Estrategia participativa vivencial de educación musical en la calidad de la formación para estudiantes de educación inicial

Experiential participatory music education strategy in the quality of training for early childhood students

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Resumen
El presente estudio evalúa la influencia de la estrategia participativa vivencial de educación musical en la calidad de la formación profesional de estudiantes de Educación Inicial de la Universidad Nacional Mayor de San Marcos. La investigación se enfoca en determinar la forma en que la estrategia participativa vivencial de educación musical contribuye a elevar los niveles de calidad de la formación profesional de los estudiantes de la referida carrera. El método de investigación fue cuasiexperimental. La población y muestra estuvo constituida por el total de alumnas matriculadas en tercer ciclo en la Universidad Alas Peruanas (grupo de control) y el total de alumnas matriculadas en un mismo ciclo de la Universidad Nacional Mayor de San Marcos (grupo de estudio). La prueba estadística aplicada fue Kolgomorov-Smirnov, ya que evalúa la dependencia de una variable cualitativa bimodal (estrategia A y B) con una variable cuantitativa discreta (notas de las alumnas). Se concluye que la aplicación de la estrategia participativa vivencial de
education musical eleva la calidad de la formación profesional y humana de las estudiantes de Educación Inicial de la Universidad Nacional Mayor de San Marcos.

**Palabras claves:** calidad de la formación profesional, estrategia participativa vivencial, formación integral personal y humana.

**Abstract**

The present study evaluates the influence of the experiential participatory strategy of music education on the quality of the professional training of the initial education students of the National University of San Marcos. It consists of determining the experiential participatory strategy of music education contributes to raising the quality levels of the professional education of the students of initial education. The research method was quasi-experimental. The population and sample was constituted by the total of students enrolled in the third cycle in the Alas Peruanas University, control group, and total of students enrolled in the same cycle of the National University of San Marcos are study group. The applied statistical test was Kolgomorov-Smirnov since it evaluates the dependence of a bimodal qualitative variable (Strategy A and B) with a discrete quantitative variable, students' grades. Conclusion. The application of experiential participatory strategy of music education elevates the quality of professional and human formation of the initial students of the National University of San Marcos.

**Keywords:** quality of professional training, experimental participatory strategy, personal and human integral training.

**Resumo**

O presente estudo avalia a influência da estratégia experiencial da educação musical participativa na qualidade da formação profissional de estudantes de Educação Inicial da Universidade Nacional de San Marcos. A pesquisa se concentra em determinar de que maneira a estratégia participativa da educação musical experimental contribui para elevar os níveis de qualidade da formação profissional dos estudantes da carreira mencionada. O método de pesquisa foi quase experimental. A população e a amostra consistiram no número total de alunos matriculados no terceiro ciclo da Universidade Alas Peruanas (grupo controle) e no número total de estudantes matriculados no mesmo ciclo da
Introduction

According to Ayala (2012), in Peru there is an urgent need to reform and update the education system. This affirmation of the aforementioned author, of course, involves everyone, mainly education professionals who try to raise the quality of education and optimize teacher training. For this reason, the improvement of teaching instruction at a professional and human level is essential for today's society.

The various pedagogical models tested in our country, such as the educational reform of the 1970s, the educational five-year period depending on the policies of the governments of the day and the National Education Project to 2021 [PEN] (The education we want for Peru ) present still partial approaches away from the current context. In this sense, we highlight the strategic objective five, about teacher training: "Higher quality education becomes a favorable factor for development and national competitiveness" (PEN, 2006). However, as Ayala (2012) points out, “although the last educational reform expressed in the national educational project is important for the educational system, this approach does not take into account the main actors that are the teachers and students” (p. 127).

In this sense, the present study demonstrates that the educational quality correlates with the integral training of teachers in both cognitive and training areas, since these are a unit: “That is, we see the human being as one and the once multidimensional, very diverse
as the human body and at the same time fully integrated and articulated in a unit” (Rincón, 2008, p.1).

However, based on the results found, we are convinced that the management of appropriate teaching-learning strategies for the area and educational level will have positive results, and that the internalization of the experiential participatory strategy in creative expression and musical appreciation will improve the professional quality of the teacher at the initial level. In addition, we agree with the statement of the representative of the national magisterium on the subject that is the subject of study, granted to the Word of the Teacher - Pedagogical and Cultural Magazine of the Magisterial Spill No. 55 - April 2011: “We need to review the curriculum of the Institutes and National and Private Universities through which education professionals are trained, we require quality service training” (Villena, 2011, p. 5).

The livelihood of the experiential participatory strategy variable becomes relevant in the thinking of the philosopher Henri Bergson, who explains “that an experience is not the idea of a thing but the experience” (Hirschberger, 1981, p. 380). In fact, while an idea is a representation, a concept or a product of the intellect, the experience is to be in the presence of the object, to live it and explore it without ever knowing it completely, although being able to develop only some questions from some prospects. In this regard, Bergson declares: "Every being is consciousness, but it is not Kantian consciousness understood intellectually, but consciousness as life, experience, impulse, duration, freedom, creation, creative energy" (Hirschberger, 1981, p. 380).

For Bergson, philosophy is being as life, and this life consists in a continuous flow without interruption; It is a vital movement and consciousness is equivalent to creation and freedom. For a real musical training we have to “make” music, for which, according to García (1891), we need to “have” an experience. This author, citing an example of Bergson, explains the following:

A person can thoroughly study the plane of Paris; study it very well, notice the different names of the streets one by one, study their addresses, then you can study the monuments in each street, you can study the plans of those monuments, you can review the series of photographs of the Louvre.
Museum, one by one ... you can get that way to have a regularly clear, very clear, very clear, detailed idea of Paris. This idea may be perfected more and more but it will always be a mere idea. On the other hand, twenty minutes of walking in Paris is an experience. Between those twenty minutes of walking on a street in Paris and the longest and most detailed collection of photographs, there is an abyss. One is a mere idea, a representation, a concept, a mental elaboration; while the other is to really put oneself in the presence of the object, that is: to live it, to have it, and really in life. (p. 2).

This interesting interpretation that García makes of the terms do and have allows us to clarify the proposal of the experiential participatory strategy, as well as deepen the presence. In accordance with this idea, we consider it important for experiential participation in music education to exercise freedom and assertive communication between participants to facilitate the relationship with others and direct experience with sounds through group intonation of children's and recreational songs, accompanied by musical instruments and / or other sound elements.

On freedom in education, Montero (1989) states the following:

Education will be truly and integrally human if one sees at all times who is educated as an intelligence capable of thinking for itself, an affectivity capable of feeling, a motor ability capable of manifesting. Therefore educating is also preparing for change. Preparing for the future will mean preparing for freedom by developing one's own freedom. The development of one's own freedom is a life-long task that affects those who educate and those who are educated. Also in a general way, education equals the development of personality and developing it is a task of human freedom. The same is achieved from both perspectives: freedom and education (p. 32).

Likewise, communication is essential for harmonious coexistence and interpersonal and intrapersonal realization. Therefore, Blázquez (2006), in Emmanuel Mounier - great contemporary writers, quotes Mounier verbatim: “Communication is perhaps the fundamental experience of the person. To be a man is to live with, among men ”(p. 154). With this, the aforementioned author explains to us the meaning of the Mounierian communication as an opening towards the other, in which an act of self-decency occurs; it
is the ability to discover oneself in others, because other people do not limit it, but instead make it grow.

For Mounier, the fundamental criteria of communication are to get out of himself (being is when he is with other beings), to understand (to be for all without ceasing to be), to assume (not only to suffer, but to suffer with pain, grief and joy), give (the person is generosity and gratuitousness) and be faithful (fidelity to the person himself).

Along the same lines, the prominent representative of the vitalist philosophy, Wilhelm Dilthey, in his work Psychology of the structure, coined the concept of understanding, according to which life, present in each moment, penetrates with its peculiar character and unique new outbreak of life, sealing it from itself with its unrepeatable individuality. The way I live now my content of representation depends on the state of consciousness of the one who receives them, and the way I will receive in myself and live my future also depends on my state of consciousness as a total basis from which I work. This state of consciousness, then, is the same ordinarily lived as a certain state of feeling or as a determined attitude of will (Hirschberger, 1981).

In the active school, from the beginning and to the upper levels, one of the essential principles has to do with the experience as a starting point to arrive at the theory: “Unconsciously live the musical phenomena, to become aware of them and thus arrive to conscious life” (Willems, 2002, p. 50).

Consequently, musical education as a vital and existential experience is supported by philosophy (as interpretation and assessment of reality), epistemology (objective relationship with nature: air and sound), sociology (feeling the presence and have a harmonious coexistence with others through the collective activities involved in music), pedagogy (approaches depending on the interests and needs of students) and neuroscience (a system, a structure of neuronal sensations linked to the brain). These, according to Picardo and Escobar (2002), are currently the fundamental basis of education. In our opinion, it is the foundation or the “education infrastructure”.

Theoretical foundation

The importance of musical education and art in general at the initial level is based on the need to discover and develop the artistic potentials (including musical ones) of children as part of their being; Therefore, music should not be understood only as a
recreation strategy, but also as an experience capable of producing meaningful experiences. In Marco's words (2017), “music is considered an anthropological universal, that is, a phenomenon that in one way or another occurs in all historical or current cultures” (p. 20). This has been proposed by the Ministry of Education (MINEDU) through the Directorate of Initial Education at the XIV National Seminar on Non-School Attention and Initial Education Programs:

Music was always closely related to the development of humanity, through its various manifestations. From the earliest times, the human being incorporated music into his existence: he accompanied him when he worshiped his gods, when he danced, to relieve his sorrows, in war, at work, in the healing of the sick. He also tried to reproduce, either with his own voice or making instruments to hit or with strings to press or rub with a bow, the sounds he heard. From that moment, music emerged as an indispensable element in his life ” (MINEDU, 2011, p 2).

Also, Valencia (2015), in The Legacy of Edgar Willems to music education today, quotes Willems about the relationship of music with the human being:

From the moment when I watched the music from the angle of education, I discovered that the source of life of the musical elements: sound, rhythm, melody harmony, improvisation, composition, were not in the knowledge of academic teaching, but in being human, in its multiple nature, dynamic, sensory, affective, mental and ideal (p. 48).

Another important aspect for music education at the initial level is the study conducted on the intrauterine development of the auditory organ, since it has been shown that the ear is one of the senses that is enhanced before the rest, as explained Cabrelles (2006):

The most important contribution of Dr. Tomatis was to discover that the fetus hears sounds in the mother's womb and also that the mother's voice functions as a "sonic umbilical cord" enhancing the baby's development and thus constituting a primary source of stimulation. In this way it established that said “sonic umbilical cord” was constituted by the set of sounds
perceived by the fetus during its stay in the mother’s womb and that these could come from the mother’s bodily noises (chew, burp, swallow, respiratory rhythm, heart rate, nervous system, etc.) and also your voice (screams, whispers, voice bells, etc.) (párr. 14).

Lozano y Lozano (2007) provides important research about the movements of the heart (systole and diastole), which can be used as didactics to understand the pulse. In this sense, the strong pulse is accent produced by systole that determines the rhythm of a musical structure and, consequently, the rhythm of the heart is two-stroke: systole and diastole. Therefore, the aforementioned authors affirm that the human being from his gestation is in “movement”. His first heartbeat, respiratory rate and pataditas in the womb show that rhythm is part of life:

Man is a being of vibration, therefore music composed of sound vibration directly affects the being. Music is life. The human being is the maximum expression of life. So you may use music as an end or as a means to harmonize all its dimensions, both physical and emotional (Lozano y Lozano, 2007, p. 04)

To this idea you can add the opinion of Pino (2011):

Music drags action and interaction through rhythm. The human being is the only being who can synchronize his movements through music, even being babies, which contributes to creating social links from the heart to the rhythm of the drums (p. 49).

Also one of the most important research that neuroscience has done has to do with the relationship of sound stimuli with the brain. This discipline has shown that music activates areas of the brain that are key to learning because it enhances and stimulates cognitive, affective and motor skills (Pino, 2011). In this regard, Despins (1996) states that “the musical rhythm stimulates the two cerebral hemispheres. The right hemisphere receives the musical stimulus and the left one interprets, controls the execution. Music will always be the best means to develop and adequately increase this brain phenomenon” (p. 04). This explains the obvious relationship between music and the brain, which favors all human beings in the process of development. Santiago (2009) analyzes it this way:

The possibility of stimulating the functioning of the hemispheres of the brain through musical activity demonstrates the need for artistic and musical
education with the same importance as the other academic disciplines. The teaching and learning of music in particular and of all the arts in general, promote an integral development of the mind, affective abilities and sensitivity of the student (p. 52).

Consequently, musical education in the training of early education teachers is essential because in it “the integration of the three fundamental learnings for the development of the human being: making, knowing and living together, they have in music a fundamental ally that goes together with the process of development and learning of children (Rivas, 2005, p. 4)

For our part, we are always motivating students in academic spaces or other events because we value the importance of music education in integral training. In this regard, we agree with the following sentence of Ayala (2017): “An initial teacher who loves her vocation, sings, dances and plays an instrument will be a competent teacher and a successful professional” (p. 29). This author also indicates that the thought is well received and internalized by each one of the teachers, who show a positive attitude towards their professional career, development and personal training.

Investigation methodology

The study focused on the area of education, specifically on the management and application of the participatory strategy of musical education in the quality of the professional and human training of future teachers, students of the specialty of Initial Education of the Professional Academic School of the Faculty of Education of the National University of San Marcos.

Kind of investigation

The design of the present study corresponds to the type of quasi-experimental research, because “one works with two groups that are almost equal or with groups supposedly equal but the researcher has not formed them but finds them already formed” (Mejía, 2017, p. 64).
In addition to this, as Hernández, Fernández and Baptista (2014) point out, “quasi-experimental designs have the same purpose as experimental studies: prove the existence of a causal relationship between two or more variables (p. 151).

In the present investigation we have found two groups already formed by students of the same specialty who were studying the same academic year with similar curricula. The control group was formed by the students of Initial Education (semesters I and II, 2017) of the Alas Peruanas University (UAP), while the study group was constituted by the students of Initial Education (semesters I and II, 2017) of the National University of San Marcos (UNMSM).

**Study population**

The population of an investigation is defined by Mejía (2017) as follows:

A population is the totality of subjects or elements that have common characteristics. In other words, a population is the totality of the members of the unit of analysis. The population concept is equivalent to the joint concept and this is delimited by the researcher according to the criteria that he considers relevant (…). It is very important that the researcher clearly defines the population because, as has been seen, the number of elements in the set depends on this definition. (p. 201).

Taking this observation into account, the population consisted of the total number of students enrolled in semesters I and II, 2017, in a single section of the same year of the specialty of Initial Education of the Faculty of Education of the National University of San Marcos and for the total number of students of the Faculty of Business Sciences and Education of the Alas Peruanas University.

The population studied had common characteristics: they were enrolled and regularly attended the courses of the respective academic year and the specialty. This situation greatly facilitated the task of collecting, interpreting and analyzing the data. In summary, the groups were formed as follows:

Control group: Semester 2017-I = 42; semester 2017-II = 14.
Study group: Semester 2017-I = 30; semester 2017-II = 32.
Total: Control group 56 students and study group 62 students.
Sample

To determine the sample, the Mejía (2017) recommendation was considered: “There is no defined criterion about the recommended size of the sample. The experience of the researcher, the resources available or the technical facilities presented to him, will be the determinants to determine the size of the sample. However, from the planning stage of the investigation, the sample size must be determined” (p. 206).

In short, we worked with the total number of students enrolled in the second year of the specialty of Initial Education.

Control group: Total semesters I and II = 56.
Study group: Total semesters I and II = 62.

Analysis unit

It was conformed by each one of the members of the group of students of the specialty of Initial Education with own and common characteristics that conform a whole. Specifically, the students of the second year, semesters I and II, year 2017, of the specialty of Initial Education of the Professional Academic School of Education of the Faculty of Education of the National University of San Marcos were determined as the unit of analysis, while as a study group one section was selected per semester during the development of the subjects Development of children's musical education (semester I) and Didactics for the development of children's musical education (semester II), the same groups as effect or result of study at the end of the development of the subject, expressed in the average of final grades from 0 to 20 of the 2017 academic year.

Research graphic design

Design Diagram

\[ \frac{O_1}{O_2} = \frac{X}{Z} \]

Tabla 1. Grupos de estudio y control (Ñaupas, Mejía, Novoa y Villagómez, 2011)
As:

E is the study group.

C is the control group.

Quasi-experimental design only with post-test.

Results

Presentation, analysis and interpretation of the data

In the planning of empirical work, the analysis of the results of two groups already formed has been considered more than an observation technique; therefore, its internal validity was small, since there was no control over the foreign variables. We have worked in the field of two real situations (a control group and a study group) in order to compare the final scores by the influence of handling different methodological strategies.

Tabla 2. Número de alumnas de los grupos de control y de estudio (actas de matrícula UAP y UNMSM, 2017)

<table>
<thead>
<tr>
<th>GRUPOS</th>
<th>SEMESTRE 2017-1</th>
<th>SEMESTRE 2017-2</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control - UAP</td>
<td>42</td>
<td>14</td>
<td>56</td>
</tr>
<tr>
<td>Estudio - UNMSM</td>
<td>30</td>
<td>32</td>
<td>62</td>
</tr>
</tbody>
</table>

Fuente: Elaboración propia

Tabla 3. Promedio de notas de los grupos de control y de estudio (actas de evaluación final UAP y UNMSM, 2017)
An attempt was made to demonstrate statistically whether or not the grades obtained by the students depended on the pedagogical method used. Therefore, the statistical test chosen for this case was Kolgomorov-Smirnov, since the dependence of a bimodal
qualitative variable (strategy A and B) with a discrete quantitative variable (student grades) was evaluated (Daniel, 2004).

The Kolgomorov-Smirnov statistical test is non-parametric, since the data does not follow the normal distribution. Data and study information were studied using the statistical package STATA12. For the Kolgomorov-Smirnov dependency test the hypotheses were:

- \( H_0 = \text{No dependency (} A = B \) 
- \( H_a = \text{There is dependence} \quad (A \neq B) \)

<table>
<thead>
<tr>
<th>Smaller group</th>
<th>D</th>
<th>P-value</th>
<th>Corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:</td>
<td>0.7535</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>1:</td>
<td>0.0000</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Combined K-S:</td>
<td>0.7535</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: ties exist in combined dataset;
There are 11 unique values out of 118 observations

Fuente: Elaboración propia

Using the statistical package STATA 12, the value of \( p = 0.000 \). Therefore, the null hypothesis is rejected and the alternating one is accepted. Finally, it is concluded that there is dependence between the strategy used and the students' grades.

**Analysis and discussion**

Assuming that all research is imperfect, in our case because of the complexity and breadth of the subject, we have put all our interest in one aspect: “participatory experiential strategy”, for which a series of integrated and organized actions “that students have been considered they must carry out to reach experiences related to life, their physical
development and non-veritatial aspects of culture, such as artistic, religious, civic and moral activities among others of formative value” (Peñaloza, 2005, p. 387).

While it is true that the subject is very important for education, Willems (2002), in its concern to unite the fundamental elements of music with those of human nature, reconsiders in the light of the new scientific mentality the concept of musical education defended by Plato and the Pythagoreans, according to which music - as a soul-maker - contributes to a better harmony of man with himself, with nature and with the cosmos.

The chosen methodology was adequate and relevant for qualitative-quantitative research, but it has limitations to the extent that the results of the study have been carried out based on the findings of the notes of a small control group and another study.

Even so, the data show that the proposed objectives have been met, that is, to determine if the participatory strategy of creative musical expression contributes to raising the quality levels of the professional and human training of the Initial Education students of the Academic School Professional of the Faculty of Education of the National University of San Marcos.

Likewise, we declare that the present study of “experiential participatory strategy” of creative expression and critical appreciation for music education at the initial level opens the doors for future research on other topics in the context of the problem of music in education.

**Conclusions**

The participatory music education experiential strategy is a factor that contributes to raising the quality levels in the professional training of Initial Education students of the Faculty of Education of the National University of San Marcos, according to the following dimensions:

In the professional dimension, the experiential education of the basic elements of music is essential for the career and quality professional training of early education teachers.

In the personal dimension, individual and group musical expressions develop their possibilities for personal fulfillment, security, self-confidence and their identity.
In the human dimension, music education creates people with initiative, respect for human dignity, self-determination and a feeling of solidarity with others while continuing to develop individuality.

Finally, it should be noted that the training of future pedagogues is the responsibility of the Ministry of Education, universities and pedagogical institutes, which have the task of training teachers in the specialty of initial education taking into account the effective exercise of teaching, development and transformation of the person and the generation of creative ideas, unpublished and original responses to the specific problems of the social context.

References


