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INNOVATION AND CREATIVITY IN EDUCATION: A TEACHER'S PERSPECTIVE



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ABSTRACT

Creativity and innovation are becoming important for the development of the 21st century knowledge society. Education is seen as tool for enhancing creative and innovative skills to the students. It emphasizes the need encourage the development of pupils and students creative and innovative potential. Today we find that students in a school are lacking of creativity and innovation skill for several reasons : 1) effect of media and technologies that learners use in their everyday 2) the immersion in this media-rich environment leads new dimensions of learning students, therefore proper attention should be given to creative approaches and find new

methods, solutions and practices to grab their attention; 3) creativity is a form of knowledge creation, it has positive effects on learning, creativity and innovation can play an important role in contemporary society. Creativity has been defined as a product or process that shows a balance of originality and value. It is a skill, an ability to make unforeseen connections and to generate new and appropriate ideas. Creative learning involves understanding and new awareness, which allows the learner to go beyond notional acquisition, and focuses on thinking skills. The creative experience is seen as opposite to the reproductive experience. Innovation is the application of such a process or product in order to benefit a domain or field – in this case, teaching. Therefore, innovative teaching is the process leading to creative learning, the implementation of new methods, tools and contents which could benefit learners and their creative potential.

KEYWORDS : Creativity, Innovation, Learning, Awareness, Teaching.

INTRODUCTION :

Teachers need to have a clear vision awareness and understanding of creativity. Moreover, creativity in education has more to do with the process than with the product, and more focus should be given on the development of thinking and cognitive skills. Creativity and innovation have strong links with knowledge and learning. While intelligence does not seem to be a precondition for creativity, research shows the relevance of previous knowledge, both in terms of knowing how to be creative and of domain knowledge. Creative learning requires innovative teaching. Innovative

teaching is nothing but practice of teaching for creativity and of applying innovation to teaching. Teachers have key role in constructing a creative climate. In particular, curricula and assessment are key areas to be addressed in order to allow creativity in the classroom. The curriculum should allow freedom and time for discovery, and taking learners' interests into account. Assessment should also allow creativity to flourish by valuing it, both at micro, everyday level and at macro, exam level. The three functions of assessment (diagnostic, formative and summative) must contribute to the development for learning and creating.

Technologies play a vital role in learners' lives and can enable educational change towards an innovative and creative school environment. They could act as a platform to foster creative learning and innovative teaching and are currently offering a variety of opportunities for constructive change. However, access to technology is not enough. Teachers and learners must acquire the critical skills in their use of technologies to be able to benefit from them in an effective, innovative and creative way. Educational systems must empower culture by new technologies, putting the learner at the center of the learning process. Otherwise, education policies and systems become irrelevant for students' real and future needs.

There are other factors, alongside technologies, that support creative learning and innovative teaching. These are: assessment; culture; curriculum; individual skills; teaching and learning format; teachers; technology, tools. The co-existence of several of these factors would give rise to an enabling environment where creative learning and innovative teaching could blossom. If enablers are not present, creativity will be less likely to flourish. If, on the other hand, all enablers are in place, it is still not possible to deduce that creativity and innovation are happening, as teachers and students will still have to actively engage in the creative and innovative process. Enablers are therefore indicators of the kind of environment which could nourish creative learning and innovative teaching.

In the framework of lifelong learning several key competences have been identified as being particularly necessary for personal fulfillment and development, social inclusion, active citizenship and employment. These are:

Communication in the mother tongue
Mathematical competence and basic competences in science and technology;
Digital competences;
Social and civic competences;
Sense of initiative and entrepreneurship;
Cultural awareness and expression;
Learning to learn

These competences are interdependent and creativity is one of the transversal skills needed to enhance them. Moreover, creativity, innovation and entrepreneurship are the foundation of the knowledge and education triangles.

Creativity and innovation are obviously inter-related. Creativity, as mentioned before, is seen as the "infinite source of innovation" and innovation - if one deduces from the above definitions - can in turn be perceived as the application and implementation of creativity. Moreover, different fields seem to favor one concept above the other, for instance in business the word "innovation" is used even when it refers to the creative process and work. As innovation can be seen as the application of a creative process or product, the focus of this chapter will be primarily on creativity and on understanding what it is and how it can be framed.

What is creativity in education?

In education, the term creativity is often used but seldom defined. As Beghetto (2005) points out, teachers might ask students to use their creativity in the design of a project, or might refer to a student's response as creative, without explaining what they mean. A lack of definition of this concept might result in erroneous assumptions (Beghetto, 2005) leading teachers and students to identify creativity only with talent, the arts and personal characteristics.

The first step towards creative learning and innovative teaching requires an understanding of the meaning of creativity for education and its implication.

The current recurring definition of creativity stands on the two pillars of "newness and value", which have to co-exist in a creative outcome. The balance between the two concepts is important: something original which has no value could also have negative characteristics (Beghetto, 2005). The application of this definition to education – and to young people in particular – raises a series of question about the suitability of the two pillars to learners' development and achievement. It was quite understand that children have a huge creative potential

Product or Process?

Another aspect of the definition of creativity concerns the emphasis on the process instead of the product. if we look at products and achievements, children will seldom have an opportunity to be judged or to judge themselves creative when compared to adults. Creativity is more visible when adults pay attention to the process and not to the product. Creativity as a method and an approach to think and live. The focus on the development of thinking skills can be understood as a priority of the process over the product.

Creativity for learning

There is a link between creativity, intelligence and knowledge. For education, this means that creativity cannot be dismissed on the ground of the different levels of intelligence one could find in a classroom. It cannot be proved that creativity is an inborn trait; there is therefore a reinforcement of the democratic view of creativity. It would be easy to assume that focusing on creativity in the classroom would leave out a small portion of those students whose intelligence falls below the threshold. The threshold refers to traditional intelligence, which is often associated with academic performance and linguistic/logical fluency or knowledge. People performing below the threshold have lower knowledge and experience

Learning

It has been argued that creativity and knowledge are interdependent for the educational field, and form a democratic perspective of creativity, taking the individual as the reference for the originality and value pillars leads to an assumption of creativity as a model of understanding and of knowledge creation. Many psychologists view that creativity as a form of knowledge creation. Learning in a creative way is certainly a form of meaning-making. Current pedagogical discourses attempt to view learners as the centre of teaching and learning processes, with an active role in the production of knowledge and meaning democratically bringing their expertise, experiences and ideas into the classroom. Moreover, constructivist approaches to learning involve understanding and making new and valuable connections between old and new knowledge. Understanding is a form of meaning creation – just as creativity is. Therefore, creativity is an aspect of learning. Both creative and non-creative learning are important for education and should co-exist.

A conceptualization of learning and creativity as "overlapping sets" that leads to a perception of creative teaching as a form of skilful teaching. thus, creativity is not only desirable but also necessary because it involves co-construction of meaning and the learner taking an active role. Creativity enhances learning and makes teaching more effective.

Teaching for creativity implies allowing pupils to take responsibility for their own learning. Pupils ought not to be considered as merely receivers of information: on the contrary, it is important that they assume the role of discovery, but support and guidance are needed in order for them to succeed. For this teachers need to be prepared both on the pedagogical side, being aware of the ways and means to foster autonomy and student – centeredness. Lack of preparation will prevent teachers from being willing and ready to provide a learning format which allows students to discover and explore.

The importance of the role of the teacher for creativity and innovation in education puts yet more pressure on the teachers to focus on several priorities. Teachers are expected to cover the curriculum, meet standards, and administer assessment in multiple forms and ever-changing ways. They must do all this while being creative and applying innovative, effective and entertaining teaching methods and formats – preferably including ICT. If teachers are the key, support mechanisms should be implemented to make sure they can fulfill expectations and respond positively to requests.

Curricula for creative learning and innovative teaching

The thinking of children at all levels of ability is significantly influenced by the type of opportunities they are given. Offering learners the right chances to develop their cognitive and creative potential should be a priority in the design of school curricula. A curriculum is the way in which domains of knowledge are made available to students and it establishes a vision of kind of society which policy-makers want and envisage for the future.

In order to foster creative learning and innovative teaching, curricula need to undergo a skillful and thorough development, where re-balancing is a key factor. The literature identified several aspects for enhancing the curriculum: the balance between different areas of education: the balance along the curriculum (from pre-school to higher education); the balance between prescription and freedom; and finally the balance students' interests and other educational stakeholders' agendas.

A balance between different areas of the curriculum entails:

- The recognition that all subject can benefit from creativity, as creativity is not subject-related;
- The possibility to introduce a statutory time for cross-curricular work, as this facilitates a broad vision of education and learning and develops creativity and thinking skills, as well as learning - to- learn skills;
- An acknowledgement of the importance of every domain of knowledge, as this facilitates the catering for different interests, intelligences and learning styles.

A balance along the curriculum entails:

- A recognition of the relevance of creativity for every age group;
- A coherent definition of creativity from pre-school to university;
- A detailed framework for creativity in education for all.

A balance between prescription and freedom entails:

- Recognition of teachers' freedom.

A balance of agendas entails:

- Recognition of students' interests when designing the curriculum;
- The possibility to tailor (personalizes) the curriculum to the level of functioning of each student;
- Time away from the statutory curriculum to allow space and time for teachers and students to teach and learn what they wish.

ENABLING INNOVATIVE TEACHING AND CREATIVE LEARNING

Creativity and innovation can be defined by two concepts. Implicit theories on creativity, which allow people to judge what is creative and innovative without being able to explain or define what creativity and innovation, are. We understand that there is a gap between policies and practices. A support mechanism is needed to facilitate the implementation of policies. This also applies to the discourse of creativity and innovation in education.

One of the barriers to creativity and innovation in schools consists of teachers' overloaded schedules. The demand for creative learning and innovative teaching from policy-makers has to be matched with a support mechanism, I.E. with policies and tools that helps all educational actors to pursue creative and innovation paths. The promotion of creativity and innovation needs to be articulate and coherent.

It becomes evident therefore that looking for manifestations of creativity and innovation is challenging for several reasons:

- Creativity and innovation are processes which do not always result in tangible outcomes and as a result it can be difficult to find evidence of them;
- Creativity and innovation are exposed to subjectivity, arbitrariness and interpretation; thus making it challenging to compare data;
- Policies are not necessarily mirrored in practice: encouraging creativity and innovation in policies is not enough, as there is a need for a support mechanism.

The fostering of creativity and innovation does not uniquely rely on the intention of educators and pupils, as there are several conditions to be met before a creative and innovation environment can be promoted. In this sense, policies and common practices may provide the circumstances for creative learning and innovative teaching or, on the contrary, obstruct them. It is therefore interesting and necessary to examine which conditions can trigger creative learning and innovative teaching in order to support and allow them to spread.

CONCLUSION:-

This paper has provided an overview of how creativity and innovation are conceptualized in the context of education. Creativity and innovation are understood as interrelated concepts; the first refers to a product or process which shows a balance of originality and value, and the second to the implementation of such a process or product in a given sphere. Creativity can be linked to different factors, residing both in the individual (cognitive abilities, thinking skills, personality traits, knowledge) and in the surrounding sphere (culture, environment, field and domain). Creativity can be linked to cognitive and thinking processes as much as to emotional states, such as intrinsic motivation and affective learning processes. To sum up, all the theories studied indicate that creativity is context dependent, and arises in the interplay of a number of factors and requisites which can be supported and/or suppressed.

Creativity and innovation are strongly interrelated but it has also proposed a differentiated approach for the field of education in which creativity is more strongly linked to learning, and innovation to teaching, hence the notions of creative learning and innovative teaching. To enhance creativity in education there is a need for a change in pedagogy towards a more permissive environment which cherishes students' ideas, encourages risk-taking and mistakes, and allows learners to assume ownership of their learning. Creativity and innovation in education are not just an opportunity, but a necessity. The fostering of creativity and innovation cannot rely on the intention of educators and pupils, as there are several conditions to be met to promote a creative and innovative learning environment. Therefore, a set of 'enablers' is proposed as a framework for understanding the conditions or the support mechanisms that allows creative learning and innovative teaching to emerge, and thus facilitate creativity and innovation. These are: assessment; culture; curriculum; individual skills; teaching and learning format; teachers; technology; and tools.

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