

CREATIVITY IN ADULT EDUCATION

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[Εισήγηση που παρουσιάστηκε στο Διεθνές Σεμινάριο «Creativity and Innovation in Adult Education», που διοργάνωσε ο Οργανισμός Διαχείρισης Ευρωπαϊκών Προγραμμάτων Δια Βίου Μάθησης της Κύπρου, στη Λευκωσία, 6-9/11/2008)]

2009 has been declared by the European Commission as the European Year of Creativity and Innovation (European Commission, 2008). This decision marks the importance given by the European Union in creativity and innovation for each citizen individually as well for the society and economy generally.

I should however clarify that in my presentation I will mainly deal with creativity, because I personally believe that innovation is just one of the elements of creativity. It is not possible to have creativity without innovation even if the reverse can happen.

I will begin, by explaining why the development of creativity is so important for the modern societies.

In the second part I will examine the European Policies regarding creativity.

In the third part we will approach in detail the concept and the components of creativity.

In the fourth part we will examine the relationship of creativity with different personality characteristics, as well as the socio – cultural environments' influences on it.

In the fifth part we will examine creativity within the frame of education - especially the one of adult education - and we will present several techniques, aimed at the development of creative learners.

Finally, I would like to ask you all to join me on a practical implementation for the development of creativity through the observation of an art masterpiece, in specific a painting of Rembrandt.

1. THE REASONS IMPOSING THE DEVELOPMENT OF CREATIVITY

Current international developments in the economic, technological, social and cultural sector, lead to the fact that more and more people should acquire knowledge and skills that are easily renewable, conveyable and adaptable to a variety of working and social environments.

The main reasons of this phenomenon are the changes occurring in production and employment due to globalization and the rapid technological developments. The opening of markets and the dramatic pervasiveness of the capital at all levels of economic life, coupled with the spread of new technologies, are leading to frequent restructuring of business organizations, while dramatic changes are happening in the characteristics of employment as well.

Within this context, characterized by intensive competition, constant mobility of capital and labour, and continuous changes of circumstances, stable jobs are reduced and careers are fluid. The

employees, need to have sophisticated skills that enable them to adapt to change, be rotated in a variety of jobs, take initiatives, and cooperate in networks and working teams.

Together with these developments in the field of employment, equally significant changes are taking place in the social and cultural level, requiring on their turn from the individuals to have a good command of a variety of skills:

The movements of entire populations raise the need of adaptability for migrants, returnees and refugees in their new society, which implies the need to enable people to understand the various codes of behavior in different environments. Simultaneously, the enlargement of social groups threatened by social exclusion, raises the question of their creative integration in the socio - cultural context.

Thirdly, the crisis that in recent decades characterizes the traditional social structures (family, local communities, associations) entails the fact that more and more people need to find new ways to determine their life course in uncertain conditions.

Thus, all these developments in both the economic – technological and the socio – cultural level, mean that nowadays a person needs to have specific fundamental skills in order to be able to meet the demands.

We should underline that all these basic abilities are related to creativity.

The most important of these new abilities are:

- to combine and develop diverse knowledge and skills
- to be open to new experiences, new ways of seeing, new ideas, unfamiliar concepts
- to reject standardized formats for problem solving and to take multiple perspectives on a problem
- to make enlightened choices from among multiple possibilities
- to construct alternative structures and to create alternative solutions

2. THE EUROPEAN POLICIES ON CREATIVITY

The EU began to promote policies for the development of Creativity since the 90s.

The beginning was in 1995 with the «White Paper on Education and Training», which indicated the need to escape the educational system from the traditional practices of the monologue, the passivity of trainees and overloading more towards the development of initiative, imagination, innovation and experimentation.

Eleven years later, in 2006, a Recommendation of the European Parliament and Council (394/30-12-2006) reported that a fundamental skill of European citizens' needs to be «the ability to develop creativity, innovation and risk-taking».

Finally, the Decision of the European Parliament and Council on the European Year of Creativity and Innovation 159 / (28-3-2008) includes, among others, the following objectives:

- Raise awareness of people regarding the importance of creativity.

- Stimulate openness to change, creativity and problem solving skills as competences developing innovation.
- Empower aesthetic sensitivity, alternative thinking and intuition.
- Promote closer links between art, business and educational organizations.
- Encourage the agencies to better utilize the creative abilities of both workers, customers and users.

3. THE CONCEPT OF CREATIVITY

Creativity is a very complex ability, therefore it is extremely difficult to determine the term. Since the 50s', when the systematic study of creativity started, mainly in the USA, many definitions have been given to it according to the scientific approach followed each time.

- According to the psychological approach (Guilford, 1967 • Henderson, 1984), creativity is a function of intelligence and, in particular, is synonymous with the divergent intelligence. In other words, creativity is considered to be the kind of information processing, which leads to ideas and solutions that have the following characteristics:

- a) They are multiple; as opposed to the « one correct answer» (the productivity of thought is expressed in this way).
- b) They are unusual or unique or alternative (the originality of thought is expressed in this way).
- c) They are diverse, containing multiple combinations on the same subject (the flexibility of thought is expressed in this way).

Another view, as part of the psychological approach is the one of Mednick (1962) that emphasizes on the combinational way of thinking and defines creativity as the configuration of combinations of pre-existing elements and stimuli, which have as a result the production of a new idea or a new combination.

- However, from the standpoint of the studies of psychology and educational psychology (Houtz, 2003 • Runco, 1994) has been pointed out that these approaches focus only on the product or the process of creativity, and ignore the person who creates. For this reason they turn their attention to the consideration of the elements of the personality of the author and see the creativity as a process that springs from deep internal motivation, has value for the author and provide satisfaction and sense of self realization.

It is therefore obvious that creativity is a complex concept and a process in which psychological, cognitive and social factors are intertwined. It is also appropriate to look at creativity through an interdisciplinary approach and to search for the coinciding points of the different approaches.

Points of coincidence of the different approaches for the definition of Creativity

Generally the various scientific approaches related to the characteristics of creativity coincide are the following:

Creativity is characterized

- a. by innovation (leads to an innovative idea or product)
- b. by diversification (examines the various issues in a different way than the stereotype and seeks for alternatives).
- c. by relevance (it is valuable for the context in which is realised and / or for the author himself) .

d. Finally, inherent in Creativity is the most comprehensive expression of ideas and feelings and thus contribute to self-realization.

Consequently, Adult Education Centres/Organisations can incorporate these characteristics of Creativity in the thematic areas they deal with, such as:

- Improving the quality of provision in the adult learning sector.
- Assessing non – formal learning for disadvantaged groups.
- Developing key competences.
- Improving the attractiveness of adult education.
- Promoting adult learning for marginalized citizens.
- Learning in later life.

4. RESEARCH APPROACHES OF CREATIVITY

Since the 50s a number of researches on creativity have been done (Amabile, 1996 · Lee, 1995 · Sternberg and Lubart, 1995 · Mayer, 1992 · Chaffee, 1994 · Qureshi and Qureshi, 1990 · Mac Kinnon, 1962, etc.) aiming to consider:

- a) The relation to the different characteristics of the personality.
- b) The influences of the socio – cultural environment.

The main research questions raised and the conclusions which have emerged are the following:

4a. The relationship of creativity to personality

- **Research question:** Is there a correlation between the knowledge available to someone about an issue and the creativity performed in this respect?

Most researchers agree that knowledge is a necessary, but not sufficient condition for the creative process. The wider the scope of knowledge is available to a person, the more are the chances to make multiple and flexible connections between different cognitive components. The creative exploration then is enriched by the knowledge background data. On the other hand, possession of knowledge does not necessarily increase creativity.

- **Research question:** Can Creativity be performed only by few gifted individuals?

Researchers converge on the view that this is not the case. Everyone has a creative potential, which manifests itself in various fields, different from person to person. Everyone can therefore be, to some extent, in a certain field, creative.

- **Research question:** Is Creativity associated with high levels of intelligence?

The findings show that the high level of intelligence is not in itself a prerequisite for development of a creative behaviour. However, in order to demonstrate creativity a person must have a certain level of intelligence.

- **Research question:** Is Creativity related to critical reflection?

Research has shown that there is indeed a correlation between creativity and critical reflection. Persons having critical reflection abilities are able to analyze more in depth the different issues, to

re-evaluate the conditions and find alternatives. In other words, they can participate more effectively in creative activities.

- **Research Question:** Can Creativity be taught?

The researchers agree that a person's creativity can be strengthened within the educational or family environment. It is also known that some large-scale educational programs carried out, mainly in the U.S., aimed at developing creativity, as the «Creative Thinking Program» and «Productive Thinking Program».

4b. The relationship of creativity with the social environment

- **Research question:** Does family environment influence creativity?

Several researches (Amabile, 1996 • Feldman, 1999 • Dasey, 1989 etc.) have shown that family environment significantly affects the development of creativity, if it has certain features, such as a family tradition, respectful to learning and culture, the ability to enrich the interests of the child, the encouragement of innovative and unconventional thinking and behaviour etc.

- **Research question:** Does the socio-cultural environment affect creativity?

And here the answer is affirmative too. In an important article of Li (1997) pointed out that it is possible a cultural community to promote creative performance in an area and suspended in another, and vice versa. For example, in the western world the values of societies rewarded the past six centuries, the continuous expansion of pictorial art in new ways and forms of expression. In contrast, the Chinese painting innovations are only within the existing structural level, which they tent to enrich.

More generally, it has been pointed out (Raina, 1993 • Amabile, 1996, etc.) that, in different societies, the very perception of creativity and ways of its expression are significantly affected by the dominant values, the historical origins, the religious and philosophical beliefs.

5. CREATIVITY IN THE EDUCATIONAL FRAME

Many researchers approached the development of creativity, both through school education (Amalile, 1996 Runco, 1994 Sternberg, 1997 Torrance, 1992, etc.) and through adult education (Brookfield, 1987, 1995 Cranton, 2006 Shor, 1980 Argyris, 1993, 1999, etc.).

All reached very similar conclusions regarding the conditions developing creativity through education, which are the following.

- Exploration of alternative, new and unfamiliar ways of thinking and acting is encouraged.
- Diversity and divergence are accepted.
- Participants' initiatives, openness and critical analysis are supported.
- Flexibility of ideas and directions is welcomed.
- Learners are helped to understand their personal styles and patterns of learning.

- Risk taking and spontaneity are valued.

There is also broad agreement among researchers about the characteristics of trainers, which are aimed at developing creativity:

- They are themselves creative.
- They can take multiple perspectives on a problem.
- They respect the integrity of the learners.
- They are competent in managing group's activities.
- They frequently use trial – and – error techniques in their experimentation with alternative approaches.
- They have empathy and enthusiasm for their teaching subject.

Techniques for the Development of Creativity

In the adult education context, that is very important to our discussion, a great number of techniques aimed at developing creativity have been developed (Brookfield, 1987):

- **Class Discussion** is the most classical technique which creates the intellectual and emotional platform that supports participants' assessment of their values and assumptions.
- **Role play** is the technique which focuses on the ability to take on the perspectives of others. It helps learners to explore their interpretations of another person, in order to gain a fully rounded appreciation of his/her thoughts, attitudes and emotions.
- **Debate** is the technique which helps participants to explore an unfamiliar issue by asking them to explain it in a sympathetic manner.
- **Crisis – Decision Simulations** (perhaps with the use of technology), is a technique in which people are asked to imagine themselves in a situation where they are forced to make a decision from among a number of uncomfortable choices. After making this decision, they are required to justify and elaborate on the reasons of their choices.
- **Brainstorming** is an exercise in structured spontaneity, in that participants are actively encouraged, for a specified period of time, to think of as many varied and alternative ideas as they can.
- **Problem – Posing** technique is the one that fosters the capacity of participants to speculate on alternatives for oneself and others.
- **Futures Invention:** Participants are encouraged to imagine individual or collective futures they desire. Then they review from this future vantage point what has pleased them about their imagined journey or, alternatively, they compare and negotiate their visions of the future so as to highlight their divergences and common points.

- **Read and try to understand a book from a point of view that is different from our own** (for example, a book on presentation skills, if we normally facilitate group process).
- **Observe systematically a certain practise** (for example, observe a colleague who has a different style from our own).

Techniques related to observation and use of art, are as well very important for developing the participants' creativity:

- **Observe systematically a work of Art.** Through this technique participants are encouraged to discover and notice some hidden aspects of an issue, some alternative visions and perspectives, some new meanings and experiences.
- **Use of Artistic triggers.** The artistic experience can be a powerful stimulus to imagining alternatives and to help participants break with the habitual structures of reasoning. For example, participants can be encouraged to:
 - write short episodes of fantasy
 - draw pictorial representations that depict their practice
 - produce photostories
 - write songs, poetry, small sketches
 - dramatize commonly occurring situations
 - use theatre in order to explore roles similar to those the participants are experiencing in their lives
 - etc

To conclude this section on educational techniques, I would like to underline that, perhaps contrary to what many believe, creativity and innovation are not necessarily identified to the use of new technology. Creativity and innovation can very well be developed through techniques containing few – or not - use of technology. Technology can undoubtedly enrich and strengthen the various teaching techniques, but it is not a panacea. Whether and to what extent we will use technological means in each case depends on the pedagogical criteria we use, such as:

- Educational objectives of the learning program.
- Educational added value, which might offer the technology.
- The familiarity of learners with different technological means.
- The uses of technology that will bring greater quality and efficiency in the educational process.

Closing now this parenthesis, let us go to the last part of this presentation.

Creativity in the context of Transformative Learning

At this point, I believe it is important to refer to the way in which it is possible to develop Creativity in view of the transformative learning theory, which is perhaps the most important approach to adult education in recent years.

The Transformative Learning theory has been developed by Jack Mezirow, since the early 1980s until today (Mezirow, 1991, 2008). Gradually the theory attracts the interest of researchers and adult education trainers as well as of the university community in the U.S., Canada, Australia and some European countries, including recently Greece. There have been more than 100 publications

in international journals referring to this theory. In 2003 began the publication of the Journal of Transformative Education and, starting by 2002, the International Conference on Transformative Learning is organised, every two years, while the theory is increasingly applied in educational programs in adult education training for trainers.

The reasoning of Transformative Learning starts from the premise that the way we interpret reality is determined by the assumptions that each one of us has. This system of assumptions has been imposed by the cultural context and we have unconsciously internalized it through the process of socialization. Often, contains erroneous and distorted values, beliefs, assumptions and hypotheses, so that our accession to the reality is malfunctioning. Furthermore, our perceptual system is so deeply engraved in our personality, that we adopt a tendency to accept almost exclusively the experiences adapt to it and to reject those who depart. It is therefore necessary as adults, in order to be able to harmonize our lives with reality, to develop the ability to critically review our convictions of ourselves and of the social system.

Mezirow argues that adult education can help to achieving this goal, as the main issue in adult learning is to help learners to review the foundations of dysfunctional perceptions and to challenge their validity in order to shape a more sustainable world image and their position in it. Mezirow considers this process as a major need for adults in order to be liberated from confusing dilemmas imposed by the socio- cultural frame.

He believes that the way to achieve this is the reflection, which he defines as the process of reviewing attitudes and values by which we understand the reality and we act. Reflection concerns the deep and systematic elaboration of all the aspects of a problem (for example in expanding the parameters and options, whether our action was consistent with our objectives etc.). Sometimes, however, the reflection goes deeper and extends to the question of established assumptions, in other words *not just how we do, but why we do the way we do, why we think the way we think, what are the underlying reasons for our behaviour*. Arriving at this point the reflection becomes *critical*, and can lead to a reassessment of dysfunctional beliefs about the reality, that we were used to take-for-granted.

Consequently, simple reflection is structured by a new, alternative elaboration and reassessment of an existing idea or problem, however this activity takes place within an undisputable certain frame of reference. For example, a trainer does not dispute the value of the lecture as the main educational technique, however, he can systematically contemplate on new and alternative techniques through which the lecture can be more effective, for example via the use of modern technology.

On the other hand, critical reflection, in our example, questions the very assumption that the lecture is the most appropriate educational technique. Consequently, the critical reflection is characterised by the following:

- Call into question the beliefs and assumptions underlying individual behavior and social norms.
- Becoming aware of taken – for – granted assumptions.
- Through these processes, critical adult education is helping learners to acquire new ideas and functional structures of understanding.

Consequently, in the theoretical framework of critical reflection, Creativity does not just lead to something new and different than usual. It is a process in which we question the assumptions of others or our own, and we are looking for new, emancipating perspectives.

Some techniques for the development of Creativity in the context of Transformative Learning are as follows.

- **Critical Questioning.** For example, the educator asks the learners: «Think back over the past few weeks. Was there an event or situation in which you felt you did a good job, when you felt a ‘high’ because of your success with a certain activity? Tell me about this». It is evident that the responses of the learners would say something significant about their assumptions concerning the examined issue, entering this way to/in a process of critical analysis of their assumptions underlying their own thoughts and actions.
- **Critical Incident Exercises.** This technique calls the learners to identify an incident, an event, which for some reason was of particular significance to them (for example, a learner identifies where and when the event happened, who were involved – their roles and attitudes – his own behavior). Through this process the learner becomes more aware about his/her significant concerns, reactions and assumptions.
- **Criteria Analysis.** This technique requires the participants to make explicit the standards and judgments they employ when determining that an activity is successful or good. Through this process they can recognize better the clichés that are probably incorporated in their judgment and assumptions.
- **Critical Analysis of Interviews.** This is a technique developed by Chris Argyris in the context of – in – service – training (Argyris, 1993,1999). The trainer gets an interview by a trainee and then the whole group of trainees analyzes the interview, critically examining the governing values and the causes of the behavior of the interviewed person.
- **Detecting the assumptions through the observation of Art masterpieces.**

I shall, finally, present a technique, which have been developed in the context of the Hellenic Association of Adult Education (Kokkos and Mega, 2007). The technique involves two stages. The first stage is a process of simple reflection: We are observing systematically a work of Art (eg a painting, a literature text, a film, etc.) and trying, during our observation, to identify what new idea or insight is gained through this process in comparison to the perception that we had developed for the work of art on the first moment we came in contact with it. Through this way we develop our creative capacity to perceive new dimensions and new, alternative meanings on the subject of our observation.

In the second stage we move deeper in a critical reflection process, which aims to examine the assumptions related to the issue of the work of art. Thus, we are developing our ability to think critically upon our assumptions concerning a certain issue.

In any way, as all this seems very theoretical, please let us together make an application of this technique.

[APPLICATION FROM THE PARTICIPANTS]

This was just a technique for developing creativity through reflection and critical reflection. We saw, however, that there is a variety of other techniques. It is precisely in the creative capacity of each adult trainer to choose those techniques (or combination of techniques) and / or to discover his / her own / new techniques that are appropriate for the development of learners' creativity

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