., Chamran Highway, p.O. Box: 14155-6456, Tehran, Iran.
b PH.D Candidate Faculty of Psychology and Education, University of Tehran, Jalale Ale-Ahamad Ave., Chamran Highway, p.O. Box: 14155-6456, Tehran, Iran

Abstract

Creativity has different dimensions. It can be looked at through psychology, anthropology, philosophy and other views. In this research philosophical view is considered. For this aim, postmodernism is a very suitable option. Postmodernism includes various groups of philosophers who follow multiplicity. We believe their ideas are symbol of creativity and can guide us for a creative education. So it is concluded that postmodern ideas can effect on educational process in various ways. Regarding postmodernist, the aims of education are teaching critical thinking, production of knowledge, development of individual and social identity, self-creation. In postmodern education teachers just lead students to discover new things. They provide opportunities to discuss about different subjects and make creative ways. In this situation student learn to listen to other voices. They tolerate others criticism and try to think in critical way. They learn to respect other cultures and nationalities. Also they emphasize on cooperative learning, independent learning, and dialectic, critical and verbal methods. It is deducted that postmodernism and creativity are embedded in each other and we can find the result of this opinion in postmodern education. Because there is no prior framework in postmodern education and we just look for change and evolution and this point is one of the most important contexts for creativity.

© 2011 Published by Elsevier Ltd.

Keywords: postmodernism, creativity, education, self-creation, critical thinking;

1. Introduction

Creativity is very important concept that we should care it in education. Because of this reason, a lot of researches have been done to clarify creativity. Gilford (1950) believed that creativity is a collection of individual characters and abilities. In his view, creativity is a divergent thinking that means thinking in different dimensions. Other researchers like Baron and Harrington (1981) and Amabile (1989), asserted that creativity is a social subject. Henessy and Amabile (1989) write: "our inquiries have shown that social and environmental factors play the main role in creative work. We realized that there is a strong relation between personal motivation and creativity and mostly social environment effects on creativity". In some theories, creativity needs special characteristics to clarify. Baron and Harrington (1981) write "some researches show that creative people have special traits". Strenberg (1985) indicates some necessary elements for creativity such as: having interest to risk, refusing limitations, having ability to make new and particular things, asking questions and building a lot of hypotheses and being curious. Although these explanations and other ones have fundamental differences, but they have some points in common. It means all of them take care of novel innovations
But we should be careful because every new thing is not creative. In fact new ideas should be worth full. Amabi (1990) believes that besides these two factors we shall add discovery and in this way we can reach the meaning of creativity, so: “creativity is every new and valuable innovation which is discovered”. Creativity has three dimension cognitive, motivated and none cognitive. Cognitive dimension indicates divergent thinking in person. A creative person has enough talents to make more new ideas and during this process he is very flexible to get more novel idea (Manteghi, 2001, p. 17).

Postmodern philosophers emphasize on creative thinking, individual differences and teacher's role as a guide. They is diversity, democracy, awareness and freedom in educational process. Learning is not a stable program indeed there an opportunity to discuss and share ideas. Postmodern philosophers believe that instead of transferring and reproducing steady fact in educational process, it should be considered invention, innovation and change. In this atmosphere, the teacher's role from transmitter changes to participant in changing process. In this way, the class can be a place for invention instead of reproduction. The teacher makes learning easier and the student is active (Usher & Edward 1994). Clive Beck (1993) asserts that postmodernism has a lot of implications for all dimensions of education. Although postmodern ideas have limitations and weaknesses but they can provide positive backgrounds for educational and we should take care of them. In this research has been tried to look at postmodern educational views to investigate the position of creativity in educational aims, educational methods, content and curriculum. Also we consider characteristics of creative class, educational curriculum and relation between students and teachers. It seems that postmodernism can answer most of these questions.

2. Education in postmodernism

Searching about postmodernism without knowing modernism is impossible, because postmodernism has refused most of modernism's main ideas. The most important point in modernism educational opinion is rationality. In modern education, teachers try to educate a logical person who can live in rational society. In this situation, teachers dominate and control students. Also teachers know everything and determine students' positions and futures (Usher & Edward 1994). But postmodernism which tries to solve modernism's problem, has different ideas. Postmodern philosophers reject objectivity, absolute fact, traditional Epistemology, metaphysics and universal moral values. In contrast, they emphasize on subjectivity, local facts, interdisciplinary methods, individual and cultural differences and creativity (Beheshti, 2005). Variation and evolution are basic concepts in postmodern education which are close to creativity. A creative thinking, it is tried to look for new solutions by changing structures and put them in new orders. A creative scientist takes care of new dimensions of phenomena. A creative artist realizes things in a special way and draws them in his paintings (Hosseini, 2005, p. 80).

Creative education is tried to have opportunity for making new ideas. If we want to motivate students, instead introducing a theory, we should talk about it as a problem. In this way students try to solve this problem and they can discover the theory. Learners should know that famous theories weren't complete at the beginning. They became perfect after continuous experiments. Learners should pay attention to deficiency of present knowledge and know that most of things that today are accepted, in the past was denied. So today it is possible to question about all hypotheses and this subject needs to risk and having ability to be brave and don't be afraid of making mistakes. So the other dimension of creative thinking is emotional dimension. Postmodernism with a critical view toward education tries offer new explanation of cognition, knowledge, school, curriculum and educational content. So postmodernism has questioned all limitations, standards and borders and has created new forms of knowledge. In this redefinition, the main work of education is to be questioner of accepted hypothesis, so doubt and scepticism about custom hypothesis necessary for creative thinking. According to these points which have been talked about, now it is possible to investigate about the position of creativity in postmodern educational ideas.

3. postmodernism educational aims and their relationships with creativity

Postmodern educational aims are not determined and they appear in educational process. These aims rise from learning environment and are formed step by step. With this introduction, we can suppose these aims for postmodern education:
3-1- Teaching critical thinking

Although emphasis on thinking and critique has an old history, but postmodern persistence has a deep effect on present education. Carr (1998: 204) writes: "teaching thinking has been one of the most important educational aims from Plato. Various philosophers like Kant, Dewey, Shefler have emphasized on it. But in two recent decades, we can see special consideration toward critical thinking. Critical thinking means a process of asking and answering the questions and analyzing and justifies. In this way it can challenge with traditions and public thinking". Giroux asserts that in the past the role of schools was only to educate non-critical mentality and reproduce everything which was in the society. But Giroux thinks that it is necessary for us to think critically about the way that knowledge is formed and appeared. Giroux doesn't accept to be just viewer. His ideas are a kind of critical education which considers the action (Hoppenfel 2005).

3-2- Production of knowledge

Lyotard criticizes modern institutes and believes that for progress of science and knowledge, we should use new discourses and fresh discussions to discover new rules. In this way creativity will appear. In his opinion, for creativity we should prevent determined conversations (Topp, 2000). According to him, the nature of language games and its special rules demands that people themselves try to produce knowledge and discover new things. Giroux criticizes education too and he believes that its role was only reproduction of knowledge. He emphasizes on production of knowledge and new thoughts. It was discussed about this subject in previous parts of this article. Clive Beck (1992) thinks that the aim of education in the class is production of knowledge. So scientific methods and researches are parts of creation of knowledge.

3-3- Development of individual and social identity

Giroux (2003) believes ever thought and philosophy which doesn't care about human social and cultural issues will fail. He also mentions "border pedagogy". Giroux in his book "postmodern education" investigates border pedagogy. He discusses about this concept with other titles like: "counter-text", "counter-memory" and "politics of difference". The meaning of these concepts is that border pedagogy gives students ability to become familiar with cultures and contexts or different texts and look at them in critical way. Students should try to make their own history and narrations and don't limit themselves in a special context. They don't accept everything which is remained from their ancestors and the search about power relations. They criticize relation between knowledge and power and try to clear their border (Giroux, 1991, pp. 118-132). Hirsch (1978) thinks that transformation of culture should be the main task of education. We have illiteracy of culture. Because we are in high levels of technology and professions but we are still strange to cultural issues of society (Bagheri, 1996, p. 7). Rorty (1989) believes self-creation is more practical in high levels of education, because people are moving from sociability to individuality. In this stage, individual beliefs wake up for new creation and they think that everything which is fact can be change and remake. In this way they describe themselves again and start self-creation.

On the other hand, the concept of "becoming" in Deleuze's ideas that is linked to "rhizome" is a symbol of self-creation. Rhizome means secondary roots and unlike main roots, they don't have determined and clear path. He think that the tree is a symbol of "being" and rhizome is the symbol of "becoming" (Semetsky, 2005). Rhizome presents system which doesn't follow fix rules. This system is open and nonlinear. Rhizome is an indicator of plurality and doesn't accept any stability.

"Becoming" is very important and Deleuze asserts that thinking without it is impossible. In his view, thinking is the result of being different from others. In fact transforming to the other is the cause of thinking. The existences which don't have ability for "becoming", actually they don't have ability to think. For example plants, animals, things and even can't think and always move in linear way. Therefore "becoming other" is the primary condition for thinking (Gilson 2007). Deleuze thinks that thinking is very important in creativity. He believes in all courses and fields, with thinking we can be creative. He has special view to philosophy because in his opinion philosophy is an intelligent knowledge. For Deleuze concepts are the main tools for philosophy and philosophy is in fact the art of formation, invention or using concepts. The concepts don't attend to reproduce themselves. They have different forms. Philosophy makes the concepts in relations with the world; in this way it uses creativity. All concepts are related to the issues and they can
exist without them. Also they are in continuous relation with each other. If some concepts are superior from others, i because of their better justification of the world (Deleuze, 1994, pp. 16-27).

4- Teacher's role in process of teaching-learning and accession of creativity

Teaching-learning process is one of the most important functions in educational systems. Methods of teaching and learning are the main discussion in this process. Postmodernism has special view to this process. Giroux (2003) believe that concerning increase in students' cognizance from information banks, teachers' role should be "how to learn". Holmes (1995) emphasizes on interaction between teachers and students in teaching process. The main condition improving relation between teachers and students is critical discourses with students. Instead of transmission knowledge, teachers emphasize of analysis and justification (Beheshti, 2005).

Giroux writes: "If teachers want to take an active role in raising serious questions about what they teach, how they are to teach and the larger goals for which they are striving, it means they must take a more critical and political role defining the nature of their work, as well as in shaping the conditions under which they work. We believe that teachers need to view themselves as public intellectuals who combine conceptions and implementation, thinking and practice with a political project grounded in the struggle for a culture of liberation and justice. First, it provides a referent for criticizing those forms of pedagogies that treat knowledge as fixed and deny students the opportunity to interrogate their own histories and voices. Second, the notion of public intellectual provides a theoretical and political basis for teachers to engage in a critical dialogue among themselves and students, in order to fight for the conditions necessary for them reflect, read, and share their work with others, in the interest not merely of improving the life of the mind but engaging and transforming oppressive discursive and institutional boundaries. Third, the category signifies the need for teachers to redefine their role as educational leaders in order to create programs that allow them and their students undertake the language of social criticism, to display moral courage, and to connect with rather than distance themselves from the most pressing problems and opportunities of the times" (Giroux, 1991, p. 108-109).

Teaching methods which are mentioned by postmodernism are:

4-1- Corporative learning method

In this method which is done in group, students helping each other learn to choose and decide. Listening to each other, increasing the power of hearing opposite opinions, reinforcement of the ability of criticism are the results of this method.

4-2- Independent learning method

In postmodernism, besides the importance of corporative methods, individual conditions are considered too. Derrida (2001) thinks that there isn't the best method of thinking and education. So always the situation and conditions indicate the best method. According to these points, we can assert that equilibrium between independent and corporative learning is very important in teaching-learning process.

4-3- Dialectic method

This method is one of the interactional methods which pay attention to different elements about learning. Berc (1993) believes that teacher and student should refer information resources and have enough cognizance for discourse. In this way they will have positive evaluation from themselves.

4-4- Critical method

Critical discourse, reading and writing are kinds of this method. In this method, it is tried to motivate students interpret and criticize after studying different topics. Giroux (2003) thinks that critical thinking in learning is dependent on individual independence and rational justification in thinking and action. Individual independence is an obstacle against acceptance and rational justification cause idea creation (p. 13).
4-5- verbal method

Postmodernism's attention toward the other, cosmetic culture and discourse shows importance of language. Postmodernism reason is replaced by language because thinking is described with language (Bagheri, 1996). Postmodernism represents a new visage of teacher and student. The perfect education in postmodernism is the educative in which other's voices are heard. Teacher is a liberal person who guides students to think. Also students use the ability for interpretation and criticism (ibid). Lyotard's language games indicate that discourses aren't stable and there no special frame for making discourses.

Lyotard (1984) himself explains that language games have their own rules. If there aren't any rules, there won't any language games. Conversations are regarded as the movements of these games (p. 10). So he tries to tell us that humans take part in different language games and according to rules of these games, they will have new roles.

5- creativity in content and curriculum

Educational curriculum and content should be on the base of problem-solving. Because in the present world the main need of learners is having ability to solve problems. In postmodern curriculum is tried to put students in the process of becoming. In this process teachers and students take part in a discovery journey to investigate things. All regarding environmental, social and moral problems are suggestions of postmodern curriculum (Pinar, 1996, Farmahini, p. 138). Palmer (2000) explains postmodern education and curriculum with annulling structure and specific frameworks, try to find new possibilities for production of knowledge which rise from everyday experiences or memories. Finally we believe postmodern curriculum which is flexible, variable and plural and is related with factual problems in life can be the suitable opportunity for creativity and innovation.

6- Postmodernism and Iranian education (postmodern implications for education of Iran)

Toyoka Morita (2006), Japanese researcher, in his study on the difference of the learning culture of Iran and Japan indicated that Japanese teachers evaluate their students according to their abilities in writing. On the other hand Iran's teachers emphasizes on oral skills. He wrote that Iranian schools insist on memorizing the contents of the books. I was surprised that Iranian students can repeat literary, historical and scientific texts without looking at their book. Another point that he indicated is about corporative learning in Japan. He asserted that in Japan from primary schools to universities, learning occur through groups. But in Iran, individual learning is considered and students evaluate as an individual not in group.

Hasrati (2005) believes that Iranian education from primary to higher education emphasizes on memory and the culture of education doesn't take care of creativity. Especially it ignores the ability of writing and students of high education don't have enough ability of organization their ideas through writing. Fazeli (2003) believes that Iranian students work slowly in asking questions but they are fast in acceptance of ideas and memorize them even in detail. Also they ignore interaction and cooperative learning. Scott Lash (2004) asserted that modernism was discourse epoch and postmodernism is figural. If in the past human beings thought with words, in postmodern world think with images and figures. In fact in postmodernism writing is more important than speaking.

Therefore, if we want to speak about postmodern education in Iran, it can effect on educational methods more than other parts. During recent years, paying attention toward cooperative learning is considered; especially in primary and middle schools and in experimental science. (Mohebi, 2000, Harirforosh, 2000 and Keramati, 2002 in MOhebi, 2005).

In fact, Iranian education should guide its culture to answer the new needs of people. Iranian education organization realizes this point that current educational methods can't solve challenges of today life. So it is necessary replace creative educational curriculum instead of receptive one. Postmodern philosophers emphasize on activity and innovation. They try to preserve creative dimension in education from goals till plans and methods. Also, self-creative in postmodernism can be helpful for evolution in Iranian education. Regarding this point, education is an interactive process between teachers and students. Finally Iranian education for its development should provide the suitable content for postmodern tips. In fact paying attention to the other instead of own self, different cultures, using cooperative method, critical thinking, using writing skills, creativity, production of knowledge and looking at teachers like guidance can be effective.
7. Conclusion

In this research, it is concluded that there is a close relation between creativity and postmodernism. Most characteristics of creativity are seen in postmodern education. Derrida's deconstruction that tries to analyze structures an introduction to criticism. Lyotard's language games don't accept prior discourses and emphasizes on new discourses and innovation. Self-creation in Foucault's ideas shows that human can create himself in the time. Giroux, who talk about critical thinking and education, asserts that in educational environment, students should practice criticism at hearing other's voices. Deleuze believes that human is in "becoming" process and continuously evolves himself. Their highlight point in postmodern philosophers' ideas is their emphasis on innovation. They don't accept imposed educati and attempt to consider the element of creativity in postmodern educational aims, curriculum and process. Concerning complexity in education, it is seemed that guidelines of postmodernism can make proper contexts for these complexities and obstacles; because social conditions and development of technology demand education to use creative methods in this way it can help learners to adjust themselves better. Also postmodern philosophers' ideas can help Iranian education to improve its educational methods and planning and guiding students to be innovative and creative.

About this subject we can suggest more researches which show relation between postmodernism and creativity better:

1- Critical thinking method in Girou's idea and its implications for creativity
2- Investigation on Deleuze's viewpoints and description of creative class in his opinion
3- Searching about genealogy in Foucault's philosophy and using it as a creative research method
4- Investigation of the role of interpretation in creativity with emphasis on Derrida's ideas

References

Amabile, T. M. (1990). The social psychology of creativity, New York: Verlarga.
Baghiri, Kh. (1996). Education in postmodern view, curriculum, viewpoints and landscapes, writer: Mahmoud Mehmohammadi, Iran: Astan Ghoo Razavi.
Baron, F., & Harrington, M. (1981). Creativity, Intelligence and Personality, Annual Review of Psychology, Vol. 32: 439-476
Beck, C. (1993). Postmodernism, Pedagogy and Philosophy of Education, philosophy of education yearbook, philosophy of education socie Availabe At: http://www.ed.uiuc.edu/EPS/PESYearbook/93_docs/BECK.HTM.
Beheshiti, S. (2005). explanation and criticism of postmodernism in contemporary educational philosophy, Iran, Tehran: Samt.
Carr, D. (1998). Education, Knowledge and Truth: Beyond the postmodern impasse. London and New York Press.
Deleuze, G., & Guattari, F. (1994). What Is Philosophy? New York: Columbia University Press.
Derrida, J. (2001). Writing and Difference, New York: Routledge.
Farnahani Farahani, M. (2004), postmodernism and education, Iran, Tehran: Aeej.
Fazeli, n. (2002). Comparative study about ineffectiveness of higher education comparing Iran and Britain, Anthropology letter, vol. 1, No. 3.
Gilson, E. (2007). Becoming Yet to Come: Thought as Movement in Derrida and Deleuze, Philosophy Today, Vol. 51, No. 4.
Giroux, H., & Aronowitz, S. (1991). Postmodern Education, University of Minnesota press.
Giroux, H. (2003). Public Pedagogy and Politics Resistance: Note on critical theory and educational struggle, Educational Philosophy and Theo Vol. 1: 35.
Guilford, J.P. (1950) Creativity, American psychologist, Vol. 5, No. 9, 444-454.
Hasrati, Mostafa (2004). Writing in Iranian universities: the lost ring of higher education, research and schedule in higher education journal, Vol.1 No.1.
Hennessey, B., & Amabil , M. (1989). The Conditions of Creativity, in Nature of creativity contemporary psychological perspectives, Cambrid University press.
Hoppenfeld, S. (2005). How Values and Philosophies Shape Spaces, Presented at the J. Paul Getty Museum Symposium, “From Content to Pla Family- Oriented Interactive Spaces, Art and History Museums, June 4-5, 2005.
Hosseini, A. (2004), effect of teaching creativity to teachers on their students' creativity, Iran, Tehran, the organization of research and plann of education.
Lash, S. (2004). Translater: Shahpour Behyan, Postmodern Sociology, Tehran: Ghoghnos.
Lyotard, J. F. (1984). The Postmodern Condition on Knowledge, Manchester University Press.
Manteghi, M. (2004), investigation of creativity in primary schools books, Doctoral thesis in Tehran University.
Mohebi, A. (2003). Active teaching methods, Tehran: Abed Publication
Morita, t. (2006). Difference between learning culture in Iranian and Japanese schools, presented at the sixth conference of the curriculum society Iran.
Ozmon, S., & Craver (2003). Philosophical Foundations of Education, New Jersey University press.
Palmer, Joy (2000). Fifty Modern Thinking on Education from Piaget to the Present, New York: International press.
Rorty, R. (1989). Contingency, Irony and Solidarity, New York, Cambridge University press.
Semetsky, Inna. (2005). Not by breadth alone: Imagining a Self Organized Classroom, *An International Journal of complexity and Education*, Vol. 2, No. 1, pp. 19-36.

Strenberg, J. (1985). *Beyond IQ: A Triarchic theory of human intelligence*. New York: Cambridge University press.

Topp, W. (2000). *Generative Conversations: Applying Lyotard's Discourse Model to Knowledge Creation within Contemporary Organization*. School of Engineering Management, University of Cape Town, South Africa, John Wiley & Sons.

Usher, R., & Edwards, R. (1994). *Postmodernism and Education*, New York & London: Routledge.