

DIVERSE CULTURAL THOUGHT IN THE EUROPEAN CONTEXT THROUGH MUSIC COLLABORATION NETWORKS

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ABSTRACT

Networking in current music education and models, projects and platforms are a means for recovering the importance of music education as a part of artistic education. Music education has value in itself, both in the international and European context, not only from an instrumental or interdisciplinary perspective, but also as a critical reflection on reality, forming an integral part of society which cannot be removed. Art, due to its non-instrumental nature, constitutes a source of living standards and allows the development of human sensibility, which contributes to the acquisition of skills related to perception, and which provides valuable tools for the cognitive process of science. Networking projects through music education contributes to diverse cultural thought, which places value on European cultural heterogeneity through music, also promoting cultural integration and diversity of tastes beyond prevailing and homogenising musical trends. This study has analysed a total of 27 musical networks (21 models or platforms and 6 collaboration projects) in the months of September to December 2020. It is highlighted that all of them had aspects of formal and non-formal education, focused on the context, learning style, domain and intentionality, concluding that their use and the results produced demonstrate an active resource for musical creative development.

Keywords: Networking; Musical learning; Virtual platforms; Creativity; Collaboration; Cultural diversity.

In the knowledge society, which is more dependent on digitisation each day, it is not enough to encourage only the acquisition of technical or intellectual knowledge. It is necessary to focus attention on other types of skills which promote the development of the individual creative talent of students who may generate unique values of a practical nature (Kim & Park, 2012). Learning requires the intellectual emotion which is produced when we put our practical skills into practice.

The majority of teachers agree that educational practice through online learning models is effective and achieve connection with students, allowing communities to be formed (Preece, 2001; Palloff & Pratt, 2007). In this context, creativity and technology must have a productive relationship which guarantees a pedagogical shift in the area of music, recovering its importance as a part of students' artistic education. Additionally, the research of issues such as their relationships between students should be encouraged: creativity as an essential element at the heart of any learning; and technology as a mediating element in the final creative activity (Burnard, 2007).

However, there are obstacles to overcome in school environments with regard to the inflexibility of teaching, based on standards that teachers find limiting for expressing their own creativity or perceiving that of their students. This may be a result of a lack of curricular flexibility and inconsistent hierarchical relationships in the educational context (Kim, 2005).

According to Kim & Park (2012), the time has come to base education on activities which promote the alignment of invention and innovation within the structured theoretical context, through objects and content which promote this synergy.

In the context of this changing society which tends to use complex systems with a holistic approach, disciplines are abandoning the concept of being self-contained, to promote interaction and communication, therefore transcending to a more open paradigm. Nanotechnology, the possibilities of communication over the internet, and new economic practices which include innovations require socio-technical profiles. For this reason, in the educational context, students and teachers must adapt to this new reality in which creativity must be integrated into rationalisation, moving from previous STEM (Science, Technology, Engineering and Mathematics) educational practices to STEAM education, incorporating the A for Arts. Engineering today is combined with humanities and social sciences; therefore, general education should allow interdisciplinary practices from the start of the student's schooling, from proponents of STEAM education's point of view (Boy, 2013).

Meanwhile, just like other disciplines, artistic education must transcend its interdisciplinary nature to recover its own intrinsic value. To this end, it must abandon practices which resort to artistic education from a purely instrumental viewpoint, in order to address it from a more positivist perspective and to achieve human fulfilment and excellence through this approach to art and culture (Martins, 2017). Artistic education,

and specifically music education, enables critical reflection on reality and is an integral part of society.

As we can see, creativity is an important element in innovation, also in scientific contexts. Therefore, STEAM methodologies are increasingly implemented in classrooms, with elements such as invention, discovery, curiosity, imagination and experimentation. All of these form part of a creative phenomenon whose digital facet leads to what is known as being transformed into something new (Black & Browning, 2011).

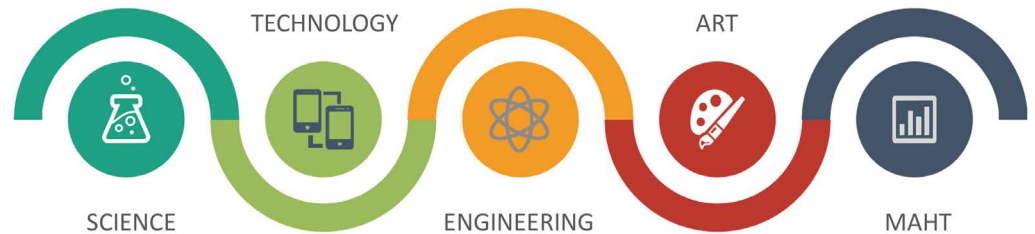


Figure 1. STEAM. Source: self-elaborated.

With regard to musical creativity, if the available technologies are implemented in the classroom in an effective and imaginative way, we will achieve a higher level of participation and involvement of students. They will see it as more authentic and closer to their personal musical experience, thus promoting broader and more culturally relevant creative results, while providing them tools to discover the value of music education in an internal context and from an approach which is not purely instrumental, but intrinsically valuable. This knowledge will enable critical reflection on reality, as music is an integral part of society which cannot be removed, and which offers the possibility of enjoying intellectual and artistic enrichment (Eisner, 1987).

The road map for arts education presented by UNESCO (2006, p. 5) indicates:

Without an emotional involvement, any action, idea or decision would be based purely on rational terms. Sound moral behavior, which constitutes the solid grounding of the citizen requires emotional participation.

Nevertheless, there are studies on the new generalised concept of creativity in the school curriculum being of little benefit to music teachers. For example, a dichotomous position is evidenced with regard to creativity in this area, with a differentiation between those who interpret it as encouragement for acquiring generic skills for life, and those who understand it as a path toward musical understanding itself (Folkestad, 2006). Additionally, in the classroom, teachers may feel unprepared without the necessary resources for this approach. It is therefore concluded that contextual analysis would be necessary to design the coordination of this aim in the official curriculum, and future consequences on the education of future teachers through emerging pedagogical systems.

Since 2002, there have been several revisions of Bloom's taxonomy, adapting it to new behaviours, actions and learning opportunities which

have emerged in the educational context thanks to the systematic advance of ICT (Krathwohl & Anderson, 2009). The nouns of Bloom's taxonomy were changed to actions or verbs in relation to each one of the categories; evaluation becoming creation; and changes being made in the sequence of the different categories. The final revision carried out by Andrew Churches (2009) was adapted based on the current digital reality. Each category in this revision (remember, apply, understand, analyse, evaluate and create) are in turn made up of different skills. It also includes collaboration and communication as fundamental elements worked on with the use of ICT, such as wikis, social networks and blogs, etc. (Pérez-Rodríguez & Ponce, 2012). Thus, the new Bloom's taxonomy establishes creativity as the most complex cognitive process, with a very positive effect on the educational context related with music (Churches, 2009).

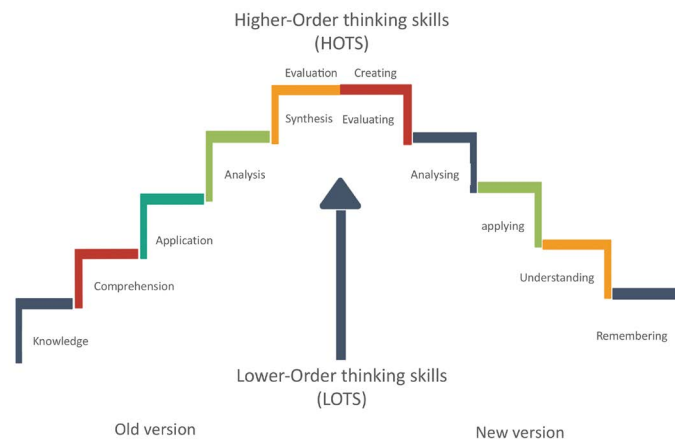


Figure 2. Bloom's Taxonomy. Source: self-elaborated based on Krathwohl & Anderson (2009).

Creativity in the context of the digital society comes from people who wish to recognise beauty within the universe of technology. An example can be found in Steve Jobs' biography, when he says:

I always thought of myself as a humanities person as a kid, but I liked electronics. Then I read something that one of my heroes, Edwin Land of Polaroid, said about the importance of people who could stand at the intersection of humanities and sciences, and I decided that's what I wanted to do. (Isaacson, 2011, p. XIX)

Although historically they seem to have been at odds, opposed and dichotomous, creativity (the result of creative thought) and technology (the result of technical and rational thought) should be branches of knowledge working in cooperation. It is desirable and recommended for both fields of knowledge to be interconnected, in order to obtain long-term results from the collaboration of interdisciplinary groups made up of agents from technical and social contexts, as well as creative contexts.

In the opinion of experts (Torrance, 2002; Runco, 2003; Davies et al., 2013), through creative processes and more explicit forms of collaboration, a more creative atmosphere is achieved in students' learning, which is less focused on the teacher. For this change to occur,

teachers need to be aware of the different characteristics of creative learning and to be able to understand its development with their students.

Educational practices should be critically reviewed, accepting the challenge of transforming ourselves and our firm beliefs, to create a democratic space for the arts in which there is no distinction between those capable of producing art, artistic geniuses, and those who are mere spectators, with a clear distribution in both political and participative terms (Martins, 2018).

In this regard, collaborative musical composition between students is of great value in the field of music. Students feel very attracted by this aspect, and its practice has a very significant effect (MacDonald et al., 2006). The process has similarities with the constructivist theories we have discussed and creative theories which overcome reductionist categories of musical behaviour.

Parallel to this, curriculums must allow the integration of more flexible forms of work which include models of innovation in the teaching-learning process, which may be transferred through all areas and fields of knowledge of the curriculum. This without forgetting that the first of these requirements is the continuous training of teachers, facilitating their professional development and in-depth intellectual training, and applying it directly to the educational practice – in this case, in the music classroom. Ultimately, having knowledge of the operation of information and communication technology in the digitisation process will help to enhance the creative characteristics of the languages which are used in composition; that is, visual, sound, written and audiovisual languages.

EDUCATIONAL TECHNOLOGY IN THE FIELD OF MUSIC

The way how technology has transformed the field of communication has brought new forms of organisation which affect all areas of our society. In this regard, audiovisual arts do not operate only as useful tools, but instead reveal themselves to be a language, a new form of experimentation. This reality extends to the way of listening to and purchasing music, as well as practicing, learning, composing, performing, recording and even teaching it (Vargas Gil et al., 2015; Draper, 2007).

Some studies (Burnard, 2007; Savage, 2007; Wise et al., 2011) show that teachers use technology to enhance learning in the music classroom, although on many occasions this is limited due to their use of traditional forms of performance and composition. There have also been certain curricular limitations in this changing scenario, led by technology which has not been considered by educational frameworks. Some music education teachers are reluctant to integrate ICT in the classroom because they do not feel comfortable with this way of working (Gorder, 2008). For effective adaptation it also is necessary for the teacher to have a series of skills in the use of ICT and the ability to assist students in acquiring knowledge from in-depth understanding of information analysis. In addition to this, in the field of music, teachers must have the knowledge and technological resources necessary to obtain the expected learning

results, as well as it being essential to properly manage the dynamics in the classroom and the physical learning environment of the students.

Additionally, the way we specify approaching the arts “within the educational environment” is important. If we do so with the same requirements as for other subjects, we will be making an error, as we will transfer the curricular limitations we discussed in the previous paragraph, due to the gap between the content of the curriculum and the related areas of knowledge and representations of the world that they may entail. This would lead to limiting factors for students in both their way of thinking and being different (Martins, 2017).

Access to a large proportion of current digital technology is free through internet downloads or apps (digital applications). Our devices such as computers, tablets and mobiles have licences for the use of software already included (Wise et al., 2011), which facilitates and benefits music education and improves access to music, including for children who have some kind of disability. Nevertheless, we must take into account that it is important to enhance students to move beyond the default settings provided by the available music software. This is due to the fact they can promote and direct the composing, the teaching and the learning processes into related specific modes, which embed and naturalise specific cultural and historical ways of thinking about, making and, indeed, listening to music (Martins, 2017).

This situation is a reality in our lives as teachers, and forms part of the social and cultural change we are experiencing (Savage, 2007). This metamorphosis has led to the incorporation of technology in official curriculums in all subjects, including in music.

In the music classroom, technology even has a transformative potential, in the nature of the area having access to digital instruments, composition tools, devices and applications which allow students to be trained for arriving at the music centre and even managing its structure, making music education truly effective and close to the student (Wise et al., 2011).

In addition to the revolutionary “Cubase” software, which allows the student to compose music in real time with professional quality, today there are also GarageBand by Apple, FL Studio, Pro-Tools, Ableton Live and Logic Pro X. Other examples of sampling, sequencing and editing software are Compose World, Ejay, and Propellerhead’s Reason, etc. While high technology resources in the music classroom may not be the solution to all problems, they do improve student achievement in acquiring skills, as has been demonstrated in various research works (Rogers, 1997).



Figure 3. Example of musical software available for education. Source: self-elaborated.

This large quantity of available resources does not mean that teachers use the most appropriate or that the range of difficulty in their use is as extensive as the range itself. This whole technological universe related with the area of music has direct effects on teachers, who end up becoming technicians, and who are also required to have a rapid level of adaptation. All of this may be a threat to teachers who are not technophiles and who feel that their role is left out of a context in a technological powerful environment. Even so, we cannot forget that although the reality of the classroom must be adapted to the outside world, the intellectual commitment of teachers is necessary, and therefore if educational frameworks are modified, they must keep this aspect in mind and assess the possibility of teachers learning from each other. For a change to truly occur, the shift can only come from teachers themselves and not from what may constitute external curricular threats.

COLLABORATION IN EDUCATION

Stereotypes and dogmas are obstacles to change and transformation. Human meaning is broader, more urgent and productive than the limited vision which simplifies things to being all or nothing, remaining in the underlying reality, in the superficial appearance which does not have a metaphysical meaning in itself (Dewey, 1958). Educational virtues are related with openness to new experiences, flexibility and opting for different approaches to use ideas for building and rebuilding in cooperation.

In order to achieve an effective transformation in the educational context, it is necessary for teachers to be sufficiently motivated to undertake actions which promote the paradigm shift which allows learning in new ways. In this sense, methodologies which promote collaboration between teachers, and whose exchanges allow new knowledge and skills to be tested for integration in everyday work, are able to create pedagogical models based on action, discussion and reflection (Hanna, 2007).

COLLABORATION AND COLLABORATIVE LEARNING THROUGH NETWORKING

There are various studies on digitally connected collaborative learning and the phenomenon of global connectivity which allows formal and non-formal learning (McLoughlin & Lee, 2007; Greenhow & Robelia, 2009; Baños et al., 2014).

Collaboration has always existed and the possibilities available with technology are even greater (Van Diggelen et al., 2009). This digital revolution therefore allows achievements to be even more creative (Isaacson, 2014). Learning and reflection through collaboration tools generate spaces for sharing ideas which promote critical thinking, and from which meaningful personal results can be obtained. Internet protocols are also the result of collaborative work. Today, everyone can create and share content, overcoming spatial and generational obstacles, as occurs on social networks. Additionally, collaboration can

be established between people, and also between people and machines (Isaacson, 2014).

These networks awaken a sense of belonging to a community, which also entails collaboration and even peer-learning through opportunities for discussion and exchange of ideas (Ala-Mutka, 2010; Vescio et al., 2008). The relationships created between members of a community generate social interdependence due to the emotions awakened by interactions over time, and which form an integral part of learning (Kreijns et al., 2007; Holmes, 2012; Abedin et al., 2011). These initially arise due to common interests, but can lead to learning aimed at practice and collaboration.

Therefore, collaboration is an inherent phenomenon in human nature and its evolution (Wilson, 2012), and despite us living in times “fluid” personal relationships dominated by fragility in the links we establish, as Bauman (2012) indicates: “people tend to weave their images of the world with the threads of their experiences” (p. 117).

There are various studies on the possibilities offered by collaborative learning in the teaching-learning process which support and encourage the development of social skills or individual abilities and contributions to cooperation. Additionally, they promote: a) more in-depth lifelong learning, contributing to cooperation and generating greater possibilities of successful completion (Altun, 2017); b) development of the skill of learning to learn; and c) the effective use of learning strategies, producing positive results which can be implemented easily and combined with other active educational methods (Güvenç & Açıkgöz, 2007).

However, collaborative learning does not occur solely by bringing together a group of students so that they will naturally and immediately collaborate, as they supposedly should, to acquire knowledge (that is, to learn). According to the CLCUM (Cooperative Learning Center at the University of Minnesota), based on studies carried out by Johnson et al. (2006), five basic elements or essential pillars are required to contribute to educational effectiveness to lead to collaborative learning (Benders, 2011):

1. Positive interdependence, where each participant depends on and complements the rest of the group (Altun, 2017), helping to solve problems and generate intellectual discussions between them, thereby contributing to the work of everyone (Johnson & Johnson, 2008).
2. Individual responsibility.
3. Interpersonal social skills/Development of social skills.
4. Interaction generated face to face.
5. Group evaluation/treatment / group self-reflection, jointly discussing the productivity of the project and success in achieving the objectives set (Johnson et al., 2006).



Figure 4. Essential pillars for collaborative learning to occur. Source: self-elaborated based on Krathwohl & Anderson (2009).

MUSICAL NETWORKING MODELS, PROJECTS AND PLATFORMS

Researchers on music education have demonstrated that non-formal musical learning promotes the acquisition of knowledge in the field. All musical practices have aspects of formal and non-formal education and interact in some way; therefore, they must not be polar opposites, as in both cases learning is focused on the context, learning style, domain and intentionality (Green, 2017).

In scientific literature we find some research work which demonstrates how musical networking projects take advantage of the opportunities offered by the internet and technology in the field of education to undertake digital initiatives related with training in instrumental performance by students (Koopam, 2007).

The sample of our study is made up of an intentional selection of 27 online musical collaboration platforms and models analysed from September to December 2020, based on suitability criteria related with the typology of spaces (public or private), the priority objectives pursued, and the type of recipients (teachers, professional musicians or students).

Through music education, the projects analysed in this work contribute to generating diverse cultural thought, placing value on cultural heterogeneity in the European context. Through music, the promotion of values such as cultural integration and diversity of tastes beyond prevailing and homogenising trends is demonstrated.

One of these projects is HARMOS, from Fundación Albéniz. It is a Virtual School financed by the PROFIT programme, with collaboration from the State Secretariat for Telecommunications. From this idea, the *MagisterMusicae.com* initiative arose (which led to the *ClassicalPlanet.com* virtual platform), defined as a meeting place for talented young international performers, where a catalogue of audio and video files of masterclasses could be accessed, taught by major figures in global musical performance, to students of the Queen Sofía College of Music at its former and new headquarters. This project has been extended to institutions of Latin American countries thanks to the collaboration of AECID (Spanish Agency for International Development Cooperation) under the name of the Atlantis project.

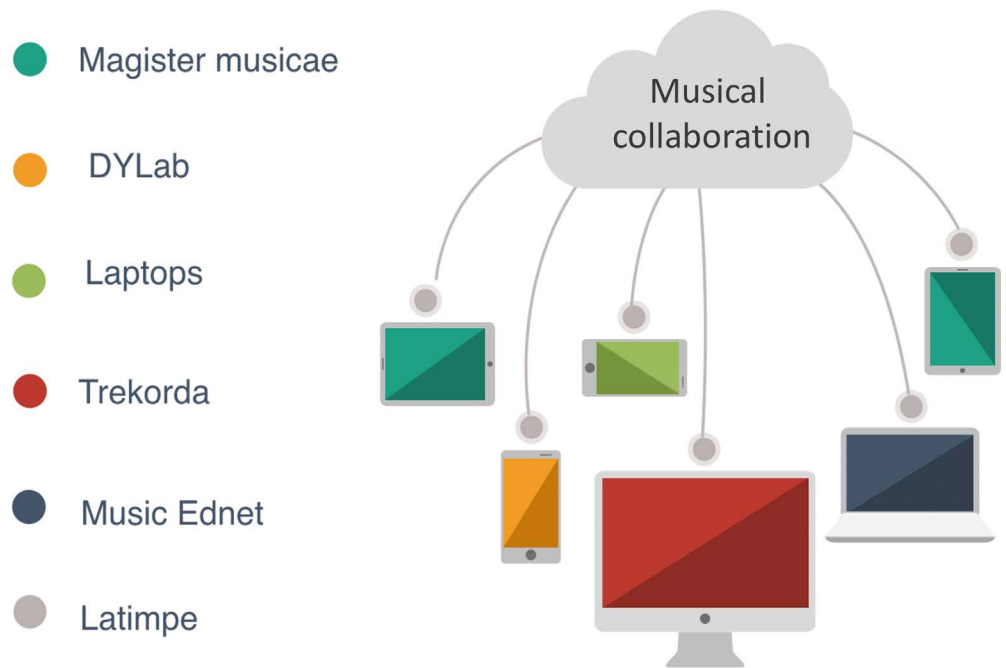


Figure 5. Examples of musical collaboration. Source: self-elaborated.

The *Queen Sofía College of Music* has its own YouTube channel with 10,300 subscribers, according to data from the 15th of January 2021, where we can find videos of lectures, concerts by students, masterclasses, etc.: 1) Atlantis Project (<https://bit.ly/2kHZnzl>) and 2) Classicalplanet (<http://www.classicalplanet.com/euroclassical>).

DIYLab is a European project which has been carried out at education centres of all levels in Czech Republic, Finland and Spain, and which aims to develop the same forms of learning based on the DIY (do it yourself) philosophy. It places the student at the centre of their training experience, making them the creator of their learning materials. The processes have been recorded, creating collaborative audio-visual productions between students of different nationalities, developing their digital skills, their creativity, collaboration and self-regulation, and have been shared on the platform established for this purpose: *DIYLabHub* (<https://hub.diylab.eu>). The results of the project were as follows:

Promoting a proactive attitude among teachers and students

Introducing the transdisciplinary vision of knowledge

Demonstrating students' capacity for informing themselves through storytelling

Demonstrating command of digital and visual media

Demonstrating the capacity for collaboration between teachers, students and/or researchers

Demonstrating the improvement of skills and capabilities with digital, reflexive, analytical, critical and research abilities

Promoting knowledge and learning from an easy to use, open access digital platform (DIYLabHub)

Promoting a transdisciplinary, intercultural and intergenerational approach

Transforming the teaching and learning practices of students of primary education. (Domingo-Coscollola et al., 2018, p. 504)

There are a wide range of networking platforms that have used music as a thematic axis, approached by this study:

The *CMES* (Collaborative Music Education Series). A musical collaborative platform on which students enrich their learning through experiences shared by members of Faculties of Education for future music teachers. It contains audiovisual resources and activities, as well as discussion forums which are intended for exchanging ideas and work. It has an area with project proposals. The videos available are interactive and offer access to appointments, links to online lectures, resources and other sources (<http://www.musicedseries.org>).

DIYLab is a platform with the objectives of artistic creation and training of teachers and students. It has open access and is based on the “Do It Yourself” philosophy, therefore allowing the creation of collaborative audiovisual productions at an international level, helping to develop digital, self-regulation, collaboration and creative skill.

iMerc (International Music Education Research). Virtual platform for community collaboration for interdisciplinary research on music and social science. Its main objective is the creation of teaching collaboration networks as well as educational research in formal, informal, non-formal and combined environments. The impact of this website has led to curricular innovations in the United Kingdom and a greater investment in music education due to the findings of the body of research created by the collaboration between participants, benefiting the educational community, and in particular students of all ages, including those with special educational needs from around the world. Members participate in one of the largest postgraduate programmes in music education at a global level (<https://imerc.org>).

Trekorda. Virtual platform for collaboration which connects musicians with advanced training to individually or collectively promote themselves through digital tools. Samples are available through SoundCloud. To become a member, several level tests validated by professional technical and musical experts must be passed.

Music Ednet. Collaborative musical platform between music teachers. It has a wide variety of content and educational resources

to share, and forums for discussing music education. It offers teachers links to the most important providers of musical software for education. It publishes a monthly digital newsletter, and schedules activities and events related with music. It offers the possibility of remote assistance and online training.

LATIMPE (Learning and Teaching in Music Performance Education). Collaborative platform for learning and teaching of music education, which carries out projects aimed at researching and enhancing musical teaching. Its objectives are artistic development, collaboration and an interdisciplinary approach in its initiatives. It is a place for sharing experiences of musical projects which may provide very interesting information so that teachers are encouraged to participate, or so that students do so. Its initiatives have a collaborative, interdisciplinary nature, and seek for students to play a leadership role, encouraging students to be responsible in their learning process, involving the use of digital tools, with a holistic approach.

SPLICE. Virtual platform for collaboration on the cloud for musicians, which allows collaboration with musicians from around the world through digital files which can be worked on, returning to any version, as they are all stored (if desired). Backup copies of compositions are also kept on the free, secure, unlimited storage system. It has a large catalogue of previously produced projects as a way of discovering the community.

SOUNDOFF. Musical collaboration platform which offers access to collaboration and file storage tools for musicians and musical producers.

RIGSHARE. Online collaboration platform which offers musicians a space to share their equipment, tools and instruments, as well as their musical experiences.

MUZOOKA. Free online platform for musicians and technical teams, with the objective of artists being able to manage their own assets and collaborate in the administration of their resources through this platform as a central element, as well as presenting reports on their activity for performance rights organisations at an international level.

Music Clout. Virtual collaboration platform which offers opportunities for promotion and great opportunities for collaboration on current musical projects. Additionally, it has a large directory of contacts from the music industry, a database, videos, workshops, etc. It operates as a social network on which each member creates their profile and presents the projects they are working on, as well as the

compositions they wish to share as an introduction and invitation for collaboration with others.

MUSIC GATEWAY. Collaboration platform for independent music professionals who work for television, cinema, advertising and videogames. It facilitates the work of musicians in the music industry and creative collaborative work at a global level. It offers the opportunity of exploration of possible training courses in the world of music, job offers in the music industry and general business industry related with music.

KOMPOZ. A platform presented with the slogan: “collaborate with musicians around the world as if they were around the corner”. It is an online collaborative platform which allows musicians to create new works of music and contact artists and creative individuals with musical talent around the world. It is considered a global community of passionate artists. With the suggestion of “uploading” creations to the platform, other musicians are invited to participate in the collaborative composition. It becomes a musical workspace on the cloud. It also offers the possibility of creating private collaborations. The works can subsequently be sold on the SoundBlend platform, which operates as the first virtual music shop through the crowdsourcing sponsorship mechanism.

Jam2Jam. Virtual platform for collaboration which offers software for playing music and mixing videos online. It is a fun learning tool which promotes social interaction, and which is the basis for research on the impact of learning networks. It is considered an exciting “instrument” which can be used in both formal and informal learning environments. It is a new resource for use in classrooms which offers new experiences without the limitations posed by not having prior extensive musical training. It works to develop skills such as exploration and improvisation, producing stochastic results.

Musical Futures. Digital platform for collaboration with the objective of helping music teachers by offering training courses, availability of resources and a community of teachers for exchanging methodologies. All of this leads to the professional development of teachers, encompassing strategies for applying to teaching practice. One of the greatest achievements pursued is to increase the enthusiasm and involvement of students in their own learning through training and support for teachers and education centres and institutions.

Music Teacher National Association. Associations which have a virtual platform on which music teachers collaborate to discuss common values and take on educational commitments, as well as promoting study and musical creation.

INTAC (International Art Collaboration). Digital platform as an educational framework for connection between students for undertaking collaborative work online and dynamic cooperative projects in an artistic context under the supervision of teachers. It has an open approach based on the philosophy of exchange of ideas and materials as a team, as if it was a social network. The role of the teacher is important as a guide and instructor, and it encourages them to become leaders in building new relationships with the aim of promoting that exchange of visions and realities. It is a virtual learning experience which promotes a contemporary approach to education, removed from traditional individualist artistic practices.

iMuze. Collaborative virtual platform with the slogan: “an initiative of artists, by artists and for artists”. Its objective is for musicians to musically express thoughts and ideas and to offer enriched learning to undertake new creations based on common objectives which are collaborated on. It aims for music to overcome any obstacle.

Blend. Collaborative music platform with the objective of collaboration in the creation process and the completion of musical works. Ideas and creations are shared in interactive format to invite others to participate in the phenomenon of creative collaboration, as if connecting with a musical ecosystem.

MSCN (Music for Screen Collaboration Network). Musical collaboration platform with the objective of creating and promoting music education projects and to link them with the music industry. Members interact with sound designers, composers and cinematographers. It is established as a collaboration network. Projects are presented to allow interaction with the products generated by other institutions, to encourage accessible results which can be brought to the screen.


Models, projects and platforms	Public or private	Priority objectives	Audience	Link
	Mixed	Formative: musical methodology	Teachers	http://www.musicseries.org/
	Public	Artistic creation / Training	Teachers and Students	https://hub.diylab.eu/category/music/
	Private	Formative / research	Teachers	https://imerc.org/
	Private	Artistic creation	Musicians	https://www.trekorda.com
	Public	Formative	Teachers	http://www.musicednet.com/
	Public	Artistic creation / Training	Students	https://latimpe.eu/
	Public	Artistic creation	Students	https://splice.com/
	Public	Musical promotion	Musicians	https://soundoffinc.github.io/
	Public	Artistic creation	Musicians	https://rigshare.com/
	Public	Artistic creation	Musicians	https://www.muzooka.com/
	Public	Artistic creation	Musicians	https://twitter.com/musicclout
	Public	Artistic creation	Musicians	https://www.musicgateway.com/
	Public	Artistic creation	Musicians	https://www.kompoz.com/music/
	Public	Formative	Students	http://jam2jam.com/
	Public	Formative	Teachers	https://www.musicalfutures.org/
	Private	Artistic creation	Musicians	https://www.mtna.org/
	Public	Artistic creation	Musicians	http://intacnet.ca/
	Private	Formative / Artistic creation	Students	https://www.imuze.com/
	Private	Artistic creation	Musicians	https://blend.io/
	Public	Artistic creation	Musicians	http://www.yatidram.com/mscn

Table 1. Models, projects and platforms. Source: self-elaborated.

DISCUSSION AND CONCLUSIONS

In the context of a neoliberal society, one of the approaches to the concept of creativity as a process through which valuable original ideas are generated (Robinson & Aronica, 2016) may be interpreted as an attempt to economise the art by giving the term “value” an economic nuance. Disagreement on this point is necessary for creativity (Torrance, 2002). Culture, humanities, arts and creativity are elements which promote the development of humanity for its own understanding and for its contribution to the participative democratic society (Kalin, 2018). If we are not able to have a neutral view of these issues, we may not detect the neoliberal instrumentalisation of artistic education (Martins, 2000).

The harmonisation of creativity with technology leads to a new order and establishes new paradigms. However, this link may obscure a policy

of standardisation of educational systems with a clear positive trend toward programmed creativity (Assis, 2019). Thus, study plans in artistic education may result in a disciplinary technology for social regulation (Martins, 2017).

It is true that students are great internet users and manage technology with ease (Moyle, 2010; Crook, 2012), and that like teachers, they feel motivated to work with this technology. The possibilities offered by modern culture predispose the student to receive information and retain it to build knowledge in an active process (Woo & Reeves, 2007). It also predisposes meaningful learning when social and emotional dimensions have a strong presence; therefore, if in addition to being motivated, they feel enthusiastic, we will have ended the diagnosis of students being disconnected in the classroom (Lucas & Goleman, 2012) capable of undertaking tasks autonomously to solve problems which they will encounter in real life (Pink, 2011).

If we manage to maintain this synergy, we will achieve good learning experiences fostering the development of different skills and abilities, as well as allowing collaboration, management, analysis, reflection, production of content, personal development and problem solving; all higher order thinking skills (HOTs), according to Bloom's Taxonomy (Solomon & Schrum, 2007).

This opportunity is enriched with the possibility of interaction and collaboration by teachers and students through networking models (Collins & Halverson, 2018), which will be successful as they maintain the level of commitment, interest and participation of their members while being flexible, receptive to contributions, and in a continuous process of learning and reinvention. However, it is important to promote the training of teachers and encourage their continuous professional development (Holmes, 2013), because it is essential to have their intellectual commitment, thereby avoiding them fearing to lose their role as experts in the classroom and gathering experience in the development and implementation of networking activities.

Teachers participating in collaborative networks has a positive effect on the performance of students due to the inferences that can be obtained on the collective effectiveness of teachers (Moolenaar et al., 2012), as the knowledge originates from the transformation of a learning experience (Kolb, 2014). For this reason, they must carry out more actions which help to promote "greater proactivity of teachers in the process of developing or maintaining learning communities" (Said Hung et al., 2019, p. 481). Social interaction forms part of learning and occurs in environments with open content in which experiences are shared and students learn from others (Attwell, 2007), and is valid for both students and teachers, although the former need to feel accompanied (the cognitive presence) of others (Shea & Bidjerano, 2009). Remote social communications generate environments for active collaboration, which allow enriched creation networks and encourage teachers and students who will be able to interact with audiovisual material and receive reflections on their actions

(Hazari et al., 2009; Fewkes & McCabe, 2012), resulting in data from various sources as an architecture for participation.

Networking also generates social interdependence established thanks to the immediacy and intimacy (Gunawardena & Zittle, 1997) and positive affective relationships which arise from interactions (Kreijns et al., 2007; Abedin et al., 2011; Holmes, 2012).

All these learning environments have also been extended to teaching and practicing music in formal and informal contexts (Green, 2017). Collaborative music is subject to educational research and this phenomenon has been facilitated by the possibilities that technology offers for online connection (Koopman, 2007). Collaboration also forms part of the construction of many musical discourses, and of course collective listening at concerts of any style. In the digitally connected world, there are multiple different types of possibilities for collaboration derived from current social and cultural phenomena which demonstrate the intensity of the change (Rolshoven, 2012). It is therefore evidenced that by taking advantage of the benefits of music education, collaboration and the use of digital tools which respond to the needs of the digital natives (Prensky, 2001), new ways of interacting and creating are developed through networking models as new instruments and pedagogical methods in contemporary music teaching-learning processes.

Artistic education must transcend its interdisciplinary nature to recover its own value, like other disciplines. To do so, it must set aside practices which use it from a merely instrumental approach, instead allowing a perspective closer to positivism in order to achieve human fulfilment and excellence, thanks to this approach to art and culture (Martins, 2017). Artistic education, and specifically music education, allows critical reflection on reality and forms an integral part of society. Art, due to its non-instrumental nature, constitutes a source of living standards and allows the development of the human sensibility and how we create ourselves (Eisner, 2002). It also contributes to the acquisition of skills related with perception, and which provides valuable tools for the cognitive process of science.

As we have seen throughout the text, the existence of multiple musical networking projects and platforms demonstrate a non-formal musical training which encourages the acquisition of knowledge on the area, recovering the importance of musical training as part of music education. All musical practices have aspects of formal and non-formal education and interact in some way; therefore, they must not be polar opposites as in both cases learning is focused on the context, learning style, domain and intentionality (Green, 2017).

In the collaboration processes analysed in the work, the value of music education is also shown in an internal and European context and from an approach which is not instrumental or interdisciplinary, in which music is used not only with a specific purpose, but instead as its own reflection and as knowledge which allows critical reflection on reality, as music forms an integral part of society which cannot be removed.

Due to all of this, the teacher – and specifically the music education teacher – must respond to this requirement of the outline and learn and understand the use of collaboration networks and platforms. These learning networks and platforms will continue the ongoing search for knowledge. As Francisco García García (2006) would say, “Knowledge is the intelligence of the cosmos, the content, the fruit, the promise and the future, the link between generations. The network had and has the possibility of being filled with content of the “iconosphere”, of knowing the future” (p. 28).

Curiously, this phrase used at the beginning of digital communication is more applicable today if we consider the world’s current situation. This article was written in the context of the coronavirus (COVID-19) pandemic, where the transformation from the analogue to the digital world has undergone an unprecedented acceleration in all social, educational, political and economic aspects. The fields of education, and in particular musical training, have had to transform and modify content, methods and evaluation processes, etc. Ultimately, it is another way of understanding, once again, that music education is inexorably moving toward collaboration processes, in our case through networking, with virtual models, projects and platforms which promote musical creative development.

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