

ASPECTS REGARDING THE ROLE OF FACILITATORS IN CREATIVE LEARNING AND INNOVATIVE TEACHING

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Abstract

In this paper I have analysed a series of facilitators that determine creativity and innovation in teaching learning processes, emphasising the role of assessment, organizational culture and information technologies as relevant and essential elements within this challenging approach to create the conditions for an intelligent development of the educational processes. Also I approached issues related to creative learning and innovative teaching in a society in which knowledge takes more and more intense forms and, they require changes and deep transformations in all educational environments. The fundamental objective was to underline the need to learn creatively and to teach innovatively, given the conditions of the development of information technologies and a deeper and deeper immersion in this information environment, with effects on involving more effectively the students in their own learning approach. Based on scientific researches, observation and comparative analyzes, I identified the facilitators which, along with the technologies, support the creative learning and innovative teaching.

Key words: *creative learning, value, innovative teaching, performance, knowledge*

Classification JEL: *I21, O30*

1. Introduction and context of the study

The new paradigm of social development, with rapid and profound changes generated prevalently by the development of information and communication technologies in the knowledge society, requires a new approach of the education systems in terms of innovation and creativity that contribute both to the economic prosperity and the development of life quality and individual and social welfare.

The educational actors must have a clear vision, awareness and a deep understanding of what creativity and innovation are and their impact in order to fully understand how they can be improved. Then, when we assess creativity, we have to create a dual vision from the perspective of both students and teachers. Moreover, creativity in education is based more on process than on product and therefore, it requires the development of critical thinking and cognitive skills.

Creativity and innovation have strong connections with the knowledge and learning. While intelligence does not seem to be a precondition for creativity, researches show that the relevance of prior knowledge involves knowing how to be creative, relying on the knowledge in the field. Moreover, creativity is seen by several specialists [1] as a form of conception, knowledge creation and building of personal development. Therefore, we can say that it is an essential skill to improve the learning processes. Thus, the creative learning can be seen as a form of learning that does not foster memory but intelligence. Creative learning also determines innovative teaching.

2. Research methodology

The research conducted is based on documents and reform strategies and it relies on an analysis of numerous studies performed by European institutions to analyze the innovative-creative process in the current educational environment. The method of investigation used was the documentary analysis which included: works of literature on the role of innovation and the growth of the creative potential; articles, studies, reports, dedicated to educational policies in the country and the EU. Also, based on observation and analysis of the educational effectiveness from the perspective of teaching-learning in 22 schools, I showed the need for creativity and innovation in the educational system with a focus on curriculum, assessment and the key role of teacher and student.

3. Innovative teaching - a condition for creative learning

Innovative teaching refers both to the practice of teaching for the development of creativity and also to the application of innovation in the teaching process. Both aspects require an educational culture based on values such as

creativity which tends to be the central element, an essential vector in improving learning performances. Teachers are the key actors in building a creative climate, but they need the support offered by public policies in the educational field. And they need it, especially in curriculum and assessment that represent the main areas to be analyzed and improved in order to encourage students' creativity.

Curricula should be designed to favour the development of skills, making a point of each discipline and taking into account creativity and coherence of the entire curriculum. This will allow greater freedom and more time spent on activities for the breakthrough, taking into account the interest of students for this type of learning.

Assessment must also converge in the same direction of developing students' creativity and thus, by capitalizing it both at micro level, day by day, and at macro level - at the final exam, it will be a condition for an effective learning assessment. The three functions of assessment - initial, formative and summative - should contribute both to the acquisition of new knowledge and to the development of learning and creating skills.

Information and communication technology plays a crucial role in the way of learning and allows changes in education for an innovative and creative school environment. These technologies could act as a platform to encourage creative learning and innovative teaching, while providing a variety of opportunities for a constructive change. However, the access to technologies is not enough. Therefore, both students and teachers should acquire critical skills in using technologies to benefit from them in an efficient, innovative and creative way. Otherwise, educational policies and the educational system are irrelevant to the real and future needs of the students. . [5].

There are, however, other factors along with the technologies that support creative learning and innovative teaching. A number of mechanisms for the development of creativity and innovation can be identified in the teaching approach, called facilitators, thus: assessing, culture, curriculum, individual skills, the format of teaching and learning, teachers, technologies, tools. [2]. The coexistence of several factors favours the creation of an environment in which creative learning and innovative teaching could create the conditions for a sustainable development. Even if these facilitators exist, the involvement of teachers and students should be more active in developing the creative processes of teaching-learning. So facilitators can be given as indicators for a type of learning environment to feed the creative learning and innovative teaching.

3. Assessment - a facilitator of creative learning

The issues of assessment generate conflicting interests of stakeholders. This happens because students want to perform better, teachers are judged by student achievements, the labour market wants well prepared graduates, able to rapidly integrate, and the society, on its way to a sustainable development in the knowledge-based society, calls generally for youngsters who, through their skills and abilities, contribute to a growth of prosperity and quality of life. It was noticed that an assessment for a creative learning helps students improve their quality of learning. We can take a look at the evaluation process from several perspectives, as shown below:

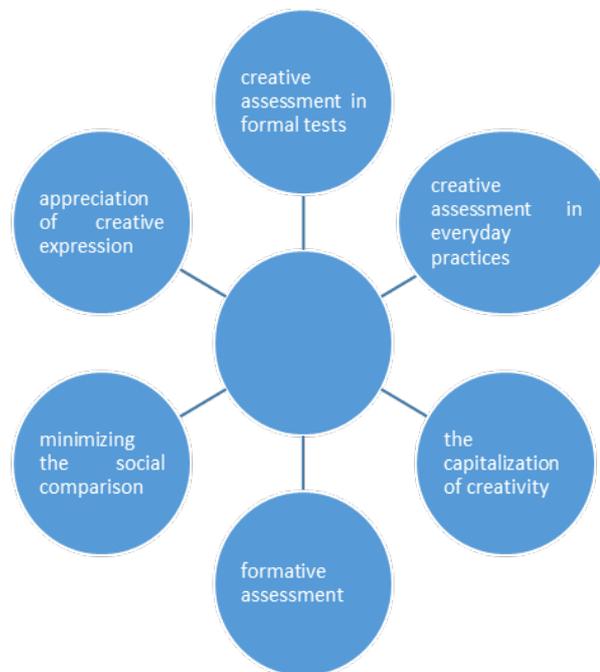


Figure 1 - facilitator assessment area
Source: adaptation after Ferrari, A., et.al. (2009)

It is worth noting that when we have an innovative teaching, then it is necessary to support a creative assessment in everyday practice. Teaching and learning are often shaped around the value of what is required from exams.

The assessment of creativity in everyday practices will entail adapting the concepts of creativity and innovation on age group. Also, a framework for assessing creativity will bring both the students and pupils to a central stage or at a common point. [3].

Capitalizing creativity is adopting methods and techniques to make students understand how beneficial creativity is and, it also involves rewarding curiosity and exploration for a given subject. In the formative assessment it is aimed to focus on understanding, not self assessment. Therefore, using various methods of assessment (self-assessment, peer assessment, portfolios), aiming at helping students to understand better not judging them. [4].

Assessment should not be a stressful situation for the student. It can also prevent students' imagination and their needs to express their creativity. Using several techniques to assess students - electronic portfolios, films, projects, etc.; unusual missions and tasks make assessment more interesting [6]. Also students should not compete against each other, but each student will try to improve his previous performance. The need to establish a culture that what matters is not mark but learning. This will allow the focus on the pleasure of learning and will encourage the creative learning. It is also necessary to find a balance between originality and relevance.

It is required that students should take the following steps in their learning approach:

1. *Do* - actual experience, what we call real life
2. *Reflection* - observe what happens experientially and think about it
3. *Conceptualization* - analysing observations logically, seeing patterns in what has been observed and starting to internalize what has been learned.
4. *Testing* - trying out new knowledge and understanding to see how it works back in the "real world" and perhaps changing our behaviour as a result.

4. Culture – a support facilitator

Creativity and innovation are certainly characterized by a risk-taking culture rather than one of avoiding errors. Research shows that there should be a shared belief about creativity as an asset for professors and students. Therefore, this belief should be recognised by all stakeholders in education. The major challenge is represented by the values that characterize creativity and innovation (taking risks, exploring beyond the rules, non-compliance), which are in sharp contrast with school values (standardization, obedience, importance and fairness). There is also a need to engage in creating a democratic culture in which students' ideas, interests and opinions are welcome. The initial training and long-term professional development of teachers have been recognized as fundamental in promoting this type of culture.

An analysis from the perspective of the following dimensions would be appropriate: creating an environment/context, commitment, creativity as value, the risk-takings of the culture, a democratic culture and broadening the horizons, according to the following table:

Table no.1 **The dimensions of culture**

The dimensions of culture	Characteristics
Building the environment/ context	-An environment that recognizes individual creativity; -A tolerant environment in which the professors are the key, but the students are the centre stage; -The promotion of a culture that allows students to be able to know when to be original and when to comply; -A safe and accessible learning environment;
Commitment	-Provide a good reason to engage in activities; -Understand and recognize students' interests; -A culture that awards hard work but which also allows more relaxing moments;
Creativity as value	-A culture which recognizes creativity as a source of deep knowledge and as an ability of thinking; -The assessment of creativity from all stakeholders point of view; -Awareness of what creative learning is and attracting after itself of what innovative teaching means;
Risk-takings of culture	-A culture that welcomes risk-takings and that offers the possibility to try before you know if it is good; -A culture that does not seek to avoid mistakes;
A democratic culture	-Students have a word to say;

	<ul style="list-style-type: none"> -Everybody takes part in the learning process; -Building knowledge together and the negotiation of meaning; -The right of learners on learning;
Broadening the horizons	<ul style="list-style-type: none"> -From teachers and students equally; -Open communication at all levels (including the construction and consolidation of trust); -To encourage divergence (for broadening the horizon); -Understanding the relationship between people, ideas, the field of the subject and cultures;

Source: adaptation Wyse, D., Jones, R., [7]

So culture is a support facilitator to create the premises for a creative learning and innovative teaching based on values such as creativity and innovation. We speak of a culture that involves both risk-taking and encouragement of non-conformism, and also the creation of a safe, tolerant and appropriate learning environment for an effective learning and responsible involvement of each and every individual in the innovative approach of learning and teaching.

5. Information technology

The technology provides great opportunities for change. In many cases they can act as a platform for an innovative teaching and creative learning as they involve new ways to shape the production of knowledge and what to do means.

In analyzing the impact of technology on the development of creativity and innovation in teaching-learning process, it is necessary to analyze a series of factors such as: resources, social networking and collaboration sharing, positive attitude and adaptability, users as innovators-participatory culture, learning how to learn, technological skills/training, games that are appropriate for the purpose of education (table no. 2).

Table no.2 **The impact of technology**

Aspects of technology	Characteristics
Resources, social networking and collaboration sharing	<ul style="list-style-type: none"> -New opportunities offered by the new technologies; - Allow users to express their creativity, to make it available to a wider audience and get feedback and recognition; -Creation of networks and collaboration between teachers from different countries; -Cooperation between schools to share examples of good practice and dissemination of the applied knowledge;
Positive attitude and adaptability	<ul style="list-style-type: none"> -Acquiring the technology can stimulate creativity and innovation only when people develop a positive attitude in adopting the new technologies; -This applies to both teachers and students;
Users as innovators-participatory culture	<ul style="list-style-type: none"> -The capitalization of a more important and evident role of the user within the innovation-development process; -Acquiring the technology can vary from a simple reproduction to a sophisticated creation; -Learning new ways to implement activities;
Learning how to learn	<ul style="list-style-type: none"> -This facilitates creative learning as it allows users to use the technology in order to learn new, creative ways; -Technology meets all the students' learning styles (visual, auditory and practical) and thus, it facilitates creative learning and innovative teaching;
Technological skills/training	<ul style="list-style-type: none"> -Technological abilities/skills as a precondition for creative learning and innovative teaching both for students and professors; -Teachers' training;
Games that are appropriate for the purpose of education	<ul style="list-style-type: none"> -Games have demonstrated a positive impact on motivation, self-confidence, different learning rhythms of students and how students remove/correct mistakes.

Source: adaptation Ferrari,A., Cachia,R., Punie, Y [2]

Technology creates new opportunities for creative learning and innovative teaching, offering more amenities and therefore, a greater involvement of students in their own learning approach. By using information technologies, interactivity and the ability to provide multiple and dynamic representations of the phenomena

develop and, especially, the fact that it can interact consistently and differentially with each and every student.

Digital Learning is increasingly emerging as an effective way of learning, of immersion in the informational environment that creates new ways to adapt faster to sudden changes within the educational environment. In the research conducted in 22 rural schools in Gorj county, I found that the school is not ready for digital learning; there are no material, information and human conditions for a wider use of computers in the learning process. Schools are generally not sufficiently sensitive to digital learning and to the new, specific pedagogies.

5. Conclusions

Through creative learning and innovative teaching a high degree of creativity and innovation is ensured within the education systems with implications on the economic and social environment, favouring the development of a creative economy and society based on intensive knowledge. This includes strengthening the role of education and training within the triangle of knowledge and focusing curriculum on creativity, innovation and entrepreneurship. We also have to consider all the facilitators of the creative learning and innovative teaching because only in an integrated approach can we achieve performance and develop the capacity to cope with the challenges of a society in constant change and transformation. The analysis of assessment, institutional culture and information technologies are relevant facilitators through their creative integration in the educational process. Creating an educational environment, favourable for innovations and based on values and information technologies, is to increase the students' performances with favourable effects on school and society in general.

It is known that school and initial education play a key role in promoting and developing creative and innovative capacities for learning later, in their lives, at their future job and within long-term learning organizations

6. Bibliography

- [1] Loveless, A. M. Creativity, technology and learning – a review of recent literature, (No. 4 update), Available online from : <https://scholar.google.ro/scholar?q.=Loveless,+A.+M.+Creativity,+technology+and+learning+-+a+review+of+recent+literature&hl=en&a,2007>;
- [2] Ferrari,A., Cachia,R., Punie, Y., *Innovation and Creativity in Education and Training in the EU Member States: Fostering Creative Learning and Supporting Innovative Teaching*, European Commission Joint Research Centre Institute for Prospective Technological Studies, available online from http://ftp.jrc.es/EURdoc/JRC52374_TN.pdf, 2009;
- [3] Cropley, A., Cropley, D., Resolving the Paradoxes of Creativity: an Extended Phase Model. *Cambridge Journal of Education*, 38(3), 355-373, 2008;
- [4] Pleschová, G. Unusual Assignments as a Motivation Tool. Paper presented at the Creativity or Conformity? Building Cultures of Creativity in Higher Education, *University of Wales Institute, Cardiff in collaboration with the Higher Education Academy*, available online from https://www.researchgate.net/publication/281446362_Unusual_Assignments_as_a_Motivation_Tool, 2007;
- [5] Todorut,A.,V., Creative learning and innovative teaching - aspects of inter-causality, Presented at *International Scientific Conference Ecotrend 2016, xiiiith edition,Performance, Competitiveness, Creativity*, Targu-Jiu, Romania,November 18-19 ,2016
- [6] Woods, P., Teaching and learning in the new millennium. In C. Sugrue & C. Day (Eds.), *Developing Teachers and Teaching Practice (pp. 73-91)*. London: Routledge & Falme, (2002);
- [7] Wyse, D., Jones, R., Creativity in the primary curriculum. London: David Fulton, 2003;