CONCEPTUAL BASES FOR THE DESIGN OF A METHODOLOGY OF MUSICAL DIDACTICS

BASES CONCEPTUALES PARA EL DISEÑO DE UNA METODOLOGÍA DE DIDÁCTICA MUSICAL

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ABSTRACT

This article will attempt to demonstrate the fundamentals that have inspired a musical learning methodology aimed at any educational level. The consolidation of two existing methodologies is proposed: the first is the cooperative approach, and the second is project-based learning (PBL). Both have merged to enhance educational achievement. Finally, its application in real secondary education and teacher training degrees will be outlined.

KEY WORDS: music – teaching – cooperative learning – project learning – methodology – higher education.

RESUMEN

El objetivo principal de este artículo es diseñar una metodología adecuada para impartir música desde la escuela infantil hasta la enseñanza universitaria. Con este fin, se muestran los fundamentos teóricos que han inspirado el método. La base del mismo es la refundición de dos metodologías existentes: la cooperativa y la de proyectos. Ambas se han fusionado para su mejor aprovechamiento didáctico. Finalmente se ha esbozado su aplicación en un contexto real en dos ámbitos escolares como educación secundaria obligatoria y magisterio.

PALABRAS CLAVE: música – didáctica – aprendizaje cooperativo – aprendizaje por proyectos – metodología – enseñanza superior.

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BASES CONCEITUAIS PARA O DESENHO DE UMA METODOLOGIA DE DIDÁTICA MUSICAL

RESUME

O objetivo principal deste artigo é desenhar uma metodologia adequada para ensinar música da escola infantil até a universidade. Com este fim, mostramos os ensinamentos teóricos que inspiraram o método. A base do mesmo é a refundição de duas metodologias existentes: a cooperativa e a de projetos. Ambas se fusionaram para seu melhor aproveitamento didático. Finalmente foi desenhado sua aplicação em um contexto real em dois âmbitos escolares como educação segundaria obrigatória e magistério.

PALAVRAS CHAVE: música – didática – aprendizagem por projetos – metodologia – ensinamento superior.

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1. INTRODUCTION

There are important moments in people's lives, in which decisions have to be made that affect their future and that undoubtedly will direct their efforts towards concrete objectives and actions. Dedicating oneself to teaching is one of them because, undoubtedly, the commitment that occurs will affect your destiny. There is no doubt that it is an important decision. And more if it is the teaching of Music.

In any subject there has been a substantial update since the mid-twentieth century, but in this case, musical studies have taken an extraordinary turn, due, above all, to that being placed on the school curriculum from Early Childhood Education to compulsory secondary education, it was not possible to continue imparting the contents and the methodology, in the same way that it had been doing so far. We must think about building another system different from the one in force, especially in the first levels of learning. Therefore, the main challenge occurs in the Teacher Training Schools, where students must be prepared to consider other alternatives that, in addition to motivating the interest of their students and the acquisition of musical knowledge, collaborate in the integral development of people.

2. RELEVANT THEORETICAL CONTRIBUTIONS

Discovering that this new application of music theory is feasible, adequate and even necessary is fundamental. There had been a very important transformation of the

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concept of the teaching of music since the mid-twentieth century, but our country arrived with much delay and in unfavorable conditions for its experimentation. The cause of this transformation had been the confluence or relationship between pedagogues and composers who managed to shape new approaches and lay the foundations of an updated pedagogy, modern and in keeping with the times. The most important movements had left Europe and America, and various authors were engaged in this important transformation. Sometimes, isolated cases appeared, but, on the whole, it seemed that a current of energy connected them all, since with small variations they coincided in the fundamental. One of the important referents was Murray Schafer who since 1965 worked trying to restore musical unity, and recover the music and the incredible world of sounds for the younger generations.

The change that was taking place responded to the expansion of the function of music education at all educational levels. Until now it had been considered that Music was a language capable of developing sensitivity and of building structured forms of thought, in accordance with other subjects. These foundations, although accurate, however, are insufficient when they have to be extended to all stages of education.

Schafer (2008, p. 32) expanded this field of action by questioning: "Why teach music? What should be taught? How should it be taught? Who it should be taught?" He wrote several books in which he was answering these questions through active experiences motivated by the search for new innovative methodological solutions: "why" and "for what"? Here are two fundamental questions to start a change. In the words of Delalande (1995): "It seems to me that musicians, whether they do, or they listen, have in common those three great capabilities: to be sensitive to sounds, to find in them a meaning and to enjoy their organization" (p. 11).

In essence, the pedagogical innovation that was pursued consisted in fundamentally changing two principles: the concept and the methodology. In this way, it was intended to enhance:
- The research on sound, natural or artificial, which gave another musical dimension to the musical fact.
- To intensify creativity in teaching, both musical and in relation to other artistic forms, which allows focusing the subject with another more innovative, spontaneous and sensitive mood.
- Take advantage of the inclusion of other procedural forms to develop sound characteristics through materials that allow the introduction of new expressive and experimental sound aspects. That is, look for the sound in all the elements that can produce it to add it as a sensible experience to other similar ones.
- Examine the nature of the sounds of the environment and become aware of the problems of sound pollution and the "noises" that can be exploited for expressive purposes. Consequently, propose a fundamental understanding: an environmental sound regeneration is necessary.

However, Schafer (2008) still goes further in his research as it determines to end the existing dichotomies between school music and live music, old or museum music

and new music, cultured music and popular music... and establish a new approach to the sound phenomenon. In this way, he considers that sound is a fundamental element in his experimental proposal and he prefers it to what has traditionally been called Music, especially if one speaks of classical, symphonic or cultured music. In fact, he was the necessary person to push a transformation of the musical concept, so he devoted his energies to divulge his experiences in European universities, where he presented his revolutionary approaches.

Another of its main objectives consists in deepening in what it denominates Sound Landscape (*soundscape*) and that consists in discovering and using those sounds or noises that the environment produces and that form, all together, a universal composition. In doing so, he distinguishes the main sounds produced by a natural or artificial medium, the sound signals that are placed in the foreground, or the sound marks, whose unique sound makes him represent a specific place. From these premises he asked himself: "Could not music be taught as a discipline that simultaneously liberates creative energies and educates the mind for the perception and analysis of its own creations?" (Schafer, 2008, p. 22).

Two fundamental questions outlined: on one hand, to release creative energies and on the other hand, to educate, clearly distinguishing the functions of noise and sound to take advantage of both functionally and creatively.

However, something that is so evident sometimes, was misinterpreted or followed in an ineffective way because, due to the novelty of the approaches in the educational music scene, teachers had emerged that, due to their improvisation and lack of methodological systematization, made to wobble the building constructed so effectively and clearly by the mentioned authors.

It is impossible to limit all their thoughts and less in this small space, but we should consider and reflect seriously on their innovative proposals, looking for the ideal and personal way to carry them out. Of course, it is difficult, but we must adjust to the change of the times and follow the new discoveries that bring new light to the pedagogical task. This confirms the need for continuous renewal to which teachers of any field, discipline or level must adapt.

In addition, it would be convenient to remember that, in the case of university professors, training should be given at three levels: study, teaching and research and that we will never finish at a certain point on the path of formation since this is not an apparent vision of reality like the parallels that come together in the infinite.

3. INNOVATIVE RESOURCES IN TEACHING: THE METHOD

It is not possible to evoke our first sound memories. Sometimes we can go back to 3 years when something surprised us extraordinarily. But if we make an effort and place ourselves at an early age, we will understand that before the immaculate whiteness of a mind that begins to awaken, any experience can be, not only rewarding, but also exciting. And that emotion is what will configure and help build our personality.

However, it is necessary that the teaching of music does not become a random system that lacks the articulation of experiences that are coherent with each other. One thing is to facilitate the study of something as specific and abstract as musical language and another to allow arbitrariness and improvisation to perform exercises that are located outside the curriculum and that are a mere distraction for students.

There must, therefore, be a common thread that the teacher must always keep in mind so that teaching-learning can be productive. And to transmit the contents you need a method, open and flexible, that allows the exchange, cooperation and assimilation of knowledge, in group and individually. Because, in addition to the content that is taught, the nature of the subject allows acting on students forming cooperative groups so that many qualities that are feasible to develop: socialization, integration in a common work, self-esteem, flexibility... go to form part of the knowledge that is acquired and that is fundamental in a democratic society.

In the case of Music, listening, identifying and producing sounds, touching, appreciating qualities, favoring spatial sense, movement, direction... is fundamental. The sensitivity to sound, and the differentiation of its basic characteristics: height, duration, intensity and timbre, can enrich the identification and description of sounds. It is also important to emphasize the recognition and description of some elements and forms of organization and musical structuring, such as melody, texture, repetition, imitation and variations of a work. As you can see, there are many elements to work and this should be done in depth, but trying to make the students receive it as a rewarding and enriching experience.

How could the chosen theory be put into practice? It was necessary to consider then, what would be the most suitable method to develop the field of competencies that should be worked and the greatest benefit that could be obtained through Music. It is evident that the conceptual contents and the musical methodology should be closely unified. So, after comparing several options, the Cooperative Method by Projects was chosen, which was adapted with guarantees of success to the aspirations that were intended to be achieved.

As you can understand, making the decision to base ourselves on the Cooperative Method by Projects was done after a lot of research, doubts and reflections. It was also evident that the two separate elements (Cooperative Method and Method by Projects), were insufficient to achieve the proposed objectives, so that there was no doubt in merging them to obtain better educational results.

As stated by Botella and Adell (2016) there is no denomination of this method as such. In fact, Cooperative Learning and Project Learning are separated, although their recasting is possible. In this specific case, both methods have been combined to complement each other since, together, they can offer a greater number of educational possibilities, since they are not mutually exclusive.

What is the aim of combining the chosen method? On the one hand, the work in cooperative groups and, on the other, that the experience is developed as a previous

project to which each student will contribute his knowledge. In addition, any circumstance that occurs outside the classroom may be used by everyone when it is shared. In this way, not only will aspects that will be developed in class be worked on, but also, the student will have to make an effort to provide data of interest regarding the sound environment of his house, his street, his neighborhood, the nature that may exist around him, television, etc... that is, analyzing and incorporating into class those elements of the "soundscape" with which he lives. In both cases, the aim is to work in an open manner, encouraging curiosity, experimentation and the development of strategies that lead to the achievement of optimal results. Piaget (1964, cited in Siegel and Brainerd, 1978) comments:

> The main objective of education is to create men who are capable of doing new things, not simply repeating what other generations have done, men who are creative, inventive, discoverers. The second objective is to form minds that can be critical; that can verify, and not accept everything that is presented to them (...) We need students who are active, who learn early to investigate for themselves, partly through their own spontaneous activity, and partly through the material that we introduce you (p. 32).

In this way, if we combine the two methods, we can see a synergic effect based on fostering peer work, permanent negotiation, socialization of students, the need for an organization subject to objectives and resources. There should be curiosity, discovery, work planning, attention to diversity, as well as the possibility of integrating students with special educational needs. It remains to be added that the teacher, in this case, plays a guiding role in the metacognition process.

3.1. Most important characteristics of the cooperative method

Cooperative Learning involves the didactic use of small groups where students work together to maximize their own work and that of others. On the other hand, it implies the realization of an effort that influences many different results at the same time. Hence, its great capacity to generate divergent, creative and socializing responses that enrich the educational act.

Torrego and Negro (2012, p. 15) point out that cooperation: *"It is not only a methodological and potentially effective alternative to teaching, but a didactic structure with the capacity to articulate the procedures, attitudes and values of a democratic society that wants to recognize and respect human diversity".* In this situation, individuals try to obtain results that are beneficial to themselves and to all other members of the group.

Therefore, it is more than a group of people since it is necessary to integrate isolated individuals who must share physical spaces and generic objectives. In addition, its components must adopt functional roles, establish fruitful communication and join efforts to obtain optimal results. *"The implementation in schools of cooperative learning techniques are highly effective in improving (...) the intrinsic motivation, self-esteem and functioning of intellectual capacities, particularly*

increasing the critical capacities and the quality of the cognitive processing of information" (Ovejero, 1993, p. 387).

We could say that a fundamental antecedent in this type of learning is Piaget's genetic theory (1896-1980). He marks a before and after in education by introducing into the methodology the construction, or ordered sequence of intellectual structures that, in some way, regulate the functional or behavioral exchanges of people with their environment.

In the USA since the nineteenth century the cooperative learning began to spread, but it was not until the twentieth century with the philosopher John Dewey (1859-1952), when a methodological project of instruction was developed, which promoted the use of collaborative learning groups. Thus the conception of the individual subject was changed to become organ of society. This new approach requires that the individual be prepared with the purpose of contributing. Dewey revolutionizes education and introduces experience as part of it. The social occupies a relevant place, laying the foundations for the creation of an active school, in the same way that emphasizes the importance of cooperation against individualism, creativity against passivity and manual work before the subjects. Another important aspect is assigned to textbooks; to which he confers only the consultation function. These ideas of Dewey place him as the true creator of the so-called Active School, which would serve as a stimulus to the creation of the Dalton Plan, the Cousinet Method and his famous Project Method.

The history of the background of group work in schools reveals that one of the methods that were most often applied in pedagogical practice, throughout the twentieth century was the Collaborative Learning Method. This is logically the continuity of the conception of active learning that took root in the United States throughout this stage; but resized from the results of the classical experiments of social psychology about competitive, collaborative and cooperative group structures.

Howard Gardner (1943-2011) also constructs a theory, that of multiple intelligences, since according to him, intelligence is not a unitary entity, but is composed of a sum of different intelligences (eight in total) with own characteristics and evolution.

In the seventies, research and practice of cooperative methods became very important. Continues to evolve the theory and application of cooperative techniques in the school environment especially in the United States and Canada. The contributions of the "Collaborative Learning Method" have been taken up since the 90s in different teaching levels and stand out as supporters of their premises: E. Cohen and DM Evans in the USA. UU; T. Ryoko and Y. Kobayashi in Japan; A. Álvarez in Spain and R. Ferreiro Gravié in Cuba.

Other research carried out in the cooperative project learning of international character counts among its greatest experts, according to Torrego and Negro: "*First of all the brothers Roger. T and David W. Johnson (Johnson, Johnson and Holubec,*

1997; Johnson and Johnson, 2008), second Professor Spencer Kagan (Kagan, 2001) and finally to Professor Robert Slavin (Slavin, 1995)" (Torrego and Negro, 2012, p. 26). All of them agree on the basic conditions for learning by cooperating and building knowledge, so that learning can be built on solid and meaningful foundations. As for Spain, it is worth highlighting *"the pioneering works of Ovejero (1990) or Echeita and Martín (1990), Echeita (1995), and the most recent by Díaz Aguado (2003), David Durán (Durán and Vidal, 2004), Pere Pujolàs (2004; 2009) or Moruno, Sanchez and Zariquiey (2011)"* (Torrego and Negro, 2012, p. 26).

The current trends in cooperative learning are the following: The *Learning together* of DW Johnson and RT Johnson, The *Student Learning Team* of Slavin, The *Group Investigation* of Sharan and Sharan, The *Structural Approach* of Kagan and Kagan, The *Complex Instruction* of Cohen and The Perspective of the *Collaborative Approach*.

Cooperative learning can be understood as a block of techniques based on interactionist theoretical principles. That is, given that the human being and its constituent elements are developed throughout social interaction *"the solution to the intellectual, personality or motivational problems that are at the base of the school failure inevitably passes through a substantial improvement of the interaction of those who fail in school"* (Ovejero, 1993, p. 387).

Regarding the objectives of cooperative learning, several authors have defined its nature: Below, some examples are presented, as well as the conditions that are supposed to be basic in this type of learning.
- In the case of cooperative learning teams, the first objective is obvious: to progress everyone in learning; know, at the end of each didactic unit and at the end of a given academic year, more than they knew when they started it, each according to their abilities; It is not about everyone learning the same, but about everyone progressing as much as they can in their learning.
- And in the case of cooperative learning teams, the second objective is equally clear: *"to help each other, to cooperate, to progress in learning"* (Pujolàs, 2012, p. 92).

Currently, the five basic conditions that characterize and sustain cooperative learning can be considered as: Participant interdependence among participants, personal responsibility and individual performance, promoter interaction, social skills and periodic valuation (Echeita, 2012).

Other authors (Borrás and Gómez, 2010) show these five basic conditions as follows: positive interdependence, individual and group responsibility, stimulating interaction, learn some interpersonal practices and group evaluation practices.

As can be seen, although the authors are different, the proposals they raise are quite similar. In both cases, in addition to positive interdependence and positive or promoter interaction, the responsibility that each member of the group must assume for optimal results is highlighted. If there is no practice that goes back to other

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similar educational experiences, the task can be quite complex and will require a longer duration in the case of each activity. Therefore, it is necessary to produce an adaptation to the socio-group behavior in which they will learn by applying some interpersonal practices. In any case, the evaluation will be an important factor that will help students and teachers to assume partially at the beginning and together afterwards, the results that will be produced in the work carried out cooperatively.

As can be deduced from the above, improvisation is not possible, although some random factors may be important. It is necessary, then, to start from a "structure", that is, from a set of activities that seek a purpose and are socially organized. The activities and purpose are related to the implementation and support of positive interdependence. We must think about the heterogeneity of students in the classrooms and their total inclusion in learning. Each student learns in a different way.

As for the strategies that will help the implementation of the cooperative project, they will be based on those that maintain a form of interdependence among the students. For that reason, they will be destined to:
- Share common goals that are personally accepted and valued.
- Share necessary means and resources for a complex task.
- Structure the tasks of learning and evaluation in an interdependent manner. For this, (…) multiple structures, simple and complex, have been created, which allow (…) something like an "scaffolding", to guarantee positive interactions that facilitate learning and concentration in the task.
- Strengthen recognition, effort and group rewards.
- Assume symbols and signs of group identity: team names, logos, slogans, etc.
- Celebrate the success of each one as that of the collective, and of this as something personal (Echeita, 2012, p. 28).

The emotions and attitudes that are linked to this condition could be summarized as "we need each other and we can all contribute" (Echeita, 2012, p. 28). Teamwork can be considered as a content to be taught. According to Pujolàs compiled in Torrego and Negro, should also be highlighted as strategies: Group cohesion, and the progress of all in learning, self-regulation as a team, continuous self-assessment, conflict definition and employment of ICT as a record of cooperative learning.

Group dynamics have the following characteristics:

The work will be developed in small groups in which the students learn from each other, through interaction between equals. Team members should be aware that their performance depends on everyone's effort. The group goal of maximizing the learning of all motivates the members to make an effort and obtain results that exceed the individual capacity of each one of them. If one fails, all fail. Each member of the group assumes responsibility and makes the rest of the group responsible for achieving common objectives. They works together in order to produce overall results. There is reciprocal support, help, explanations, etc. are offered. Certain forms of interpersonal relationship are

used, such as the sharing of tasks and responsibilities, to coordinate the work and achieve the objectives (Johnson, Johnson, and Holubec, 1999, cited by Borrás and Gómez, 2010, pp. 9-11).

As can be deduced from these premises, cooperative learning is more than a methodological alternative since it is potentially effective in teaching and also creates a space with the capacity to articulate the attitudes and values of a democratic society in which human diversity is recognized and respected. The cooperative group analyzes the effectiveness with which it achieves the objectives and the joint work process to guarantee the continuous progress of learning (Johnson, Johnson and Holubec, 1994). The idiosyncrasy of cooperative work leads to the development of a series of basic competences only because of the use of this methodology:

– Linguistic communication: oral and written expression is required to convey the learning that is intended to be carried out. Use of adequate terminology and a basic vocabulary that must be handled fluently.
– Information processing: it is essential to make good use of the information sources as well as a good filtering of them. In this competition, it is essential to know and make proper use of ICT.
– Social and civic: the fact of working in a group implies a continuous interaction with its members. There is a continuous exchange of opinions, criteria and it is essential to reach agreements where all parties feel satisfied.
– Cultural and artistic: very often this type of work ends up in a product that requires an artistic skill that develops it in a creative and convenient way.
– Learning to learn: the autonomy of the groups is fundamental, being the teacher a companion or guide. This means that students are immersed in a process in which they are largely responsible for their learning.
– Autonomy and personal initiative: Although it seems a contradiction, the personal initiative and the drive of each one of the members of the group to achieve their progress is fundamental. It is about taking advantage of the potentialities of each one of the members of the same to make profitable efforts achieving optimal results.

The other basic skills are worked to a greater or lesser extent depending on the content of the learning in question.

Another aspect to emphasize in this methodological form is the evaluation. The group evaluation without neglecting to indicate that a study of the characteristics of the students should be based before establishing any evaluation criteria. Therefore, they should be considered at a general level:

– What prior knowledge is found at the starting point of the chosen topic, both theoretical and practical (motivation interests, etc...)
– How are the students with respect to their degree of cooperation in the evolutionary stage in which they are.
– Characteristics of the various personalities, introversion, extraversion, ability to lead groups, etc.
– What are the specific skills that can be adapted to their educational needs.

It is also very important in the group evaluation to monitor any significant incident with the support of ICTs that will give us a complete view of the advances, doubts, setbacks, interventions, leadership... that occur as the work progresses.

3.2. Most important characteristics of the project method

According to Katz, cited in Clark (2006) a project consists of a thorough investigation, carried out by the students, of a topic worthy of their time, attention and energy. This somewhat simplified definition should be expanded to better understand it. As Clark (2006) indicates, a project includes three phases:
  – Students together with their teacher choose and discuss a topic to explore.
  – The next step is for students to conduct direct investigations and then organize and arrange their findings.
  – The project culminates with a series of questions and answers as well as the sharing of their research.

In part, this division of sequences is due to John Dewey (1859-1952), who affirmed that education consists of the organization and reconstruction of experience. In this way, for him, the acquisition of knowledge is done as a personal rediscovery. Towards the end of the 19th century it was extended to the engineering branch and expanded throughout Europe and America. In 1879 C.M. Woodward founded the first *Manual Training School* in San Luis with clear Russian influence in which processes derived from instruction to construction.

John Dewey is interested in the method emphasizing creativity. But the new demand for expansion to the knowledge of a new psychology of education did not come until Rufus W. Stimson of the *Massachusetts Board of Education* did not realize his *Home Project Plan* adapted to agriculture in 1910.

However, the term project was not applied more generally until William H. Kilpatrick published his essay *The Project Method* in 1918. For him projects were defined by four phases: motivation, approach, execution and critical judgment. Dewey, Kilpatrick's teacher, criticized his student's project and the method fell into disuse. Still, with many vicissitudes, at the beginning of the 20th century the method became more relevant and was considered in countries such as Canada, Argentina, the United Kingdom, Germany, India and Australia. Curiously, the center of discussion was located in Russia where, since the 1920s, it was considered as an alternative to capitalist education. In the thirties, the methodology by projects was considered as the only truly Marxist and democratic means of teaching. It lasted for a decade until after the Second World War. During the 1960s, the Project Method expanded throughout Europe, updating the system that Kilpatrick and Dewey had previously devised and still remains active in Germany. Of course, these assessments were devoted to the general study of each subject and were not adapted specifically to the musical world.

Regarding its objectives and According to Clark (2006), when undertaking a project, in addition to its three phases, three components need to be considered: content, processes and products.

The work projects are a way to understand the meaning of schooling based on teaching for understanding, which implies that students participate in a research process, which makes sense for them (not because it is easy or they like it) and in which they use different study strategies. They can participate in the planning process of their own learning, and it helps them to be flexible, recognize the other and understand their own personal and cultural environment. This attitude favors the interpretation of reality, oriented towards the establishment of relationships between the lives of students and teachers and the knowledge that disciplines and other disciplinary knowledge are developing.

All this to favor the development of strategies of inquiry, interpretation and presentation of the process followed when studying a topic or problem, which due to its complexity favors the better knowledge of the students and the teachers of themselves and the world in which they live[3].

As for the strategies, the method is specified as:
- A set of attractive learning experiences that involve students in complex and real world projects through which they develop and apply skills and knowledge.
- A strategy that recognizes that meaningful learning leads students to an inherent process of learning, to a capacity to do relevant work and to a need to be taken seriously.
- A process in which the results of the study program can be easily identified, but in which the results of the students' learning process are not predetermined or completely predictable.
- This learning requires the management, by students, of many sources of information and disciplines that are necessary to solve problems or answer questions that are really relevant.
- The project method is a learning strategy that focuses on the central concepts and principles of a discipline, involves students in problem solving and other significant tasks, allows them to work autonomously to build their own learning and culminates in real results generated by themselves.
- Working with projects can change the relationships between teachers and students.
- It can also reduce competition among students and allow students to collaborate, rather than working against each other. In addition, projects can change the focus of learning, they can take it from the simple memorization of fact to the exploration of ideas[4].

In the process of student learning the following stages are given:

Develop your own questions about the research topic, make predictions about possible answers, devise ways to test your hypotheses, reach an agreement

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[3] Recovered on 4/15/17 http://www.eumed.net/rev/ced/26/arsv2.htm
[4] Recovered on 4/15/17 http://elmetodode.blogspot.com.es/2012/12/que-es-el-metodo-de-proyectos.html

with the teacher about various ways to present your findings, and take time to resolve your own problems by trial and error (Clark, A. 2006, p. 1).

The phases that Clark develops are considered the ideal within the learning stages of the students, but they do not always coincide with the reality that occurs in the classroom:

> The approach that inspires the work projects is linked to the perspective of globalized and relational knowledge (...) This modality of articulation of school knowledge is a way of organizing the teaching and learning activity that implies that said knowledge is not organized to its understanding in a rigid form, neither as a function of some pre-established disciplinary references or a homogenization of the students. The function of the project is to favor the creation of strategies for the organization of school knowledge in relation to: the processing of information and the relationship between the different contents around problems or hypotheses that facilitate the students' construction of their knowledge, the transformation of information from different disciplinary knowledge into own knowledge (Hernández and Ventura, 1998, p. 47).

In the same way as in cooperative learning, in this case it is also fundamental to discover what will be the structure that will guide the content of the work constituting logical and sequential successions and in any case act as a link that relates it to other subjects. In any discipline it is considered that the chosen topic can be traced in other communication media outside the school, thus expanding the vision of the students and their connection with the news media that can be found on television, in the cinema, or in any other another manifestation of the usual environment. The aim is to give meaning to meaningful learning, taking as a basic principle its articulation based on open foresight. Therefore, there is evidence of the need to give a high meaning to the functionality of what needs to be learned and also the value of memorization in order to reinforce what has been learned while other relationships in learning are envisioned.

The information needed to build the projects is not predetermined in advance, nor depends on the teacher or a textbook, but is based on what each student already knows about a topic and the information with which it can be related within and outside the school. On the contrary, it is necessary to approach the information presented in class in such a way that the students come to order it, value it and infer from it new senses, meanings or references. So, in this system, it is the class that chooses the topic, always paying attention to the teacher's proposals, since he must state the reasons that determine the choice of work to be carried out and provide the situations that should preside over it. Thus, the main thread of the activity will be specified, as well as the choice of materials with which elements such as structure, rhythm... etc. will be worked on. These materials will be sought and chosen among all, trying to achieve certain objectives with them. It will also be important to consider if the relationship between the subject and the materials will be suitable to get them to contribute something to each student and the project system. And,

finally, the result should be an original experience, based on a series of concepts that we want to develop in this case. In this regard, the teacher must be patient and insist on the restructuring, rethinking or modification of the elements of the project, since not all students have the same expressive, rhythmic or auditory ability to follow the most gifted musicians. Consequently, it is essential that all students participate and that the environment is impregnated with an emotion that makes participants want to communicate and make a common effort.

The procedures help students to incorporate new learning strategies and being included in the project construction process, they can be used in the specific case that is developed or on other occasions:

> For Nisbet and Shucksmith (1987) learning strategies are 'structuring of functions and cognitive, affective or psychomotor resources that the subject carries out in the processes of compliance with learning objectives'. How strategies operate is through the depiction of 'configurations functions and resources, generating action schemes for more effective and economic confrontation between global and specific learning situations for selective incorporation of new data and its organization' (Hernández and Ventura, 1998, pp. 17-18).

The idiosyncrasy of project work leads to the development of the same basic competences and in a similar way to what is explained in cooperative learning. Regarding the evaluation is justified by the analysis of the process followed throughout the entire sequence and the interrelations created in the learning. Therefore, decisions must be anticipated, relationships established and new issues inferred. "The Buck Institute for Education points out that two types of evaluation are important in the Project Method: Of the student learning. Of the project"[5].

In the first case, attention will have to be paid to the results as well as to the self-assessment carried out by the students.

In the second case and since the students are generally the best critics of the project, their opinion will be considered. Therefore, immediately after the project is completed, it is important to reflect on its successes or failures. The self-evaluation should act as one more element of the learning process and it will be very useful to write down what things worked well and what did not, in order to reorganize new strategies and actions for subsequent activities.

4. CONCLUSIONS AND PRACTICAL APPLICATION

In summary, both methodologies have elements in common that allow, as already indicated, their merger and joint implementation. The flexibility of the Project Method

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[5] Recovered on 10-16-16 http://es.slideshare.net/norman.trujillo/el-mtodo-de-proyectos-como-tcnica-didctica

combined with the peer assistance of the Cooperative Method are factors that act synergistically in recasting both. Below are some examples of activities carried out with the Cooperative Method by Projects, which has been carried out in different educational areas.

4.1. Application in the university field (Teaching)

According to the own experience and the investigation-action that has been done in a real context, the suitability of the method was contrasted, forming two groups of different students to those that the same contents were taught, on the one hand, through the mentioned methodology and on the other, through the Master Class. The experience was structured on students who already had some musical notions to which they passed a pretest to assess them. When the activity ended, a posttest was passed to estimate the level of learning acquired after the intervention. However, given that the test is an excessively objective quantifiable element, a perception survey had to be added to it so that values such as cooperation, project involvement and other more subjective elements had a place in its final assessment. The project was carried out with the use of hydrophones built by themselves. This process was highly educational and enhancing various cross-cutting skills and competences. The conclusion reached is that in both cases the results were optimal, although the Method by Projects was chosen by the students to include a series of elements that made it more stimulating, attractive and even more productive in the long term. This could be verified when the experience ended with a quantitative and qualitative evaluation regarding the proposal to experiment with the Cooperative Method by Projects. As a final note of the experience, the appropriate educational applications were given in the Infantile Education and in the Primary Education.

4.2. Applications in compulsory secondary education (CSE)

The application in CSE has taken place over several courses, making possible the implementation of different projects for each one of them. In these ages, the use of non-conventional instruments to make music is very striking and, therefore, activities have been developed in this line. Let's not forget that it can be an interesting end, stimulate listening to unusual sounds that arouse their attention and sensitize them to other unknown media.

One of these experiences consisted in interpreting *Balloonology* by Jeremi Telfort with balloons. This allowed to obtain sounds that had never been chosen as "music". The texture of the swollen surface can be rubbed, hit, made to squeak... generating a range of different sound textures that are very interesting as well as original.

In another experience, fans were used as musical instruments. In this case it was done on the work of Silvia León *Aire rítmico*. The texture of the sound was more powerful and spectacular than in the previous case, since hitting them, rubbing them, closing them softly or violently... created many more sound possibilities and the students thought that they were advancing in a territory unexplored by them but whose artistic result was beyond all doubt.

Other experimental proposals have been carried out with the use of very diverse materials such as: newspapers, brooms, balls, lighters... Which reveals the above. Cooperative by Projects work, carried out with non-conventional instrumentation, is a magnificent tool to work in the music area at any educational stage.

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