

**Approaching innovation in music teacher education for Secondary Education: The case of Spain**

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Although teaching would seem to be exclusively coupled to each country's economic and technological development, it can also be associated with social transformation, provided that it promotes social innovation: in other words, new ways of conceiving society. This leads us to ask how music teachers are being trained in terms of innovation, a concept that plays a decisive role in our current knowledge-based society and economy. This article seeks to obtain an overview of the goals and structures associated with the concept of innovation as featured in the Master's Degree for secondary-school music teaching in Spain. We analyzed the Spanish legislation and the Master's Degree programs of 26 Spanish universities. Our results evidence a lack of consensus regarding which objectives should be pursued and which innovative practices should be prioritized. We nevertheless note a tendency to view innovation merely as an exercise designed to help teachers and students adapt to existing school reality by proposing activities and projects in the area of digital technology, along with examples of "good practices". We conclude that educational innovation needs to make fundamental progress, not only in terms of its presuppositions, but also in its actions, which should lead to the development of critical, creative attitudes that can foster true social transformation.

**Keywords:** pre-service music teacher training; Master's Degree programs; Secondary Education; teaching innovation; social transformation

## **1. Introduction**

Questioning the basis for the growth of today's modern societies implies placing the focus on knowledge creation in all areas of life (Stehr, 2007). In the knowledge-based society as a post-capitalist society (Drucker, 1993), human beings and their training take on a leading role from the moment when work organizations start to ascribe less value to knowledge contained in books or internet repositories, and find considerably greater value in the type of knowledge that is about to be created (Avis, 2020). Innovation in the area of teaching thereby acquires a much greater relevance, since a country's cultural and economic production capacity will depend on professionals who understand the evolution, transformation, and exchange of knowledge as a continuous task in their professional lives (Vaillant & Marcelo, 2021). This change in the way knowledge is conceived represents a challenge to the field of music teacher education in terms of having to reconsider its educational objectives, curricular contents, and teaching methodologies (Aróstegui, 2017). This challenge became evident during the pandemic-related health crisis, which obliged teachers and institutions to find new forms of pedagogical interrelationships, and new ways of constructing knowledge.

In the field of pre-service music teacher education, it is necessary to analyze potential relationships between knowledge and innovation. It is important to study whether they truly imply a fundamentally different conception of music education, leading to new ways of understanding the music classroom and society, or whether they simply tend to maintain the current situation. The knowledge-based society usually compels music teachers to understand their actions as part of the productive engine of nations, oriented toward generating relevant human capital. However, from a critical perspective, we can understand the teaching body as a group of professionals capable of guaranteeing a fairer society or, better said, capable of combatting the inequalities that

emerge from it (Fernández-Jiménez & Jorquera, 2017; Hargreaves, 2003; Sahlberg, 2010). Such a critical perspective would imply finding new ways of contributing to the national economy, along with other, more inclusive and more democratic forms of social relationships (Avis, 2005). This context thus requires a music teacher who not only asks questions about the efficacy of their teaching, but also about the truth contained in its core, as part of a search for new worlds (and journeys) of learning for themselves and their students (Varkoy, 2010).

In view of the role that social innovation could play in today's knowledge-based society, our study's objective is to analyze the conceptions of innovation reflected in 26 university Master's Degree programs for pre-service trainees specializing in secondary-school music education in Spain, along with the governing legal framework. Basing ourselves on the data collected by the PROFMUS<sup>1</sup> project, we analyzed the themes and topics addressed in the compulsory university subject "Teaching innovation and introduction to educational research" (henceforth abbreviated as IDIIE) and the conceptions on which those proposals are based, with the further goal of sparking a series of reflections on the potential role of innovation for Spain and for other countries. As a process that enables us to approach the concept of teaching innovation from another angle, this document analysis has allowed us to take a global look at pre-service music teacher training within the framework of the PROFMUS project, while serving as a complement to other research approaches.

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## **2. Innovation in teaching**

### ***2.1. Innovation in (music) education: forms, goals, and alternatives***

Many studies have analyzed the purpose of education in general and music education in particular, often noting a predominant tendency to replicate traditions, practices, and models that maintain the status quo in these areas (Ballantyne, 2006; Jorquera, 2010). Stated more concretely, those studies observe a general tendency to develop academic musical skills and knowledge rather than applying perspectives that reconstruct the discipline of music from the ground up and foster critical understanding of action in real-life contexts (Bylica & Schmidt, 2021; Fernández-Jiménez & Jorquera, 2017; Jorquera, 2010). Critical perspectives that link education with its socio-cultural environment are thus generally neglected (Liston & Zeichner, 1997). Certain authors nevertheless propose a more critical vision of this situation, highlighting that the aim of education should be social transformation (López-Peláez, 2020; Rinholm & Varkøy, 2020; Woodford, 2005), with innovation as one of the possible means of promoting it. In the words of Kuhn (2013), innovation can be understood as “other ways of tackling problems”: in our case, it could be regarded as the best way to confront the challenge of socio-educational transformation. Innovation could be upheld by a fundamentally new perspective that would call old models into question, break down barriers, and lead to the emergence of new forms of action while addressing a series of cutting-edge issues in the area of pre-service music teacher training, as well as in music education in general.

Although the term of innovation had its roots in the industrial sector and originally reflected an orientation toward technological development (Echeverría, 2008), specific teaching innovation concepts tend to be more associated with the restatement or creation of new modes of action for teachers: new tools, and, consequently, new ways of creating and codifying knowledge (Aróstegui, 2020). For its

part, the concept of social innovation has been frequently addressed over the past half-century (Marques et al., 2018), referring to inclusive processes within those institutions that seek to transform society in different orders of magnitude. Such transformations can be structural, contextual, or organizational; they can be associated with ways of generating or modifying procedures and products with the goal of either challenging or maintaining tradition and/or the status quo. In education and in music teacher training, this would imply the need to establish and maintain a steadfast link between music education and societal change: such change can be either radical or conservative, either structural or micro-political, but in all cases, it views education as a political, democratic act. If we are indeed attempting to transcend neoliberalism (and not only in its social, cultural, and artistic dimensions), these approaches would either obviate or integrate new, emerging ways of acting or relating to the economy and to society at large (Avis, 2005). Social innovation gives priority to the inclusion of individuals who have been marginalized or left behind by traditional education policies (Marques et al., 2018), seeking to meet the needs of the entire school community.

Imagining this dynamic in the area of music teacher training would imply: 1) a reinforcement of students' freedom and autonomy, along with their creative and critical capacity; and 2) the creation of multiple connections with interdisciplinary reality, which is the same kind of reality with which our students will have to deal in their professional future (Serrano et al., 2020). In other words, if secondary-school music teachers do not actively and consciously endeavor to challenge traditional musical practice while searching for new possibilities, they will merely tend to repeat previous experiences (Bourdieu & Passeron, 1996). It is also common to fall back on the "idolatry of method" (Regelski, 2002), which regards method as a magical recipe that simply needs to be applied, and the act of teaching as an undertaking isolated from other

actions in society. As opposed to such “idolatry of method”, music teacher training projects oriented toward innovation in teaching should pursue the ultimate goal of transforming society while confronting current and future challenges: for example, those which emanate from growing interculturalism (Timonen, 2021), and those that open up the perspective of trying out new approaches and building new knowledge. In the face of unstable and uncertain socio-cultural and technological conditions, the discipline of music teacher training should view the profession as a practice that is alert to those challenges, seeking to transform education based on the cognizance, respect for, and positive valuation of the rich social and cultural diversity that already exists. Once university faculty members have understood that we are training teachers who will become local and global actors and initiators of social change, we are opting for an orientation toward critical innovation (Didriksson & Herrera, 2004) and viewing future music teachers as a collective capable of promoting radical change while encouraging their students to move in that same direction (Boni et al., 2018).

In the area of general pedagogy, this would imply that we connect with the most profound needs of our students and our communities, seeking to acknowledge their full value as human beings while encouraging their intrinsic potential (Zemelman, 2002). In the more specific area of music education, “innovation in teaching should principally focus on the person: each human being has their own unique, individual socio-musical baggage, a product of their most intimate aesthetic experiences” (Ángel-Alvarado, 2018, p. 719). Thus, ultimately, we should not conceive of “one sole music” as a subject, but of as many “musics” as there are individual human life experiences (Kertz-Welzel, 2018). There is not one way of teaching and learning music, but many different ones. This would have implications for music teacher training as the construction of an alertness to musical context. Faced with a collective of students whose roots are

culturally diverse, we need to decide which types of music we are going to feature in the classroom, what value we will ascribe to them, in what order we will teach them (Hess, 2015), and which means and tools we intend to use for these purposes. Our endeavor to create a counter-hegemonistic curriculum allows us to draw on a broader choice of repertoires and teaching methods in order to conform a truly diverse musical curriculum (Aróstegui, 2011). From the perspective of social innovation, this would imply new activities, new “ways of doing and acting” within a wider context.

Finally, digital technology is a potential tool for innovation that could foster deep reflection and radical change, depending on how it is applied. Digital resources can indeed serve as tools for innovation, i.e., as catalysts for new didactics and inclusive methodologies. Once digital technology is included in teacher training as a potential counterweight to “analog” musical tradition, it can serve as a source or interface to help us imagine other ways of training future music teachers as well as other ways for students to learn, and for motivating them to learn (Bernabé & Cremades, 2017). The challenge lies in using technology as a means to include and integrate all the musics of the world, a “creative space that opens up the possibility for interaction among several disciplines and fields of knowledge” (Cobo, 2016, p. 42). However, the mere fact of using technology in music education does not necessarily imply innovation; the outcome will depend on the chosen methodological application, giving priority to aspects such as creativity or collaborative networked learning (Serrano, 2017).

## ***2.2. Initial pre-service teacher training and the legal framework***

The analysis of initial pre-service teacher training at the university level is an important line of research in general education and, specifically, in music education: it can allow and encourage responsible agents and institutions to improve and optimize the educational process (Domínguez & Prieto, 2019). Regarding current Master’s Degree



programs for secondary education in Spain in the specialty of music, we now briefly need to go into further detail regarding the research that has been conducted about them and the educational legislative framework in which they are embedded.

In terms of legislation, the Declaration of Bologna (1999) gave rise to the construction of the European Higher Education Area (EHEA), which requires a progressive harmonization of all university systems in the European Union. This has led to significant changes in European university norms, and, concomitantly, in the range of corresponding diplomas on offer at these universities. In the wake of a slow process that has not been without its difficulties, educational laws have sought to modernize and improve the pre-service training on offer at Spanish universities. The current Master's Degree in secondary-school teaching (Ministerio de Educación y Ciencia, 2007) was created in 2007, leaving it up to each university to conform to official requirements and to define its program according to its capacity for autonomy and innovation. This freedom is allotted in relation to the distribution, title, and number of courses foreseen within a compulsory framework that establishes 3 modules (generic, musical and practicum) with 7 subjects, one of which is the “IDIIE” subject (*Teaching innovation and introduction to education research*).

Very little research has been carried out on existing programs for a Master's degree in music teaching in Spain from a general and comparative perspective. To date, two articles have been published on the subject: the one by López & Bermell (2016) does not refer to the area of innovation, while the one by Serrano et al., (2020) addresses the subject, albeit briefly. Thus, it becomes necessary to carry out a study that focuses on program innovation and its repercussions on the kind of social transformation that will equip us to face the challenges of the 21st century.

### **3. Method**

This study follows a qualitative paradigm: by observing the data (Maykut & Morehouse, 2002), we have attempted to grasp and interpret the different university Master's degree program proposals within their respective contexts. The research method applied herein is document analysis, in which "the focus is on both the content and the structure of a series of examples" (Flick, 2015, p. 142). We have thus analyzed and synthesized the data gathered from those documents in order to elaborate a new representation of its content (Fox, 2005), which may "facilitate the intellectual growth of individuals by making a contribution to the satisfaction of their cognitive needs" (Peña & Pirela, 2007, p. 78) while providing a theoretical approach to the concept of innovation within the documents.

We conducted our document analysis of Spanish university Master's Degree programs by visiting the respective universities' websites, gathering data directly from the websites as well as going further in depth by consulting the course description of each music module, considering that these data are a common planning framework applied by all universities in the attempt to achieve maximum transparency regarding their training processes (Gil-Asensio, 2008). In order to find similarities and differences among the documents, we applied comparative analysis (Fideli, 1998). The usefulness of such a comparative focus is recognized in the area of educational teacher training (Popkewitz & Pereyra, 1994) as a means to gain understanding of the subjacent dynamics and presuppositions that underlie university programs.

In our case, we have analyzed in depth the entire written syllabus of each course associated with the area of teaching innovation in the IDIIE subject along with the course titles, examining and coding data regarding structure, objectives, contents, competencies, and assessment methods. This analysis was accompanied by a further examination of the Spanish legal framework. Data were collected and analyzed to

answer the following research questions: 1) How do IDIIE course syllabi conceive innovation in teaching? 2) What is the purpose of training future music teachers in innovative teaching?

### **3.1. Sample**

We analyzed all Spanish university programs conducive to a Master's Degree in Teaching with a specialty in music, focusing our attention on courses offered in the IDIIE section, pertaining to the study module specifically devoted to music education. It is worth noting that the Spanish legal framework allows for the IDIIE subject to contain courses with different distributions, names/titles and teaching loads. We thus examined a total of 26 Master's Degree programs proposed by 26 Spanish universities either in the 2018/2019 or in the 2019/2020 academic year. In the following table we present their regional distribution according to Autonomous Communities.

Table 1. Distribution of programs by Autonomous Community.

<b>Autonomous Community</b>	<b>University</b>	<b>No. of programs</b>
Andalusia	Universities of Granada, Seville, Malaga, and Cordoba	4
Aragon	University of Saragossa	1
Asturias	University of Oviedo	1
Castile and Leon	Universities of Valladolid, and Salamanca, and Pontifical University of Salamanca	3
Catalonia	University of Barcelona	1
Valencian Community	Universities of Alicante, Valencia, James I University, Catholic University of Valencia, and International University of Valencia.	5
Estremadura	University of Estremadura	1
Galicia	Universities of La Coruna and Santiago de Compostela.	2
Balearic Islands	University of the Balearic Islands	1
Canary Islands	Universities of La Laguna (Tenerife) and Las Palmas (Gran Canaria)	2
Madrid	Autonomous University of Madrid, Complutense University of Madrid, and European University of Madrid	3
Murcia	University of Murcia, and Catholic University of Murcia	2

### ***3.2. Tools and methods of data collection***

*Initial phase:* We first established a complete list of all 68 public and private universities operating on the Spanish territory. We created an Excel database divided into Autonomous Communities, including all university headquarters and branches, along with the webpage on which each university features information regarding the diplomas it offers, specifying whether or not it features a Master's Degree in Teaching with a specialty in music. We then selected the centers that offer that diploma.

*Data collection:* Our selection yielded a total of 26 Spanish universities that offer a Masters in Teaching with a specialty in music. Firstly, we submitted the programs of all those universities to general document analysis in order to ascertain the objectives, organization, and foreseen competencies of the courses; secondly, we analyzed the IDIIE courses that deal with the subject of innovation in teaching, with the aim of gaining in-depth knowledge of their training proposals. For the above, we used a qualitative categorization matrix, following the model elaborated, validated, and applied by the researchers involved in the ALFA II-0448-A project (Aróstegui, 2010), which sought to evaluate music teacher training programs in Latin America and Europe. In 2018, a team of experts once more revised that categorization and further updated it according to the characteristics of diplomas within the new framework of the European Higher Education Area (EHEA) and the Spanish Government Order No. ECI/3858/2007 of 27 December 2007 (Ministerio de Educación y Ciencia, 2007) which establishes the conditions for the validation of official university degrees in Spain.

For all Master's Degrees on offer we collected general data regarding the programs, data referring to the degree's academic duration and structure, courses of the general education module, and specific music module courses (detailing goals, content,

evaluation, methodology, and bibliography, along with the course description, semester, teaching load, and typology). Based on the relationships among all the previously collected data, we elaborated an overview of each program's structure and subdivisions.

*Analysis phase:* To conduct this study (which forms part of a larger research project), we analyzed all general data related to innovation: specifically, the results of our in-depth analysis of courses in the IDIIE subject (see above). To yield the results detailed below, we studied the course descriptions individually in the case of each university, as well as comparatively. Although all the universities featured in our study have a website referring to the Master's Degree in teaching and specifically mentioning the music module courses associated with it, not all universities present the data in the same level of detail, and not all course syllabi are elaborated with the same degree of coherence and thoroughness.

## **4. Results**

### ***4.1. Legislative and general analysis of the Master's Degree programs***

A detailed temporal analysis of Spanish educational legislation in relation to innovation shows that the legislation prior to the current one barely included any reference to the concept of innovation; moreover, the Certificate of Pedagogical Aptitude required for teaching in Secondary Education did not feature this concept. It was not until 2007 that Spanish educational legislation established the Master's Degree in secondary-school teaching as a didactic specialization degree (Ministerio de Educación y Ciencia, 2007).

That legislative framework lists 16 competencies that all Master's Degree students should acquire. In Objective 8, it foresees (among other aspects) "participation in evaluation, research, and innovation of teaching and learning processes" (Ministerio de Educación y Ciencia, 2007, p. 3). Within the minimum amount of 60 European

Credit Transfer System (ECTS) credits required by the above-mentioned laws regarding Master's Degree programs, three modules are established: the general module, the specific module, and the practicum, which altogether take up 52 credits, leaving the remaining 8 credits up to each university's discretion. Twelve ECTS credits are allotted to the general module, which contains no mention of innovation in its specifications. The Practicum module takes up a minimum of 16 ECTS credits, which include the Practicum specialization and the Master's thesis. Although innovative proposals are not among the competencies this Practicum module is presumed to develop, it does mention student participation in proposals for improving the different areas of pedagogical activity from the vantage point of reflection based on practice. On the other hand, the specific (musical) module takes up a minimum of 24 ECTS credits (up to a maximum of 32): within this module, the specific IDIIE subject can be planned in one or several courses, allotting freedom in terms of teaching load, time distribution, and course titles. IDIIE includes the acquisition of competencies in knowing and applying innovative teaching proposals within the student's area of specialization, such as designing and developing innovation projects. Nevertheless, all Master's Degree study programs are required to foresee two further subjects within the specific music module (apart from IDIIE) and to distribute the ECTS credits among all three; thus, in practice, the amount of time devoted to innovation can turn out to be quite limited. We thus conclude that although state legislation showed signs of evolving by featuring innovation more frequently and by partially acknowledging its significance by including it in one university course, the practical importance given to innovation largely depends on each university's concrete application of the guidelines.

In our analysis of the development of competencies and the main objectives of each university's Master's Degree program, we note that five universities highlight

innovation as an essential focal point: those universities are Saragossa, Alicante, Valencia, La Laguna, and the Autonomous University of Madrid. Moreover, since the Spanish legislation combines innovation and research under the umbrella of one sole subject, namely IDIIE, most universities (n=19) follow suit and foresee a slot for innovation and research in one sole course – with notable exceptions where specific courses for innovation can be found: Valladolid, Salamanca, Pontifical University of Salamanca, La Coruna, and the Catholic University of Murcia. It is important to note that two universities (University of Alicante and Complutense University of Madrid) make no mention whatsoever of innovation in the IDIIE subject. In terms of recognition via the attribution of ECTS credits, the importance of the IDIIE subject is reflected in an allotment of 6 ECTS credits in the programs of most universities (n=16). Exceptionally, the Catholic University of Murcia doubles the corresponding amount of credits, whereas the University of the Balearic Islands reduces them to 2. The average ECTS allocation for the IDIIE subject across all curricula is 4.8 ECTS. Sixteen universities feature the IDIIE subject in the second semester, whereas five of them have it in the first semester; three of them propose it as a yearlong subject (two semesters). This tendency to feature the IDIIE subject in the final semester would either stem from the idea of concretely applying pedagogical knowledge gained from the preceding general module, or from the intention of articulating specific didactic knowledge related to the music module.

#### ***4.2. Conceptions of innovation in Spanish Master's Degree programs***

Firstly, from a normative perspective, the Spanish Master's Degree programs in secondary music education display two tendencies: the association of innovation with the musical field, and its inclusion within the generic educational context. In most cases (n=17), the concept of innovation is associated with specific content pertaining to the music specialty. However, some course descriptions opt to view innovation within a

general educational perspective. This can be due to two reasons: either due to a decision to combine a set of several disciplines more or less related with one another, as in Granada and Malaga with “Sports, Music, and Arts”; or due to the decision adopted by other universities to simply view innovation from a general educational perspective, as is the case of Extremadura, Oviedo, and the Pontifical University of Salamanca. Such proposals would encourage the students to take up the challenge of cross-disciplinarity (in the first case), or would encourage them to find their own link between general educational innovation and specifically musical innovation (in the second case). These orientations multiply the ways of conceiving musical education and the possibilities of relating it with other educational areas. The James I and La Coruna universities combine these two types of orientation in one by proposing a deductive approach to innovation: starting with general educational innovation and leading to innovation in music education. This approach is a complex, integral way of viewing teaching innovation, and it has the potential to extend the boundaries of what innovation can represent for university students.

#### *4.2.1. Why innovate? From mere reforms to true social transformation*

To guide our analysis of course descriptions, we asked the question: “For what purpose should we innovate in musical education?”. In the documents we analyzed, the matter is treated with an interesting diversity of conceptions. Most of them are admittedly rather conservative: i.e., they limit themselves to the application of a practical perspective in terms of goals in music education innovation. On the other hand, a conception of teaching innovation that would opt for a more critical vantage point boldly associated with the perspective of social transformation remains relatively relegated to the margins.



*Between adaptation and improvement of teaching practice.*

Most course guides (n=12) relate the concept of innovation with good practices or model projects to follow, without promoting a critical and contextualized vision of the proposals. For example, the IDIIE innovation course at the International University of Valencia presents local projects such as "Geography, Music and English getting together in Secondary Education" or international projects such as "The LOVA project" as models to be imitated. Certain universities, such as La Laguna, point out the need for quality indicators to evaluate and develop good innovation practices in music education. However, although there may be a certain critical view of what good practices in music education mean, the course guides of the universities include it only marginally – as is the case of the University of Granada, which leaves the concrete focus in the hands of the faculty members who teach the course. The risk therein is that an observation of desirable practices and educational quality is often proposed, but without including a critical perspective developed from solid theoretical bases, and without taking socio-cultural problems and issues into account.

*Innovation for purposes of social transformation.*

The rare course descriptions that display a critical perspective (n=5) refer to innovation oriented toward social transformation in a reflective teaching approach. For example, the University of the Balearic Islands and the University of Murcia point out that it is necessary to reflect about music in the classroom and the role of the teacher. This would imply the existence of a critical basis for innovation, which would be highly desirable in the training of music teachers in their role as agents of social transformation. Similar orientations can be found in the course descriptions of the Autonomous University of Madrid. The example of the University of Murcia is interesting in that it proposes to

revise the concept of educational quality and good practices from a critical perspective in view of social and educational transformation. An example of a more in-depth approach to this proposal can be found at the University of Las Palmas de Gran Canaria, which indicates that the IDIIE subject will deal with “the emergent social challenges related with the area of music: interculturality, equal opportunity, the development of personal and social values, and the social significance of curricular designs.” By connecting these otherwise marginal themes with music and innovation, another viewpoint of these concepts’ potential meaning emerges, making it possible for innovation to become more integral and more committed to inclusion.

To summarize, the different positions found in the course descriptions regarding why and for what purpose we should innovate in school and in the music classroom mostly tend to alternate between strictly musical and more general pedagogical perspectives, exhibiting a series of approaches that tend to be conservative. Perspectives of social transformation and educational change are only discernible in a few programs, although such perspectives could easily be integrated into course content. The more progressive question regarding why we should innovate remains on the margins in most of the course descriptions we analyzed. This could mean that those responsible for music teacher training find critical reflection about social transformation via innovation in music education rather irrelevant; they seem to find it more useful to regard innovation as a merely practical exercise, without further questioning its bases and presuppositions, and without examining its degree of adaptation to the wide degree of latitude already allowed by Spanish legislation.

#### *4.2.2. How should we innovate? Infatuation with digital technology and project design*

Innovation in music education finds its scope of practical application in a series of

structures and materials. It can be applied in two ways to the field of learning: 1) by using “new” methodologies and means of teaching, and 2) by developing innovation projects. Regarding the first alternative, we note two different positions in the course descriptions: one related to digital technology, and the other related to musical methods. Both positions attempt to provide an alternative to the academic tradition of music teaching by opting for new teaching methods and more flexible forms of musical experimentation. Regarding the second alternative, we note a series of innovative project developments that are either based on the analysis of good practices or research, or that view the school classroom and the university classroom as a laboratory for experimentation.

*Digital and analog technologies as tools for innovation.*

In the majority of the course descriptions (n=13) we analyzed, we noted the presence of innovation propositions such as the use of digital technology; most descriptions suppose that these digital resources’ intrinsic qualities automatically make them adequate tools for teaching and learning in an innovative way. For example, in its IDIIE subject, the Catholic University of Valencia proposes “sound digitization as a creative worktool: Digital sound, terminology, and formats: sound editing programs.” In parallel with such proposals of applying digital technology to music education, we find further generic digital learning modules that feature lesson formats such as WebQuest, as at the International University of Valencia. This proposal does indeed provide pre-service teachers with new media possibilities that can help them motivate their students to develop an interest in the subject and improve their learning; the university faculty members who teach the course are ultimately those who are entrusted with the responsibility of revealing the bases of critical, creative innovation and reflection that

should go along with this kind of technological integration.

To a lesser extent, we also find innovation proposals (n=3) for music education in an “analog” area associated with musical creation, composition, and improvisation, as well as with 21st-century musical approaches. For example, the European University of Madrid proposes “Teaching instrumental music in the classroom: alternative proposals for its inclusion in music subject; Creating musical arrangements in the classroom; Music composition and music editing for visual media.” From this proposal we infer that such practices are either not widely applied elsewhere in teacher training in Spain, or that this IDIIE subject is attempting to supplement other courses foreseen in the university program such as *Music Teaching and Music Learning*. As indispensable steps toward innovation, certain IDIIE courses thus propose a revision and reformulation of musical methods, along with participation in cross-disciplinary projects, as we find in the course description provided by the University of La Coruna.

#### *Project evaluation and design.*

A considerable number of universities (n=15) understand that part of the path in learning how to innovate as teachers consists in evaluating innovative projects to ascertain their underlying bases and structures. On the one hand, it implies that innovation projects can be designed by analyzing and evaluating previous projects that are regarded as exemplary, as in the University of Cordoba. Other course descriptions propose to design a series of innovation projects by using education research as a point of departure. This is in line with our previous referral to the need for constant dialogue and interchange between innovation and research: the two can be viewed as an indissoluble tandem. In consequence, research and innovation should be regarded as part of a music teacher’s fundamental daily culture and outlook. This is evidenced in the

course descriptions provided by the James I University and the University of Barcelona, both of whom highlight the need to promote research in educational practice with the purpose of developing innovation projects; in other words, such projects are inspired by the concrete issues that are experienced and observed in the schools. It is interesting to note that certain course proposals describe the school as a “laboratory” (University of Valencia): from a critical point of view, this would imply a certain objectivation of school reality once we correct our (pre)suppositions about what school really means. Certain proposals on a more marginal level view project evaluation as an input that can serve to transform teachers and inspire them to innovate, while taking interdisciplinary projects into account (James I University and International University of Valencia). This empowers teachers to become critical, active subjects capable of combining several disciplines in one project.

## **5. Discussion and Conclusions**

To conclude, we propose that it would be highly recommendable for legislation and university programs to include innovation in pre-service music teacher training; this implies a certain interest in updating and/or transforming the school in the face of current as well as future technological and social challenges. However, much progress still needs to be achieved in this domain, as indicated by the analysis of university Master’s Degree programs presented herein.

This study has analyzed the response of Spanish universities to why and how we should innovate in music education. Our examination of university course descriptions reveals an apparent diversity of approaches and ways of innovating in music education. Among these diverse orientations, the conception of innovation as a practical-instrumental issue stands out, an issue that would not resolve the obvious adaptive orientation of music teachers through educational didactics (Ballantyne, 2006). This

conception exemplifies the general difficulty of breaking with traditional paradigms, as pointed out by Leite (2012). Another one of the common orientations we find in the course descriptions is technological up-to-dateness. It presumes that the mere use of digital technologies would be sufficient in terms of innovation, thereby foregoing the necessary revision of methodologies and optimization of the educational process (Bernabé & Cremades, 2017; Serrano, 2017), or precluding the possibility of pursuing other innovation objectives (to face the different social and educational challenges of the 21st century) such as interculturality (Timonen, 2021). This quasi-unanimity regarding the meaning of innovation in music teacher training in Spain by subsuming it within the framework of desirable competencies “works in favor of the hegemonic models that have been established to train teachers, and represents an obstacle to innovation” (Marcelo & Vaillant, 2018, p. 78). It would seem that the university discipline of music education does not teach its students to become aware of and criticize the discipline’s own limits; in other words, music teacher training is not seeking to cultivate “curiosity for the art of being led by the possibilities of rejecting or innovating” (Ball, 2017, p. 37). This generally conservative tendency in pre-service music teacher training reveals itself as a suppressor of innovation, at least if the latter is understood as a subversive act (Kuhn, 2013), i.e., innovation understood in its socially transformative role of calling practices into question that are still cemented in traditional educational policies.

University students who are training to become music teachers should ask themselves why we should innovate in music education. This will allow them to reflect upon their teaching role, the current state of music education, and the challenges they will face. This questioning should be accompanied by introducing new, reflective, creative ways of teaching in the music classroom, taking the entire educational

community and its problems into account (López-Peláez, 2020; Woodford, 2005). The need of fomenting creative, critical, reflective thinking in pre-service music teachers will probably help to orient innovation toward true transformation of society through music education; this should inspire us all to reflect in depth upon the traditional notions of training and education that are still predominant in university programs (Bylica & Schmidt, 2021) and on the humanistic or non-humanistic role of teaching (Varkoy, 2007). We obviously need to bring active methodologies into play: networked learning, creative and divergent development – but, why should we not propose a series of goals that might help our society to become fairer and more democratic? This implies that we dare to venture a step beyond what school is requiring in the here and now by developing a more complex, critical view of uncertainties that threaten harmonious coexistence in school, along with an outlook on future social problems and future potential.

Training teachers to innovate is a challenging undertaking that needs to be regarded as a shared project carried out by the entire educational collective, and not merely as an isolated event that takes place as an interplay among students, teachers, professors, guidelines, and specialties (Herrera & Didriksson, 1999). The course descriptions we analyzed tend to lack such perspective: the IDIIE subject is usually included in the group of specifically musical assignments, thus foregoing the possibility of cross-disciplinary collaboration and interaction that could work in favor of enhanced teacher creativity (Perales & Aróstegui, 2021). The implicit challenge for university programs is to create an interplay between general pedagogical proposals and specifically musical ones, in order to ensure that teachers reflect upon the stabilizing and destabilizing processes that such projects can unleash: this, in turn, can lead to the emergence of truly creative pedagogical activity (Abramo & Reynolds, 2015). It is

therefore worthwhile to ask whether innovation should be merely conceived of as a consensual term designed to reflect homogeneous, conservative perspectives and practices. Some authors point out the gradual emergence of a critical awareness that innovation in music should necessarily relate the social and musical fields with one another (Baker, 2021). In this case, it would be up to education faculty members and their students to find out which innovative activities in music education are most liable to promote innovation as social change. This could emerge, for instance, from a novel, different use of digital technology and related tools, from a new approach to pedagogical models, or from the creation of entirely new ones; all of this could lead to the possibility of building critical knowledge for the benefit of future teachers and their students in secondary school. The remaining task would consist in reflecting and asking these same questions within the discipline of pre-service music teacher training on an international level, and to compare and measure the extent to which innovation in music education tends to be either conservative or progressive.

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