Desarrollo de la creatividad en la primaria a partir del cuento musical

Creativity development in primary school throughout musical story

Desenvolvimento da criatividade na primária do conto musical

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Resumen

En años recientes se puede observar un creciente interés por estudiar a las personas creativas desde distintos enfoques y perspectivas, así como el rol y la función que la escuela tiene en todos los niveles educativos para el desarrollo de la creatividad. La creatividad es abordada y estudiada no solamente por los psicólogos, también por educadores, artistas, filósofos, biólogos, empresarios, entre otros. En las primeras dos décadas del siglo XXI, la creatividad se ha vuelto un sinónimo de educación, porque existe una necesidad urgente de educar a nuestros niños y jóvenes de una forma creativa, cambiar los esquemas convencionales por los esquemas del pensamiento divergente, creativo y original que incentive el estudio y desarrollo de la creatividad.

Escuchar el cuento musical como parte de las actividades de la educación artística dentro del currículo escolar, es una herramienta muy valiosa para el desarrollo de este potencial. El análisis de los resultados del estudio realizado con 582 niños de 1º a 6º grado de una escuela primaria pública de la ciudad de Puebla, conduce a la necesidad de incluir el cuento musical como parte del currículo de la educación artística. A pesar de una gran variedad del acervo literario-musical que nos ha dejado la historia, sobre todo en los últimos años. El cuento musical, por diversas razones, aún no ha sido explorado y utilizado con fines pedagógicos en

la educación primaria. Por lo tanto, este trabajo plantea la necesidad de generar líneas de investigación específicas, enfocadas al estudio y desarrollo de la creatividad a partir de las artes que permitan el desarrollo integral de los niños en la educación básica a nivel primaria, al demostrarse que el cuento musical grabado motivó una transformación estadísticamente considerable del promedio de puntaje de creatividad (mismo que se incrementó de forma estadísticamente significativa en el post-test) en los grados 1º, 2º, 4º y 5º en específico, y al juntar a todos los niños de todos los grados (1º al 6º) que tomaron el test después del cuento musical.

Palabras clave: cuento musical, creatividad en la primaria, cuento y música.

Abstract

In recent years we can see a growing interest in studying creative people from different viewpoints and perspectives, as well as the role and function of the school at all educational levels for the development of creativity. Creativity is approached and studied not only by psychologists, but also by educators, artists, philosophers, biologists, entrepreneurs, among others. In the first two decades of the 21st century, creativity has become synonymous of education, because there is an urgent need to educate our children and young people in a creative way, to change conventional schemes by divergent, creative and original thinking schemes which encourages the study and development of creativity.

The development of creativity depends on the opportunities the child has to experiment with his fantasy and imagination. Listening to the musical story as part of artistic education activities within the school curriculum is a very valuable tool for the development of this potential. The results analysis of the study carried out with 582 children from 1st to 6th grade of a public primary school in the Puebla city, leads to the need to include the musical story as part of the curriculum of artistic education. Despite a great variety of literary-musical heritage that has left us the history, especially in recent years, the musical story, for various reasons, has not yet been explored and used for educational purposes in elementary education. Therefore, this work raises the need to generate specific research lines, focused on the study and development of creativity based on the arts that allow the integral children

development in basic education at primary level, demonstrating that the recorded musical story motivated a statistically significant transformation of the average of the creativity score (which increased in a statistically significant way in the post-test) in grades 1, 2, 4 and 5 in specific, and bringing together all The children of all grades (1st-6th) who took the test after the musical story.

Key words: musical stories, creativity at primary school, stories and music.

Resumo

Nos últimos anos, pode-se observar um crescente interesse em estudar pessoas criativas de diferentes abordagens e perspectivas, bem como o papel e função que a escola tem em todos os níveis educacionais para o desenvolvimento da criatividade. A criatividade não só é abordado e estudado por psicólogos, também por educadores, artistas, filósofos, biólogos, empresários, entre outros. Nas duas primeiras décadas do século XXI, a criatividade se tornou sinônimo de educação, porque há uma necessidade urgente de educar nossos filhos de uma forma criativa, alterar os esquemas convencionais por esquemas de pensamento divergente, criativa e original que incentiva o estudo e desenvolvimento de criatividade.

Ouça o conto musical como parte das atividades de educação artística no currículo escolar, é uma ferramenta muito valiosa para o desenvolvimento deste potencial. A análise dos resultados do estudo com 582 crianças de 1ª a 6ª série de uma escola pública na cidade de Puebla, leva à necessidade de incluir o conto musical como parte do currículo da educação artística. Apesar de uma variedade de herança literária e musical que nos deixou a história, especialmente nos últimos anos. O conto musical, por diversas razões, ainda não foi explorado e utilizado para fins educacionais no ensino primário. Portanto, este artigo discute a necessidade de desenvolver linhas específicas de investigação incidiu sobre o estudo e desenvolvimento da criatividade das artes que permitam o desenvolvimento integral das crianças na educação básica no nível elementar, para provar que a história música gravada levou a uma criatividade médio estatisticamente significativa ponto de transformação (o mesmo que aumentou de forma estatisticamente significativa no pós-teste) em graus 1, 2, 4 e

5, em particular, e para reunir todos os filhos de todos notas (1 a 6) que fizeram o teste depois que a história musical.

Palavras-chave: conto musical, criatividade no ensino primário, história e música.

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Introduction

In recent years, creativity has been approached and studied not only by psychologists, but also by educators, artists, philosophers, biologists, entrepreneurs, among others. In this regard, Gardner (2011) postulates the need for interdisciplinary research. This interest grows every day and confirms the importance and the actuality of the theme, which has become paramount in all fields of human endeavor. This vision has become a necessity of the 21st century, being a synonym of education. Waisburg and Erdmenger (2008) emphasize as social responsibility motivating and stimulating creativity within the school curriculum, being more significant in the development of the child between the ages of six and twelve, being, as Vygotsky (1984) says, a determining period For the future life.

As with many other authors (Maslow, 1982; Csikszentmihalyi, 1998; Hargreaves, 1998; Campbell, 2007, 2011; Copland, 2003), Vigotsky (2008) emphasizes that some creativity depends on the opportunities the child has to experiment with His imagination and imagination, not "as festive entertainment of the mind or an activity held in the air, but as a vital and indispensable function" (p.505).

Sustaining this, Bertomeu (2006) emphasizes the fact that "children and young people in contact with art, literature and music free their imagination, their sensitivity and their creativity" (p.54). Meanwhile, authors such as López Romero (2006a) specify which stories stimulate children's imagination, because "not all stories stimulate creativity and artistic sensitivity" (p. 146).

If creativity depends on the imagination and imagination of the child and they are born thanks to their experience, the implementation of the musical story as part of artistic education activities or other subjects can be a valuable tool for the development of this potential, especially Within the school curriculum.

The musical story has an intimate relationship not only with music - which is part of artistic education - but with other subjects, such as Spanish. This activity can be a significant support for the development of creativity, as well as for thinking and language skills.

Orff-Schulwerk was one of the pioneering methods in emphasizing the importance of using the word (spoken or written) in music education, since it represents "an unequaled world of expression" (Orff-Schulwerk, 1969, pp. 12-13) , Since before any musical exercise, whether melodic or rhythmic, there is the exercise of speaking.

Although many researchers have conducted and published studies in the field of tale and music, there are topics of great interest that have not been addressed yet. The musical story, for various reasons, has not yet been explored and used - for pedagogical purposes and in general - in primary education. It is for that reason that to investigate the effect that the musical story could have in the creative capacity of students at primary school level is extremely important.

CREATIVITY AND ITS CONSTITUTIVE ELEMENTS

According to López Pérez (1999) and other researchers such as Tatarkiewicz (1987), in the ancient world the concept of creativity, as we know it today, did not exist until the seventeenth century, when it appears "timidly" due to religious sensitivity, Depriving man of the conception of creation.

Most of the references to the term Creativity correspond to our time. Perhaps, as Romo (1997) says, interest in the study of creativity and innovative capacity is due in large part to political reasons: "the so-called Shock of Esputnik *[Sputnik]*[1], *A feeling of national failure at the first exit into space that was Soviet rather than North American, also influenced*

[1] Sputnik se refiere al primer satélite artificial de la historia, el cual fue lanzado el 4 de octubre de 1957 por la Unión Soviética.

awareness of the need for greater innovative capacity among NASA scientists "(p.7). It is possible that the US government has been concerned about this, asking a number of questions about the importance of creative ability as part of intellectual capacities.

Hargreaves (1998), Wilson (1997), Waisburg and Erdmenger (2008) refer to creativity as an element of complexity and mystery, polysemic in the sense that its own meaning is creative. Guilford in the fifties, expresses the need to study creativity as a discipline of psychology, revealing the complexity of the phenomenon, being necessary for understanding different levels or "keys to creativity," according to Lopez de la Llave and Page 1

- Sensitivity. The creative person is sensitive and able to identify the problems, needs, activities and feelings of others; In addition, perceives all the unusual or promising that the people, objects or situations with which it is related.
- Fluidity. It consists of producing a large number of responses in a situation, it is the fertility of ideas and behaviors.
- Flexibility. It is the individual's ability to organize events within diverse and broad categories. It is the capacity of modification, of variation in behaviors, attitudes, objects, objectives and methods.
- Originality. It manifests itself through the "uncommon" responses that can occur in a given situation. The original is recognized by departing from the usual, by its uniqueness.
- Redefinition. It is the ability to rearrange ideas, concepts, people and things, to transpose the functions of objects and stimuli in novel ways; Refers to the ability to define or perceive objects or situations differently than usual.
- Analysis. It allows to extract details of the totality.
- Synthesis. It is the ability to combine several components to reach a totality.
- Divergence. It is the individual's ability to analyze the opposite, to visualize the different, to find different ways.

- Development. It is the individual's ability to formalize ideas, to plan, develop and execute projects. It is the attitude to turn the formulations into decisive actions, it is the demand to carry the creative impulse until its realization.

- Utility. An idea, an object or a creative process must be able to solve some problem, to propose a new approach to some pending issue. Only something creative is recognized if it is advantageous individually or socially useful (in the broadest sense of this concept) (p. 61).

Following this author, it is "impossible to reach a concept like that which is intended, that is, simple in its expression, but full of content" (p.17). However, some definitions of habitual use stand out as "new associations that are useful" (Firestein, 1991), for example, explains creativity as the "capacity to produce new and valuable things" (Rodríguez, 2009), " Reveal new relationships, change existing norms in a reasonable way and thus contribute to the general resolution of problems in social reality "(Wollschlager, 1976). "Creativity is moving away from the main path, breaking the mold, being open to experience and allowing one thing to lead to the other" (Bartlett, 1995). "Creativity consists in forming new combinations of old elements. These combinations have to meet certain requirements or be useful in some way. The more the elements are separated from each other, the more creative the combination becomes "(Mednick, 1964). In addition, Torrance (1970) speaks of it as a process of appreciation of problems, formation of ideas, verification of hypotheses with the corresponding communication of results, highlighting the elements of connectivity, originality and relevance that López enunciates. Frega (2009) as well as Waisburg and Erdmenger (2008) and Csikszentmihalyi (1998) make references to creative environments. From here, we can talk about criteria of creativity.

Criteria for creativity

1. Creative energy is the intellectual activity that the product performs (in this it coincides with Mihaly Csikszentmihalyi in his book Creativity, The Flow and the Psychology of Discovery and Invention (1998)) In addition, this energy coincides with sexual energy and Creative rest in its ten contrasts or paradoxes that define creativity based on a methodology based on interviews with great creators.

2. Creation is useful, has utility (it is more complex to define utility in art).

3. It has novelty. Overcoming difficulties, the response of inventiveness is a surprise; The same creator may be surprised.

4. Experimentation precedes the performance of the work or product.

5. Inventiveness is presented in the product successfully completed, in an uncommon area.

6. There is a previous skepticism of colleagues in this area to a new scientific product (although there are general common features between scientific and artistic creativity, we believe that a deep comparative study between the two areas of human creation would be very useful, even Between the different branches and specialties of each creation).

7. In the individual there is a dissatisfaction ("an unfulfilled desire") made later with the birth of productive novelty (p. 75).

Based on multiple approaches to creativity, it is stated that creativity encompasses four concepts: person, process, product and creative environment. Creativity is the human capacity (person) to produce works - or work (product) - original or new, which are the result of a creative process of flowing from creativity (term introduced by Csikszentmihalyi, 1997). It is created in an environment (environment and public), which can issue different judgments (favorable or rejection) with respect to the creative product. Therefore, it is necessary to review each of these approaches separately.

Creative person

By Csikszentmihalyi (1998), Creative people adapt to any situation and reach their goals with whatever they have at hand (p.73). While it is difficult to define specific traits or characteristics of creative individuals, they can be very social and optimistic, but they can also be antisocial and depressive, or very generous and joyful, as well as greedy and bitter, proud or timid. At the same time, these characteristics can be misleading because they are the opinions or impressions of others.

Creative personality is a highly complex subject, occupying a central place in the works of Csikszentmihalyi, who dedicated several of his writings, among them The Evolving Self: A Psychology for the Third Millennium. In 1996 (1998 in Spanish), published Creativity. Flow and the Psychology of Discovery and Invention, where the author interviews ninety-one creative personalities from around the world, who have revolutionized their areas of work. In one of his chapters devoted to the creative personality, Csikszentmihalyi describes "the ten dimensions of complexity" (pp. 78-99), which are summarized below:

The ten contrasting pairs of the creative personality [2]

1. They have a lot of energy and ability to work, as they "seem to have a very high dose of eros or generalized libidinal energy, which some express directly in sexuality." But they are also quiet and at rest, working long concentrated hours, with freshness and enthusiasm, superior physical endowment and genetic advantage. However, it is frequent that creative septuagenarians may have had a childhood full of illnesses. Flexible febrile activity and rest are key to creation (pp. 80-82).

2. Creative individuals are "alive" and ingenious while naive (we would add paradoxically "malicious" Goethe said that "naivety is the most important attribute of genius", remember that genius comes from "gene." So Genitive, genitive, generate, naive and genius have a common root.It is known that the indices of Intellectual Coefficient (CI) are not reliable, nor directly conclusive, with respect to the creative individual, however, creativity requires a minimum of IQ of 120. In spite of everything, there is no test that clearly measures the different types of creativity, because a creative person unites the divergent thought with the convergent one, that is to say, a flexibility with rigor in its turn that joins the intuition with the good judgment. 82-84).

[2] Se decidió por este título, porque cada una de las diez dimensiones de la complejidad de las personas creativas que describe Csikszentmihalyi implican siempre dos fenómenos o características contrastantes de la personalidad creativa.

3. The immediately preceding brings us to the third creative trait, which combines playfulness with discipline. The creative being possesses humor and power of the game: it is irresponsible and responsible at the same time, but as we said: its constancy in the perfection of a creative idea is fundamental. (Pp. 84-86).

4. Imagination and fantasy on the one hand and a deep sense of reality on the other, is characteristic of the creative personality. Art and science are sublime ways of escaping reality, Einstein said. The essence of creative individuals is to go beyond reality by creating a new, also true. The novelty of them is rooted in reality, they are not extravagant, do not wander, are coherent: they are structured. In constant change, reality is relative - says a famous financial creative mind, echoing in Einsteinian; Reality is not empty but it is close to being. From his point of view, success is evolutionary. (Pp. 86-88).

5. Creative people are introverted and extroverted (their paradoxes continue). "Only those who can be alone can master the symbolic content of a field," but they also insist on the importance of dialogue with people. Solitary and sociable, they establish relationships creating, and create solitarily. (Pp. 88-90).

6. The creative personality is humble and proud, self-critical and self-confident; Depending on the medium, is aggressive if necessary. They are self-critical because they focus above all on their present activity. A famous person is not necessarily arrogant, he may be shy because he is self-critical, aware of the contributions of those who preceded him-are placed in perspective-of the role that fortune also assigned to them, centered on the present and the future, Are not particularly interesting to them. They can be more proud of their role as parents than of their reputation. Often, they subordinate welfare and promotion to the success of the project that excites them. Peaceful and aggressive, depending on the circumstances, many go from being egocentric to being altruistic, especially at maturity. (Pp. 90-93).

7. Creative men and women transcend gender stereotypes. This psychological androgyny should not be confused with homosexuality. They are aggressive and protective, sensitive and rigid, dominant and "submissive". Creativity unites the strengths and virtues of the two brains (the "masculine" and the "feminine"). Creative men have great concern for their family and sensitivity for subtle aspects of the environment, such as "feminine" traits, talented women are more dominant and harder than their common, but in general men are perfectly masculine like absolutely female , Possessing traits of the opposite gender. (Pp. 93-94)

8. You can not play a game without knowing its rules: you can not be creative (and rebellious, and iconoclastic) without being traditional and conservative. To be creative, you first have to internalize a field of culture. According to the artist Eva Zeisel, no creativity emerges from a negative impulse (what happens to postmodernism, according to her); In other words, only the positive impulse produces a satisfactory creation. At the same time, the creator breaks with the security of tradition, but based on his deep knowledge. (pp. 94-95)

9. The great passion for his work is a characteristic of creative beings as -parallelly- objectivity by it. Without passion, interest is soon lost. Without objectivity, the work lacks credibility because it will not be very good. The creative process is an alternation between the two extremes.

10. The last of the contrasting pairs of creative personality, according to the author, is the openness and sensitivity of the creator who exposes him to suffering as a great pleasure. Being in the vanguard leaves him unprotected and vulnerable, the eminence invites criticism and virulent attacks. Divergent thinking is constantly understood by most as a deviation, which can make the creator feel misunderstood, but the most difficult thing is the feeling of emptiness and loss when he can not work. In spite of this, when you are working in your specialty there is a sense of happiness. A constant in this type of personality is to enjoy the creative process itself. Divided attention,

> delivery by half, is not compatible with creativity, creators generally enjoy also with many other activities they perform. (pp. 96-99)

In addition, Csikszentmihalyi guarantees: "A person can not be creative in a field in which it has not been initiated. However enormous the mathematical gifts a child may have, he will not be able to make a contribution to mathematics without learning its rules "(p. 47). On the other hand, the development of all these skills will be subject to the "field that recognizes and legitimizes the new contributions" (Csikszentmihalyi, 1998, p. The subject of the scope will be discussed later.

The creative process

The creative process requires constant work. Vigotsky confirms it: "creating is difficult". He even discusses this subject in the chapter The Sufferings of Creation, from the book Thought and Language (Vigotsky, 2008, pp. 535-538). In addition, Csikszentmihalyi (1998) refers to the creative process using Thomas Edison's words: "Creativity consists of 1% inspiration and 99% perspiration" (p.104). Hargreaves (1998) describes the creative process with the words of singer Sammy Kahn: "When people ask me what comes first, whether the music or lyrics, I tell them that what comes first is the phone call" (as quoted in Hargreaves, 1998, p. Artistic work demands hard and persistent work.

With this example of the American singer, it is verified that the creative process will culminate in a work and what finally interests the artist is the final product, that is, in the case of cantautor, the song that will deliver. With children, the same thing does not happen. For them the final product is not so important, but the production process (Gardner, 1994, p. 47). Vigotsky (2008) also mentions something about this: "It should not be forgotten that the main rule of child creativity is that its value lies not in the result or in the product of its creation, but in the process itself" (p. 571). In the same line of ideas, Viktor Lowenfeld emphasizes the importance of making art, above the final product interested in fundamentally achieving the development of the creative and mental capacity of students through artistic activities. He postulated that there were six areas of growth that were influenced by these activities: emotional, physical, perceptual, social, aesthetic and creative (as quoted in Wilson, 1979, pp. 13-14).

In addition, it points out that artistic techniques can not be taught or explained, but that each child must create his own resources to perform his task, being that the expression of child creativity that attracts the child the most is theatrical performance (Vigotsky, 2008, p. 568). Vigotsky describes play as the primary form of dramatization, making it vitally important for the formation of character and worldview in the child (p.570). The author of Thought and Language says that the child can be a bad actor for others and perfect for himself (Vigotsky, 2008, p.572). This characteristic affirms once again that the child does not care about the result, but the process. The best reward for the performance of the play must be the child's pleasure to participate in all processes related to the play, from the preparatory process (painting, sculpting, cooking, decorating, learning their lines, rehearsing and Other) until the moment of action (Vigotsky, 2008, p. 570).

According to Csikszentmihalyi (1998), the creative process consists of five steps or phases:

1. Period of preparation or immersion.

2. Incubation period.

3. Intuition: the moment ah!

4. Period of self-criticism: the evaluation.

5. Processing process.

This process or "classical structure" - as the author calls it - begins with the preparation period and culminates with the elaboration process. However, do not take it too literally:

> *A person who makes a creative contribution is never limited to working hard during the long last stage of development. This part of the process is interrupted constantly by periods of incubation and sprinkled with small epiphanies. There are many new intuitions that arise while, presumably, only the final touches are being given to the initial intuition [...] Thus, the creative process is not so linear as it is recurrent. The number of iterations through which it passes, the number of turns it contains, the intuitions it requires, depends on the depth and breadth of the topics being treated. Sometimes*

> *incubation lasts for years; Sometimes, a few hours. Sometimes the creative idea includes a deep intuition and an incalculable number of other smaller ones.* (Csikszentmihalyi, 1998, p. 105)

According to the studies of Guilford (1980) and Torrance (1969), among other specialists, two types of thinking are involved in the creative process: divergent and convergent. López (1999) says that divergent thinking is equivalent "to look from different perspectives. It is above all a thought that is not restricted to a single plane ... "whereas convergent thinking" is used to solve well-defined problems whose characteristic is to have a unique solution.*"* (p. 75).

Creative product

Although the person and the creative process allude to something intangible, the creative product refers to concrete things that we can see, touch or listen to. Waisburg and Erdmenger (2008) define it as "[...] the realization of the creative process shared with others. It is what makes visible the invisible, creativity is an internal process that is proven by doing it externally "(p.62). At the same time, López (1999) points out: "In the category of product are considered the criteria that make a work, object or idea can be described as creative, and the antecedents that allow to establish levels of creativity or forms of manifestation of Creative behavior "(p.10).

Creation implies a product, the verb create is transitive. According to Romo (1997), the spectacular is not the process but the result, but we understand that this is a kind of abstraction, because the process of creativity can also be spectacular. The author calls this process insight (which can be understood as inspiration, intuition, connection, sparkle, opening or beginning, momentum of the creative moment, among others). For the author, the synchronicity is closely related to creativity, and manages to provoke or lead to creativity. The invention may have synchronic-synchronized structures, for example, in music or poetry an image is woven with rhythm: it is the image of the rhythm and rhythm of the image, and in turn these two instances imply a worldview (p. 65). From the physicist Linus Pauli, to Jung, Ortiz Osés, Neumann, Eliade, Durand, Kawai and other Circle Eranian theorists, they have studied creativity - mainly artistic - in deep relation with her, hermeneutics and symbology, The process and not only the result is spectacular.

Donald MacKinnon (1975) indicates that creative products are the basis on which all creativity rests, but that foundation must be firmly constructed. We must be clear what constitutes a creative work to build a psychology of creativity. Ronald Finke (1992) says that there is something special about great art. Beyond a consensus, it contains something essential about the nature of man. "The social can affect the product but it is irrelevant in the determination of the process because, in any case, it will intervene long after the product has emerged from the mind of the creator" (como se cita en Romo, 1997, pp. 67-68).

Since there are objects that can definitely be said to be creative products, the scientific method can be applied to the study of creativity. Gruber's pioneering work on Darwin (1974) marked a milestone in explaining creativity from cognitive psychology. The method that emerged was called Cognitive Case Study. Gardner (2011), cognitivist also, studied Gandhi and Picasso, among several different samples. "The inductive value of observation data obtained in a rigorous case study has sufficient identity to raise explanatory models of creativity, such as Gruber's much-celebrated 'evolving systems'" (Romo, 1997, p.

Therefore, Romo seeks to define which products are creative and explain why the things of creativity contain novelty and value. The product charges an independent existence of the creator to be transmitted, it is communicable. In science, the idea must be verified, "in an empirical contrast with the values of the conceptual system where it arose" (Romo 1997: 73).

Newell, Shaw and Simon (1958) suggest the following criteria that must be met minimally to consider the product as creative:

1. The product has novelty for the thinker and culture.

2. It is not conventional, modified or rejected previously accepted ideas.

3. The product results from a great motivation and persistence, with intense work and time expenditure (the Creative Energy of Csikszentmihaly).

4. The product may be the result of formulating a more formulated or defined problem. "There are no problems in reality, there are problems that are badly posed,

when a problem is correctly solved, it is solved automatically", Would say Ludwig Wittgenstein (como se cita en Romo, 1997, pp. 75-76).

Creative environment

As Csikszentmihalyi (1998) argues, "creativity is jointly constructed by the interaction between field, field and person" (p 47).

From the three categories of Csikszentmihalyi (1998): individual or individual talent; The field or discipline; And scope; Gardner forms an armamentary for his study, as "a trio of broad themes" that guided him throughout his research on the seven great creators: Freud, Einstein, Picasso, Stravinsky, Eliot, Graham and Gandhi (Gardner, 2011, p. .74). The results of this study are published in the book Creative Minds. An anatomy of creativity, which originally appeared in 1993 with the title: *Creatings Minds. An Anatomy of Creativity*[3].

According to Gardner (2011), at the field level the following steps are followed:

> 1. Consider the nature of the symbolic systems with which the creators worked.
>
> 2. Describe the types of creative practices of individuals in the form of five different kinds of activity. These activities are also mentioned in interludes. [1. Solution of a specific problem; 2. Proposal of a general conceptual scheme; 3. Creation of a product; 4. A stylized type of actuation; 5. A high-risk action. These five types of activities must be approached creatively, which implies "conceptualizing a more complicated scheme, which includes three components: 1. The concrete symbolic system (or systems) used; 2. The nature of creative activity; 3. Particular moments in the course of a creative advance or performance "(pp. 480-481)].

[3] Esta obra se tradujo al español por José Pedro Tosaus Abadía y fue publicada en España en 1995 y 2010. En marzo de 2011, fue publicada por primera vez en México, en colaboración con la editorial Paidós de España.

3. Finally, it is necessary to consider the statute of the main paradigms or approaches, as they exist in the fields where the creators are working. It includes a consideration of the susceptibility of the paradigm in the face of a continuous innovation throughout the life of the creator.

García and Estebaranz (2005) point out several aspects or characteristics that the environment implies as a "creative development scenario" (pp. 22-23):

- Relaxed and playful atmosphere.
- Existence of limits to arise.
- Balance in the characteristics of the work to be done, which should be available to the workers.
- Pressure in competition interferes with creativity.
- Educators who promote creativity treat students as individuals, foster independence, and serve as models for creative roles.
- Environments that facilitate creativity are characterized by good direction. It sets goals, avoids distractions and is not too strict. In addition, it has sufficient resources: stimulation of new ideas, collaboration between the divisions of work, if any, recognition of creative work, having time to think, existence of challenging problems or a sense of urgency to have the work done.
- The societies that stimulate the creativity support the creative work, reason why they are open to the cultural stimuli.

BENEFITS OF THE MUSIC STORY IN THE DEVELOPMENT OF CREATIVITY

By Zelenkova (2010), to understand a musical work or, as it is called, the image of performance (p.238), is one of the most difficult tasks in musical pedagogy, since it is an abstract concept. Without going into the description of the processes involved in the activity of children's musical perception, one of the methods to bring the child closer to the musical phenomenon described by Zelenkova is the use of verbal creativity, that is, the introduction of the magical story as An issue where the child participates as the author. This method of directed improvisation, says the author, has been used by Leon Tolstoi (Vigotsky, 1967), Gianni Rodari (1990) and O. M. Dyachenko (1986). The child showed his richest experience in the composition of stories, above musical performance. However, in carrying out this joint activity, driven by the effect of the context, the child could see "the musical work in such a way that it could not be done with the usual means of perception. The magic world of stories is here as one of the means of representing the reality of life, as the special language, which, when penetrating the student's consciousness, guarantees the creation in him of the image of execution of The musical work "(Zelenkova, 2010, pp. 240-241). Music becomes the symbolic representation of the story, which serves as support for the understanding of the musical message, hence its interpretation. Zelenkova conducted an experiment with children from seven to fourteen years old, who studied piano at an art school. The experimental group in which the story creation and storytelling activity was used, together with the piano performance, showed the increase in performance quality[4] In its creative component, averaged 1.77 on a usual 10-level scale, while the control group showed no significant changes.

Arguedas, like other researchers, describes the enormous benefits of a musical story in the child's education, both in the psychomotor and in the socio-affective and cognitive, through literary and musical stimuli. This experience "motivates plastic expression, dramatic expression and dance, which allows to enrich the creativity of girls and boys" (Arguedas, 2006).

[4] La evaluación de la interpretación musical se dividió en dos indicadores: **técnico**, que abarca la ejecución correcta de las notas, la precisión y limpieza del sonido, etc. y **creativo** que incluye la expresión emocional, personalidad del intérprete, aspectos de agógica, dinámica, utilización de matices, manejo del tiempo y pulso.

Camino (2012) believes that "there is no doubt that the union between word, music and image produces a magical result with great educational possibilities" (p.1). In that same vein, Romero affirms that the "two ingredients united, word and music, are the essential elements to amuse, motivate and develop imagination, creativity *[...]"* (Romero, 2007, p. 1) concluding thus:

> *The musical story involves a psychomotor, socio-affective and cognitive development, since through this, a relationship is established with the musical, literary, creative, imaginative stimuli that frequently include movement and dance, which will serve as Motivation to children, putting into practice an active and participative teaching within what we consider integral education.* (Romero, 2007, p. 1)

There are other works that include methodological proposals to implement the musical story in classroom activities, however, most of these texts are dedicated to describe different opinions about the importance of bringing the child closer to the literary and musical world. At the same time, they describe different benefits that the musical story provides in the development of different potentials of the child, including creativity, their contribution in the formation of children in an integral way, but practically speaking there is no talk of studies with a solid scientific base Have been made in this field.

FIELD RESEARCH

Objective

Being a new field that has not yet been explored, the objective of this research is to know the effect of the musical story that could have in the development of creativity in the children of the primary schools through the use of a test of children's creativity.

Hypothesis

Hypothesis: the musical story positively influences the development of creativity in elementary school children.

ANOVA: Analysis of variance provided by the F statistic from which the null hypothesis is contrasted with an alternative.

Null hypothesis: musical tale does not influence the development of creativity in primary school children. R2 = 0. That is, the response variable (creativity) is not influenced by the independent variables. It is the same as saying that the variability observed in the responses is caused by chance without influence of the independent variables. In other words, our null hypothesis means that the musical tale does not make any changes in the level of creativity.

If the p-value associated with the F statistic is less than the significance level (usually 0.05), we reject the null hypothesis raised.

If the null hypothesis is rejected, we assume that the musical story benefits the development of creativity.

Methodology

In the present study we used a quasi-experimental design A-B-A, with an initial evaluation (A), the application of a program integrated by stories (B), with 3 variants (without music, live music and music Recorded).

Subjects

The study included 582 children from 1st to 6th grade of a public elementary school in the city of Puebla. Most children belong to a low to medium-low social level. Of the 582 children, 122 children were excluded: 36 participated in the pilot test and 85 did not complete the two tests (pre-test and post-test), missing one of them. In addition, a student did not have the authorization of her parents. Therefore, the final results of the study correspond to a total of 460 students, ranging in age from 6 to 13 years. The children at each grade level were divided into 3 groups, one control group and two experimental groups, according to the following conditions:

Grupo Control: 0 (GC) - Cuento sin música (n = 147)

Grupo Experimental I: 1 (GE-I) - Cuento musical en vivo (n = 163)

Grupo Experimental II: 2 (GE-II) - Cuento musical grabado (n = 150)

According to the above, we obtained 18 groups, 6 control groups, 6 experimental groups type I and 6 experimental groups type II.

The following table shows the number of participants by grade and type of story:

Table 1. Distribution of subjects by grade and type of story.

Grado	GC - Sin música	GE1 - Musical en vivo	GE2 - Musical grabado
1	25	28	24
2	24	25	24
3	25	31	29
4	31	28	26
5	25	28	27
6	17	23	20
Total	147	163	150

The following table shows the distribution of subjects by grade and gender:

Table 2. Distribution of subjects by grade and gender.

Grado	Género		Total
	M	F	
1	33	44	77
2	39	34	73
3	41	44	85
4	39	46	85
5	37	43	80
6	27	33	60
Total	216	244	460

The allocation of the type of story for each group was made at random. The distribution of groups and sessions (some complete, some partially) were videotaped in this way:

1 “B” Cuento sin música (Grupo control)	4 “B” Cuento sin música (Grupo control)
1 “C” Cuento musical en vivo (Grupo experimental I)	4 “C” Cuento musical en vivo (Grupo experimental I)
1 “A” Cuento musical grabado (Grupo experimental II)	4 “A” Cuento musical grabado (Grupo experimental II)
2 “A” Cuento sin música (Grupo control)	5 “A” Cuento musical grabado (Grupo experimental II)
2 “C” Cuento musical en vivo (Grupo experimental I)	5 “B” Cuento musical en vivo (Grupo experimental I)
2 “B” Cuento musical grabado (Grupo experimental II)	5 “C” Cuento sin música (Grupo control)
3 “C” Cuento sin música (Grupo control)	6 “A” Cuento musical grabado (Grupo experimental II)
3 “B” Cuento musical en vivo (Grupo experimental I)	6 “B” Cuento musical en vivo (Grupo experimental I)
3 “A” Cuento musical grabado (Grupo experimental II)	6 “C” Cuento sin música (Grupo control)

Instruments

Before the course and at the end of the course, the children performed a Creativity Test in order to assess whether their participation in storytelling had any impact on their creativity. We used the Infant Creativity Test, by M. Romo Santos, V. Alfonso Benlliure and M. J. Sánchez-Ruiz (2008), researchers of the Faculty of Psychology of the Autonomous University of Madrid.

This test was chosen for several reasons. The authors of the Child Creativity Test (TCI) give us a detailed description of its value, importance and theoretical foundation. They start from the researches of Getzels and Csikszentmihalyi (1976) and investigations of Runco (1994). In addition, this test is not only easy to apply, but its results are simple to interpret, something that can not be verified with other tests of creativity. Before starting the study, the

information with the study description was given to the parents, requesting their signature of acceptance (Letter of Consent) and filling in the questionnaire, in order to gather demographic information of the children participating in the study.

Description of story types

The following describes the three types of stories that were given and the activities carried out:

- Story without music: different stories that were read and / or counted for children in each class.

- Live musical story: different stories that were read or told with live classical music that I played with the guitar, interrupting the reading in certain moments of the story to continue the literary idea with music. Although these stories were previously prepared, since it had to select the musical works depending on the content of the story, there were moments of improvisation in the musical part.

- Recorded musical tale: different musical stories recorded on CDs. In each session the children listened to different musical stories through discs.

Pilot Test

Before starting the study, the pilot creativity test was carried out in order to determine the reliability index of the evaluation of the tests by three jurors, students of Bachelor of Music from the Autonomous University of Puebla (BUAP). The three evaluators received the previous training and the evaluation mechanism was explained to them. Likewise, they were provided with the material and instructions in the Infant Creativity Test Manual. To carry out the pilot test, four children were chosen at random from each of the groups 2, 4 and 6. Each of the judges evaluated the 36 tests separately and showed a high degree of agreement.

The purpose of the pilot test is to verify that the final evaluation of the test is independent of the evaluator who performs it, ie that the test is reliable and objective because the factors associated with the evaluator are not relevant to the final assessment. This allows to justify that only a jury will evaluate the pre-test and the post-test of each child, of each school year,

for the three conditions of the experiment: 0 - story without music, 1 - musical story live, 2 - story Musical engraving.

Results of the study

The following table shows the results of all children of all grades who were subjected to condition 0: tale without music, control group.

Table 3. Creativity score of all control, pre-test and post-test groups.

Puntaje Creatividad	Media	Desviación Estándar	Error Estándar de la Media	Alumnos
Pre-test	4.81	1.86	0.15	147
Post-test	4.92	1.86	0.15	147

Table 4. Story without music (witness), all grades.

Hipótesis alternativa	t	df	*p-value*	intervalo de confianza de 95%		media de diferencias
Diferencia de medias no es igual a 0	0.63	146	0.53	-0.24	0.46	0.11

The p-value does not allow to reject the null hypothesis that the difference of means is equal to 0. The story without music did not produce statistically significant change of the average score of creativity in this group.

In the following table we observe the results of the children of all the grades that were submitted to condition 1: live musical tale, experimental group 1.

Table 5. Creativity score, all experimental groups 1, pre-test and post-test.

Puntaje Creatividad	Media	Desviación Estándar	Error Estándar de la Media	Alumnos
Pre-test	4.00	2.09	0.16	163
Post-test	4.92	2.04	0.16	163

Table 6. Live musical tale (experimental 1), all grades.

Hipótesis alternativa	t	df	*p-value*	intervalo de confianza de 95%		media de diferencias
Diferencia de medias no es igual a 0	4.82	162	32 e-06	0.55	1.31	0.93
Diferencia de medias no es igual a 0	4.82	162	1.6 e-06	0.61	Inf	0.93

The p-value allows to reject the null hypothesis that the difference of means is equal to 0. The musical story in vivo produced a significant change of average score of creativity in this group. In addition, in the second t-test we can also reject the null hypothesis, that is, that the musical story in vivo produced a significant increase in the average score of creativity in this group.

In the following table we observe the results of the children of all the grades that were submitted to condition 2: recorded musical tale, experimental group 2.

Table 7. Creativity score, all experimental groups 2, pre-test and post-test.

Puntaje Creatividad	Media	Desviación Estándar	Error Estándar de la Media	Alumnos
Pre-test	5.18	2.16	0.18	150
Post-test	5.91	1.86	0.15	150

Table 8. Recorded musical tale (experimental 2), all grades.

Hipótesis alternativa	t	df	*p-value*	intervalo de confianza de 95%		media de diferencias
Diferencia de medias no es igual a 0	3.84	149	1.8 e-04	0.36	1.12	0.74
Diferencia de medias es mayor a 0	3.84	149	9.1 e-05	0.42	Inf	0.74

The p-value allows to reject the null hypothesis that the difference of means is equal to 0. The recorded musical tale produced a significant change of average score of creativity in this group. In addition, in the second t-test we can also reject the null hypothesis, that is, that the recorded musical story produced a statistically significant increase in the average score of creativity in this group.

On the other hand, we appreciate that both the live musical tale and the recorded musical tale, although they produced a significant increase in the average score of creativity in this group, the statistical significance of the live musical tale represented an order of magnitude greater than that of the tale Recorded (1.6 x e-06 contra 9.1 x e-05).

Summary of Results

Table 9. Statistically significant increase in post-test creativity.

Grados	1º	2º	3º	4º	5º	6º	Todos
Sin Música	✗	✗	✗	✗	✗	✗	✗
Musical	✗	✗	✓✓	✗	✓✓	✓✓	✓✓
Grabado	✓✓	✓✓	✗*	✓✓	✓✓	✗	✓✓

* Disminuyó el puntaje de creatividad en el post-test.

The story without music did not raise a significant statistical variation in the average score of creativity to any degree.

The live musical tale produced a statistically significant change in the average creative score (which increased statistically significantly in post-test) in grades 3, 5, 6 in specific, and bringing together all children from All grades (1 to 6) that took the test after the musical story.

The recorded musical story motivated a statistically significant transformation of the average creativity score (which increased statistically significantly in the post-test) in grades 1, 2, 4 and 5 in specific, and bringing together all children Of all grades (1st to 6th) that took the test after the musical story (the specific case of 3rd is curious because the average creativity score decreased after the recorded story).

CONCLUSIONS

The story without music does not produce significant changes in the level of creativity. The live musical tale and recorded musical tale increase creativity.

This research was the first step to discover the benefits of a musical story in the development of creativity in primary school. Listening and receiving the pleasure of the musical story, which combines both literary art and music, is a valuable experience that enriches the life of a child, music and literature help to free the child's imagination and stimulate their creative potential .

Following the purposes of the artistic education of the "Basic Education Curriculum 2011", which starts from the needs and characteristics of children, focused on fostering taste, sensitivity and appreciation towards artistic expressions and development of creativity through Use of different resources of artistic expressions, we consider suitable, implementation of the musical story as part of the activities of artistic education in primary that will undoubtedly enrich the child's experience and stimulate his imagination, and hence, creativity.

In this way, it becomes important to reconsider the time spent for the disciplines of artistic education: plastic arts, theater, dance and music that they impart during one hour a week during the six years of primary education.

If, well, it has not been possible to show that the activities of the story without music raise creativity significantly, there is a great interest on the part of the children towards these activities that no doubt enrich their experience and serve as a valuable stimulus and motivation to do Of reading a constant habit. Also, listening to a story, helps concentration and attention by the child. It was possible to observe a truly exemplary behavior on the part of the children, who listened to the stories with much attention and pleasure. With a rethinking of the activities around stories (which can be explored together with the creation and dramatization of them) and taking into account the time allotted for the course (the study lasted about a month and a half) , It is possible to find more answers about creativity and the story, its effects and benefits. The important thing is to continue doing this type of research to give objective, valid and reliable answers. These answers at the same time can correspond to all the searches, ideas and theories created around the benefit of musical story in the development of creativity. The lack of this type of studies that show with valid arguments the increase of the creativity from the story and the music, oblige us to continue studying this subject, to carry out a greater number of studies with the corresponding activities and planning, also taking into account the Tendencies of a new era and its needs.

All human beings, in one way or another, have the creative potential and this, in turn, can be developed. To foster, promote and offer opportunities for the development of this potential, in an atmosphere of respect and acceptance, should be paramount for any teacher, especially in primary education, because from these ages the seed is sown and opportunities are

generated for all Experiences that will form a solid foundation in the growth of individuals and, above all, in the development of their creativity.

The theme of creativity is a very diverse and complex subject and at the same time fascinating. We must continue to work together in the development of new proposals and initiatives for creative teaching that will undoubtedly benefit our children in every way as human beings.

The school should focus its activities on the development of creativity, contribute to the formation of creative and critical people, capable of expressing their ideas in an oral, written or artistic way; The ideal space is the artistic education that must occupy a privileged place within the school curriculum, with teachers specialized in the artistic field who can simultaneously respond to the demands of modern time, contemporary tendencies and the purposes and goals established by the Secretariat of Public Education through various documents that it has elaborated in the last fifteen years. In the same way, the academy is obliged to create spaces and conditions for the development of creativity. At the same time, it must update and revise the curricula of arts education, implement new proposals and ideas and explore new approaches to creative education.

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