THE IMPACT OF CREATIVITY ON EDUCATIONAL UNDERSTANDING

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Abstract: This study investigates the ability of creativity to bring about significant change in the field of education. It suggests a new methodology that integrates the latest creativity research with teaching methods. Our research aims to create a strong theoretical framework to enable the successful integration of creative activities in education. We believe that creativity is a crucial factor in understanding and improving educational processes. The first part of the paper presents a theoretical framework that aims to clarify the interpretation and use of creativity concepts in the educational process. The study focuses on discovering and analyzing creative situations that can improve and facilitate the teaching and learning process. Using the theoretical Vol. XXXV No. 1/MARCH

framework, the study suggests an educational model adapted to the unique characteristics and individual needs of students. This study examines practical strategies for overcoming barriers, such as the importance of providing inservice training for teachers. Our study highlights the vital importance of creativity in reforming education and presents a theoretical and practical framework that can be used as a basis for creating more adaptable, inventive and personalized teaching methods that meet the demands of 21st century learners.

Keywords: creativity; education; methodology; innovation.

1. Introduction

The difficulties in establishing a clear definition of creativity

Defining creativity is challenging because it encompasses a wide range of forms and variations (Ainsworth, 1967, 1978, 1978; Galton, 1969; Gardner, 1998; Guilford, 1950, 1957; Terman, 1925, 1950; Torrance, 1963).

The transformation of creativity into a specific concept by using scientific methods from both monodisciplinary and multidisciplinary approaches. Rouquette (1973) presented two key principles of creativity: personal discovery and the production process (Kaminski et al., 1973).

The classical paradigm and Definition creativity

- Low enthusiasm for exploring creativity is a result of challenges in measuring and conducting scientific examination.

- The lack of a widely recognized definition and the presence of ambiguity around creativity.

Definitions and perspectives on creativity

The term "creativity" derives from the Latin word "creation" and has challenges in defining a definitive definition. Most academics agree that creative thinking is a universal skill (Fontao, 1997; Guilford, 1950). Guilford 's notion refers to the expression of the human spirit and the differentiation between convergent and divergent thinking (Guilford, 1950;). Stein's (1953) definition is extended to recognize the value of knowledge as a cognitive process for society (Stein, 1953). Taylor explores the notion that creativity encompasses a wide range of activities and interpretations that attempt to modify and rearrange an individual's mental frames, regardless of their rarity or frequency, but meaningful in a particular context (Taylor, 1971). Taylor's explanation of this phrase highlights the multitude of factors that play a role in the creative process, establishing a direct link between creativity and problem-solving skills (Taylor, 1971). In a similar way, other scientists link creativity to the problem-solving process. In his work published in 1980, Vervalin defines creativity as the systematic process of detecting a problem in the mind, which could involve activities such as imagination, visualization, conjecture, meditation and contemplation. -This process is then followed by the generation or discovery of a new idea, concept, notion or schema (Vervalin, 1980).

In this preliminary investigation of creativity, our main objective is to enhance and perfect creative skills while maintaining a forwardlooking perspective on importance creativity in the field of education. Extensive studies have continually demonstrated that creativity is an inherent attribute that exists in individuals to varying degrees and manifests in a wide range of industries and disciplines. According to Bernal Vázquez (2000), each individual possesses an inherent capacity for creativity, which should be encouraged and cultivated through education (Vázquez, 2000). This process should extend beyond conventional academic boundaries to include the involvement of both the family and society at large. It is widely recognized that each individual has an inherent creative capacity that allows them to engage in a range of activities that could improve their lives (Araya, 2005; Holm-Hadulla, 2013; Richards, 2007; Runco, 2010). Our objective is to give priority to Glăveanu 's (2014) perspective on creativity, which emphasizes the importance of the connections between the artist, his work of art, cultural values and his community(Glăveanu, 2014). Creativity, in this context, refers to the generation of new products, information and methodologies adapted to the specific requirements of a community or circumstance. Glaveanu expands the concept of creativity to include more than just the act of generating new subjects and things (Glăveanu, 2014). He incorporates the inventive concepts underlying these creations within current cultural tools. His concept of creativity is characterized by distinctiveness, particularity and the ability to conform to different cultural and historical settings. Neuroeducation, as defined by Mora (2007), is a discipline that examines how the brain and environment interact in the educational setting. It emphasizes the need to adapt teaching and learning methods to meet the demands of the modern period (Mora et al., 2007). This approach encourages a collaborative effort between neuroscientists, psychologists, educators, social educators, and communication specialists to address the various factors that affect education. These factors include emotions, empathy, curiosity, attention, creativity, entrepreneurship, memory and learning processes, circadian rhythms, and interaction with nature. Driven by advances in neuroscience, this new perspective emphasizes the need for educational institutions to undertake the necessary adjustments and reforms to innovate and improve the educational system. These changes should reflect the significant impact on personal development and the progress of modern societies. Robinson (2012) discusses the importance of recognizing the specific 'component' as a means of improving creative skills (Robinson, 2012). This element refers to the intersection of an individual's innate abilities and personal inclinations. The experience of being immersed in the element goes beyond simple happiness or contentment, beyond the typical cases of pleasure. Discovering one's own element promotes a deep connection with the individual's core essence, their aspirations and their overall being, providing a broader perspective on people's personal capabilities and achievements (Robinson, 2012).

2. Research methodology

2.1. *Objectives and integrated approach: Research objectives:*

- > Promoting essential methods to promote creativity in education.
- Developing a new theoretical framework for revitalizing the creative education approach.

Specific objectives:

- ✓ Recognizing and harnessing the creative potential of students, teachers and the educational community.
- ✓ Emphasizing the importance of the social and cultural environment in education schoolboy
- ✓ Improving educational opportunities that foster the growth of creativity.
- ✓ Exploring contemporary educational advances and resources for the good of education.
- ✓ Identifying and solving obstacles to promoting creativity through training.

2.2. Research design:

The structure of our research consists of three primary and interconnected stages:

- Theoretical Stage One: An in-depth examination of the existing literature on creativity, spanning its historical roots to the current state of knowledge.
- Stage two: Context analysis refers to examining how social and cultural factors influence creative education.
- Stage three: Evaluation and discussion: Analysis of inventive pedagogical approaches that can encourage creativity, followed by making judgments about the objectives pursued.

3. Teaching staff

3.1 Proposed creative methodologies and resources establishing the theoretical framework and After educational circumstances, it is essential to determine the appropriate educational course of action. What techniques should be used in teaching and learning to facilitate the development of students' talents, including creativity, and how can the educational process itself be made more creative? This approach requires a new examination of education through the lens of creativity, forcing us to reconsider active approaches currently used in educational settings. We do not intend to provide a comprehensive analysis or a compilation of different creativity stimulation programs, such as specific programs such as "curricular" and "transversal" programs (Sepúlveda Muñoz, 1994), the "Instrumental Enrichment Program" (Feuerstein et al., 1988) , the Harvard Intelligence Project. None of the component theories of creativity, such as Urban (1991), Investment Theory (Sternberg & Lubart, 1993), and the Theoretical Model of Productive Thinking (Treffinger et al., 1990), are included(Sternberg & Lubart, 1993; Treffinger, 1990; Urban, 1991). We do not intend to compile a list of resources or approaches for fostering creativity. Our aim is to highlight the importance of innovative educational approaches that uphold the fundamental rights of individuals and facilitate their holistic growth. Active approaches refer to changes made to teaching practices to adapt to the current educational landscape. Active methodologies facilitate continuous learning through trial and error, enabling reflection and flexible learning processes that can meet the diverse needs of students (Carceller. 2019).

Today, although there have been improvements in teaching and learning approaches, traditional textbook-based exposure methods are still commonly used. The student engages in active listening and reproduces information with varying degrees of proficiency. He is expected only to reproduce the system without any additional requirements. According to Wallace et al. (2016), students' lack of engagement or detachment from the taught subject is the result of their passive role in the classroom (Wallace al.. 2016). et However, it is important to emphasize the need for the student to be actively involved and take a leadership role in the teaching and learning process, as emphasized by (March, 2006). According to him, the ideal student profile should possess the following qualities: be an active learner, demonstrate autonomy, use strategic thinking, engage in reflection, collaborate with others and take responsibility for their own learning (March, 2006). Thus, active approaches aim at using the student's knowledge in practical and familiar situations, favoring the growth of autonomy, competence and, ultimately, creativity. Faculty serve as an intermediary for learning, providing tutoring, guidance and

support (Toledo & Valverde, 2016).

Education that comes from creativity is based on its ability to bring about change, allowing students to cultivate their skills and apply them to improve the community.

Active techniques involve teaching processes where students use their knowledge in real circumstances and implement their learning in their everyday activities. These methods enhance the process of acquiring knowledge and develop a competent student by encouraging critical, creative and reflective thinking.

4. Conclusions

Today, there is a growing recognition of the importance of creativity for both individual growth and societal progress. Being able to adapt to the ever-evolving needs of the world is critical to career success.

This study emphasizes that every individual possesses the capacity for creativity, with variations between individuals, and it can be cultivated through appropriate education. To encourage creativity, it is essential to establish an educational and cultural structure that upholds the rights of individuals, facilitates the fulfillment of their needs and encourages innovative efforts. The importance of the environment is emphasized by its influence on the use of creative capacities.

Educational techniques should include active teaching approaches that promote student engagement and allow students to explore, exercise autonomy, and pursue their individual passions to discover their distinctive "thing." Environments that foster a culture of tolerance for mistakes and embracing failure are essential because they not only aid in the acquisition of knowledge, but also encourage the exploration of new paths and the cultivation of innovation.

The introduction of creative education means the initiation of a significant reform of the educational system and society as a whole. This entails implementing creative educational practices that incorporate creativity as a fundamental aspect of education, promoting a worldview that recognizes and nurtures creativity as a vital skill for a rewarding and dynamic existence.

References

Ainsworth, M. D. S. (1967). Infancy in Uganda: Infant care and the growth of love.

- Ainsworth, M. D. S. (1978). The bowlby-ainsworth attachment theory. Behavioral and Brain Sciences, 1(3), 436–438.
- Araya, Y. C. (2005). Una revisión crítica del concepto de creatividad.
 Revista Electrónica" Actualidades Investigativas En Educación", 5(1), 0.

Carceller, A. T. (2019). Innovación o moda: Las pedagogías activas en

el actual modelo educativo. Una reflexión sobre las metodologías emergidas. Voces de La Educación. https://hal.science/hal-02513733/

- Feuerstein, N., Chan, P. K., & Mond, J. J. (1988). Identification of numatrin, the nuclear matrix protein associated with induction of mitogenesis, as the nucleolar protein B23. Implication for the role of the nucleolus in early transduction of mitogenic signals. Journal of Biological Chemistry, 263(22), 10608– 10612.
- Fontao, M. D. P. G. (1997). Sex Differences in Academic Performance and Aptitudes for Cognition. Perceptual and Motor Skills, 85(3), 1031–1034. https://doi.org/10.2466/pms.1997.85.3.1031
- Galton, P. (1969). The pelvic musculature of the dinosaur Hypsilophodon (Reptilia: Ornithischia). Postilla, 131. https://elischolar.library.yale.edu/peabody_museum_natural_h istory postilla/131
- Gardner, J. F. (1998). Family and familia in Roman law and life. Clarendon Press. https://books.google.com/books?hl=en&lr=&id=cjYRiUEE_f AC&oi=fnd&pg=PR9&dq=Gardner,+1998&ots=Wv_RsoU_h M&sig=9-MMI4Zl15EA9cDd_d5LZvn8k5w
- Glăveanu, V. P. (2014). Distributed Creativity: What Is It? In V. P. Glăveanu, Distributed Creativity (pp. 1–13). Springer International Publishing. https://doi.org/10.1007/978-3-319-05434-6 1
- Guilford, J. P. (1950). Fundamental statistics in psychology and education. https://psycnet.apa.org/record/1950-04974-000
- Guilford, J. P. (1957). Creative abilities in the arts. Psychological Review, 64(2), 110.
- Holm-Hadulla, R. M. (2013). The Dialectic of Creativity: A Synthesis of Neurobiological, Psychological, Cultural and Practical Aspects of the Creative Process. Creativity Research Journal, 25(3), 293–299.

https://doi.org/10.1080/10400419.2013.813792

- Kaminski, M., Goujard, J., & Rumeau-Rouquette, C. (1973). Prediction of low birthweight and prematurity by a multiple regression analysis with maternal characteristics known since the beginning of the pregnancy. International Journal of Epidemiology, 2(2), 195–204.
- March, A. F. (2006). Metodologías activas para la formación de competencias. Educatio Siglo XXI, 24, 35–56.
- Mora, S., Cook, N., Buring, J. E., Ridker, P. M., & Lee, I.-M. (2007). Physical Activity and Reduced Risk of Cardiovascular Events:

p.228-236

Potential Mediating Mechanisms. Circulation, 116(19), 2110–2118.

https://doi.org/10.1161/CIRCULATIONAHA.107.729939

Richards, G. (2007). Cultural tourism: Global and local perspectives. Psychology Press. https://books.google.com/books?hl=en&lr=&id=-

LXgdr3hbkgC&oi=fnd&pg=PR13&dq=Richards,+2007&ots= QHmsdzxYOO&sig=15gUM6KwGovMSnK-XyV5Xlu6-VI

- Robinson, S. K. (Ed.). (2012). Out of our Minds: Learning to be creative (1st ed.). Wiley. https://doi.org/10.1002/9780857086549
- Runco, M. A. (2010). Divergent thinking, creativity, and ideation. The Cambridge Handbook of Creativity, 413, 446.
- Sepúlveda Muñoz, I. (1994). Comunidad cultural e hispanoamericanismo, 1885-1936. (No Title). https://cir.nii.ac.jp/crid/1130282268950539520
- Stein, M. I. (1953). Creativity and Culture. The Journal of Psychology, 36(2), 311–322. https://doi.org/10.1080/00223980.1953.9712897

Sternberg, R. J., & Lubart, T. I. (1993). Creative Giftedness: A Multivariate Investment Approach. Gifted Child Quarterly, 37(1), 7–15. https://doi.org/10.1177/001698629303700102

- Taylor, K. N. R. (1971). Intermetallic rare-earth compounds. AdvancesinPhysics,20(87),551–660.https://doi.org/10.1080/00018737100101311
- Terman, L. M. (1925). Mental and physical traits of a thousand gifted children (Vol. 1). Stanford University Press.
- Terman, L. M. (1950). Predicting marriage failure from test scores. Marriage and Family Living, 12(2), 51–54.
- Toledo, Y. A., & Valverde, R. I. H. (2016). Innovación educativa y metodologías activas en Educación Secundaria: La perspectiva de los docentes de lenguas castellana y literatura. Revista Fuentes, 18(1), 65–76.
- Torrance, E. (1963). Education and the creative potential. University of Minnesota Press. https://muse.jhu.edu/book/31773/
- Treffinger, C. L. (1990). Parental expectations of American-sponsored overseas schools in Bolivia. The University of Alabama. https://search.proquest.com/openview/4afb476f7fbb75a4e845 e1efcc1785c6/1?pq-origsite=gscholar&cbl=18750&diss=y
- Urban, K. K. (1991). Recent Trends in Creativity Research and Theory in Western Europe. European Journal of High Ability, 1(1), 99–113. https://doi.org/10.1080/0937445900010114
- Vázquez, J. B. (2000). Mesa redonda:" La investigación como proyecto de futuro". Implicaciones de la Música en el currículum de

Educación Infantil. Revista Electrónica de LEEME, 5, 20.

- Vervalin, C. H. (1980). Checked your fog index lately? IEEE Transactions on Professional Communication, 2, 87–88.
- Wallace, S., Nazroo, J., & Bécares, L. (2016). Cumulative Effect of Racial Discrimination on the Mental Health of Ethnic Minorities in the United Kingdom. American Journal of Public Health, 106(7), 1294–1300. https://doi.org/10.2105/AJPH.2016.303121