### Learning and Teaching Music in the Twenty-First Century



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#### • 1 Introduction: Waking Up from a Deep Sleep

Some years ago, in an analysis on what is happening in primary and secondary 1 education classrooms, one of us (Pozo, 2006) referred to the film "The Sleeper" 2 directed by Woody Allen in 1973, to serve as a metaphor for the educational situation. 3 Many readers and particularly the younger ones may not be familiar with this film. It 4 is a comical narration of how, after hibernating for 200 years after forced cryogenic 5 storage, Miles Monroe, a clarinettist, played by Woody Allen himself, wakes up 6 in USA, his home country, finding himself in a police state with its citizens under 7 surveillance. Leaving aside other more political aspects of the film (and of Allen 8 himself) which coincide with other, perhaps better known dystopias such as "1984", 9 we wish to emphasize that Miles Monroe, the clarinettist stumbles upon situations 10 which hilariously illustrate what changes have occurred in the most everyday culture 11 and habits that Miles does not know how to respond or adapt to, giving rise to 12 multiple comical situations. In this future, Miles the clarinettist does not go to any 13 music classes to update his musical knowledge, but if he had, we would fear that his 14 reaction would have been totally different because beyond shallow appearances and 15 the presence of new artefacts and technologies, the ways of learning and teaching 16 would have changed very little. 17

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It has become a cliché to say that musical education is crisis-ridden and that the 18 ways of teaching in conservatories and music classrooms in general have not adapted 10 to social and cultural changes nor helped students to develop the skills and tools 20 required for this new millennium. In fact, all the analyses carried out in recent years 21 on the state of instrumental music teaching, many of them centred on conservatories 22 but also encompassing other teaching environments, agree that it has reached a serious 23 crossroads (e.g., Sarath et al., 2014; Tregear et al., 2016). For example, one report 24 undertaken a few years ago which aimed at tracing the upgrading of the curriculum 25 in North American conservatories categorically stated that "significant change is 26 essential [in musical education] if we are to bridge the gap between academic music 27 study and the musical world into which our students and the students of our future 28 will graduate" (Sarath et al., 2014, p. 11). 29

Several authors (e.g., López-Íñiguez & Bennett, 2020, 2021; Tregear et al., 2016) 30 agree with the insights of this report. It purports that the gap between the musical 31 education being provided for future musicians and the competences they will need to 32 deploy in their professional and personal future is increasingly broader and deeper. 33 A similar gap exists between the "musician in the academy" and the "musician in 34 the real world" (Sarath et al., 2014, p. 2) and as a result the report advocates radical 35 or paradigmatic changes, to intensely rethink the suppositions, goals and methods of 36 this type of musical education. 37

Many factors are involved in widening these gaps, some of which will be anal-38 vsed in this chapter and some in the next. Improving the quality of education 39 in musical interpretation beyond mere cosmetic changes in the periphery of the 40 curriculum which characterises the new curricular proposals, means undertaking 41 genuine paradigmatic change (Sarath et al., 2014), to overcome the traditional conser-42 vatory model (Burwell, 2005; Musumeci, 2002; Tregear et al., 2016). Jørgensen 43 (2000, p. 68) describes this tradition as the arrangement "where the teacher is gener-44 ally looked upon as a model to follow and a source of identification for the student, 45 and where the dominant learning mode of the student is imitation". The student is 46 therefore, "the one who observes, listens, imitates and seeks [the] approval [from 47 the teacher]" (Uzler, 1992, p. 584). This particular type of didactic relationship 48 between teacher and learner (see Chapter "Teaching Music: Old Traditions and New 49 Approaches" and also Burwell, 2012, 2016; Persson, 2000) inhibits the development 50 of the autonomy of future musicians as learners, and the development of artistic 51 identity (Gaunt, 2008, 2010, 2011). 52 However, it is not just the personal development of the learner that is limited by 53

traditional teaching. The social function of music as a cultural activity is also encased 54 in models which appear to respond, in a similar nature as that which occurred with 55 Miles Monroe, some 200 years ago. This more or less corresponds to the foundation 56 of the first conservatories we had, and not with today where we should be waking up to 57 a new reality. Society which surrounds and sustains the conservatories is completely 58 different from that which induced its first foundations, and the 'social contract' 59 between society and the centres of musical education is therefore also burnt out, 60 with the commitment between them in need of updating and modifying (Tregear 61 et al., 2016). 62

Neither is the music which is taught and learned in the conservatories, for good or for bad, the same as that which is listened to and participated in within most social spaces. There is also a widening chasm between music which fills conservatory classrooms and its potential listeners, its public, who nobody bothers to train. It is increasingly necessary that conservatories work to promote attentive listening from their citizens.

Maybe the problem of passive audiences in concert halls, invoked with such frequency, is
 due to the fact that the embodied part of the musical experience has become irrelevant and
 yet the embodied element of music is central to the listening experience. (Tregear et al.,
 2016, p. 10)

Recognition of this gap or possibly now chasm, therefore, has a good many dimen-73 sions which do not peter out in the relationships taking place in the classroom between 74 teacher, student and music, often determined by a specific instrument. Although this 75 book precisely centres on how to improve or radically change these forms of making 76 music and learning it and teaching it in classrooms, we believe it is necessary in this 77 first chapter to also point out other dimensions that in our opinion are also essential for 78 defining a new educational culture in conservatories and in general in music educa-79 tion spheres. We will therefore identify three pillars or essential dimensions in this 80 chapter, as we shall see in the following subsections. These appear to be intertwined 81 into current research on new musical educational culture, which both researchers and 82 a growing number of music teachers appear to be pursuing in recent decades, and 83 also with the professional practices and educational policies of institutions where 84 music is taught and learnt: 85

- The *integrating aspect* of musical education, by which holistic competences are
   defined that expand instrumental mastery, since they are required for the musicians
   to find their professional function in an increasingly changing society.
- The *social function* of musical education and interpretation, as the organising
   centre of musical practices and musical education which benefit people in many
   aspects of life, particularly the diversity of existing cultural expressions.
- The *restructuring element* inherent to music through which autonomous, open, creative, expressive and flexible learning and teaching practices are brought about.
   Also, as explained in this and successive chapters of the book, there is a need for this restructuring element to acquire greater presence in institutional curriculums, instructional practices and education policies.

# <sup>97</sup> 2 Comprehensive Preparation in Music Education: <sup>98</sup> Towards Professionalism in Higher Level Instrument <sup>99</sup> Studies

The need to accept restructuring instruction in formal musical education contexts, which is the very kernel of this book is strongly connected to more general research studies on education and psychology that define effective learning as that which

promotes autonomy but also resilience and competencies to confront new problems 103 (Biggs & Tang, 2011; Boud, 2012; Pozo & Pérez Echeverría, 2009; Yeager & Dweck, 104 2012). This wouldn't be a bad thing for our clarinettist Miles Monroe as a learner in a 105 society which is so impacting for him. However, teachers usually have difficulties in 106 accepting these ideas, both theoretically and practically, (see Chapter "How Teachers 107 and Students Envisage Music Education: Towards Changing Mentalities") and the 108 same occurs with students who seem to be particularly focused on the instrumental 109 issues (Gaunt, 2010; Presland, 2005), forgetting that in order to develop their careers 110 they also need other, different skills (Burwell, 2005; Carey, 2008; Gaunt, 2008, 2010; 111 Gaunt et al., 2012; Jørgensen, 2000; López-Íñiguez & Bennett, 2020, 2021; Mills, 112 2002; López-Íñiguez & Burnard, 2021). This is why Lebler (2008) suggests that 113 for future music professionals to know how to navigate the working world, today's 114 music conservatories need to provide students with comprehensive instruction which 115 is musically inclusive and leads to both flexibility and a great variety of musical skills. 116 Such issues as these, as will be illustrated in this section, do not appear as frequently 117 as they should in the classroom. 118

This is extremely worrying since we know that the employability of musicians who 119 graduate is minimal, but also "complex and disorganised" (Bennett, 2016, p. 112), and 120 when they leave the higher conservatories or music universities with their diploma 121 as professional instrumentalists, they will have to address their professional options, 122 not only in keeping with their skills as instrumentalists, but also with other informal 123 aspects and their ability to take decisions and adopt a variety of professional roles in 124 the music area (Burnard, 2014), a rather uncertain career for those who are profes-125 sionally dedicated to it (Bennett, 2007; Bennett & Bridgstock, 2015; Shihabi, 2017). 126 Being the principal player or *tutti* in an orchestra, or establishing a chamber musical 127 group with an agenda replete with concerts and commercial recordings is attainable to 128 very few instrumentalists (Bartleet et al., 2012; Bennett, 2014). Furthermore, a great 129 majority of them will be dedicated to teaching their instrument and for this, as we 130 shall see in Chapter "Instrumentalist Teacher Training: Fostering the Change Towards 131 Student-Centered Practices in the Twenty-First Century", comprehensive teaching 132 of instrumentalists as music teachers is essential to ensure them an empowering and 133 motivating future. 134

Here, studies undertaken by Zhukov (2019, among others) repeat the need for 135 change in dyadic teaching in higher conservatories and music universities, putting 136 emphasis also on creative aspects and professional development during studies (e.g., 137 López-Íñiguez & Bennett, 2021). Moreover, Perkins (2013) advocates authentic 138 learning activities which arouse students' curiosity and therefore their motivation, 139 beyond the necessary skills with the instrument. These specific skills of the instru-140 mental discipline have been defined in a range of studies (in the American context, 141 e.g., Chin, 2002; Young, 2016), for example, with pianists, indicating those which 142 are truly important in interpretation evaluation: sight-reading, playing the Western 143 canonical repertory, harmonizing melodies, transposition, improvisation and accom-144 paniment. We all agree that skills with the instrument must necessarily have to be 145 refined to the utmost. It is a fact that students of musical instruments in higher educa-146 tion centre their efforts on this (Creech et al., 2008; Gaunt, 2010). However, these 147

skills are not enough to make a musician successful nor adapt to the contextual and professional demands of this society.

Hence, the curriculums of music teaching have always considered this a central 150 aspect (Barrett, 2007; Carey & Lebler, 2012; Walmsley, 2013). However, the addi-151 tion of representative subjects of the aspects mentioned in the previous paragraph 152 in the curriculums as we have just suggested, do not appear to be sufficient and 153 therefore, students must also be exposed to pedagogic environments where they 154 develop traits which are relevant in our current western society, including adapt-155 ability, flexibility and resilience (Burnard, 2012; Gaunt et al., 2012). Our students 156 also need to develop their social skills and organisation, their motivation, their confi-157 dence, their artistic agency and autonomy, and the necessary strategies to cope with 158 their professional demands (Burland & Davidson, 2004; Juuti & Littleton, 2012; 159 MacNamara et al., 2006, 2008). They also have to be able to reflect critically on 160 their professional learning pathways (López-Íñiguez & Burnard, 2021), and on their 161 abilities and profiles as future music professionals (Blom et al., 2014; Brown, 2009). 162 Essential qualities, without forgetting also generic matters such as critical thinking, 163 leadership or working in a team (Bennett, 2009; Bennett & Bridgstock, 2015). 164

Recent research studies conducted within the Icelandic framework (Jónanson & 165 Lisboa, 2019) or the Australian framework (Lebler, 2008, 2019), emphasize the 166 offer of additional engagement in investigation for music students in higher studies 167 (see also Chapter "Instrumentalist Teacher Training: Fostering the Change Towards 168 Student-Centered Practices in the Twenty-First Century"), since it is only in this way 169 that they may be prepared to lead in bringing about the necessary change we have 170 been suggesting and to improve the curriculums of the different centres where they 171 will work in the future. Such is the significance of these aspects that, for example, in 172 the Australian framework, after having researched these issues, they have insisted on 173 designing the higher musical education curriculum to be more centred on offering 174 authentic learning and assessment experiences (Carey & Lebler, 2012; Harrison et al., 175 2013). As a result the students come out of what several authors (e.g., Burwell et al., 176 2017; Rostvall & West, 2003) define as the 'secret garden' or the 'black box' of 177 the conservatory classroom or the rehearsal soundproof booth to new and inspiring 178 environments (Perkins & Williamon, 2014; Smilde, Page & Alheit, 2014) which 179 include collaboration (Gaunt & Westerlund, 2013; Pozo et al., 2008); innovation 180 in musical styles and pedagogic practices (Lebler, 2007), and diverse creativities 181 (Burnard & Haddon, 2015). 182

All of these issues, but also aspects such as the criticism of musical studies in 183 formal institutions, the lack of exposure to professional situations during studies, or 184 the focalising on soloist careers (Bartleet et al., 2012)—which really is a dream only 185 within the reach of very few (Juuti & Littleton, 2012)—comes to light when profes-186 sional musicians are asked whether their musical education prepared them for what 187 truly was their profession within the musical framework (López-Íñiguez & Bennett, 188 2020), i.e., a comprehensive or holistic education in which a broad identity was devel-189 oped as musical citizens their whole life long, as identified in research in musical 190 education as the 'living curriculum' (Bath et al., 2014; Johnsson & Hager, 2008). 191 For this reason several studies in music have identified the need to expose students 192

to real experiences with professionals who enrich them and help them develop a
variety of essential competences in life as musicians, such as versatility, personal
growth or social and emotional skills (Ascenso et al., 2019; Burland & Davidson,
2004; MacNamara et al., 2006, 2008).

To conclude, the future instrumentalists will have greater or lesser success as professionals depending on the variety and quality of their interpretation activities during their studies and the potentiality of these for promoting self-discipline and autonomy (Creech et al., 2008). However they will also possess realistic anticipation about the professional opportunities available to them (Brown, 2019; Reid et al., 2011), which will necessarily have to be defined within a framework of expansion within and without the educational framework in the professional environment.

# The Social Function of Music: Playing and Learning Music in an Increasingly Open, Diverse, and Changing Society

During the last few decades, the expressive and creative dimensions of music have 207 changed considerably, and as a result, Miles Monroe would need not only to under-208 stand which novel questions would occur musically around them but to understand 209 that these new artistic manifestations of great diversity respond to constant social 210 changes. These changes respond, for example, to the diverse cultural influences of a 211 global society which is increasingly more interconnected and constantly expanding, 212 to the growing interest of professional musicians in improvisation and composition, 213 to the artistic expression mixing a great variety of musical genres, or the acoustic 214 and electronic productions and interpretations which take place in unconventional 215 contexts and which are enabled in turn, by the genuine technological advances that 216 facilitate their access and transmission to audiences who are different from those of 217 the opera or classical ballet. 218

Furthermore, as stated by Tregear et al. (2016), educating professional musicians 219 has been highly selective and exclusive, particularly over the last two centuries, and 220 for this reason we may call it "elitist" since a "talent" or musical predisposition was 221 required, which supposedly only some people had, and which was something that 222 could not be taught. At the same time, these people interpreted for elitist audiences 223 because the language to communicate was highly intellectual and therefore accessible 224 to select and erudite audiences. Throughout this book we will try to demonstrate that 225 a more open view is required regarding musical education and that it should not be 226 reduced to the virtuosity of the individual interpreter. Instead of being merely limited 227 to an exclusive form of musical education it should open up to new audiences, new 228 social settings outside of the ones it has been used to. To do so, greater efforts need 229 to be dedicated to educating not just the musicians but the audiences too, without 230 whom those musicians would not be able to professionally develop (Tregear et al., 231 2016). 232

However, if understanding all of this were not enough for Mr. Monroe, he also 233 should accept that music not just evolves as a response to social changes but that it also 234 occasions them (e.g., Green, 2017; Regelski, 2006), with the relationship between 235 music and society being a similar dilemma to the 'what came first, the chicken 236 or the egg?'. The social function of the music would therefore be more related to 237 cultural enrichment through its multidisciplinary and trans-disciplinary character (see 238 Chapter "Learning Outside the Music Classroom: From Informal to Formal Learning 239 as Musical Learning Cultures"), connecting it both to other arts and diverse scien-240 tific domains. A dialogue therefore arises which could contribute to sensitisation on 241 ecological sustainability through more local cultural projects in small communities, 242 or exercising as the essential focus in the development of social justice through the 243 integration of immigrants in musical experiences derived from their folklore. Some 244 of these issues have come about in macroprojects of relatively recent research such 245 as the ArtsEqual in Finland which includes interventions of social cohesion and 246 integration through projects in which the arts are used to improve peoples' health. 247 Educational policies are designed to support the development of artistic institutions 248 which act in the most responsible manner possible towards society. The impact of 249 the arts on equality and wellbeing has been studied, as has the importance of the 250 arts as an element creating diversity in general schools (e.g., Anttila & Suominen, 251 2018; Jääskeläinen & López-Íñiguez, 2017; Kallio & Heimonen, 2018; Kivijärvi & 252 Väkevä, 2020). In Latin America we also found individual research initiatives on 253 the accessibility of music in schools of developing countries such as Chile (Angel-254 Alvarado & Lira-Cerda, 2017), or "El Sistema" in Venezuela. The latter originated as 255 an experience which went on to have great success in these social aspects according 256 to several authors, (e.g., Verhagen et al., 2016), and was then adapted to other coun-257 tries such as the United States (e.g., D'Alexander & Ilari, 2016), although it also 258 received severe criticism regarding its results, which were far from conclusive on 259 the said social benefits. Further rigorous research is required as to the real effects of 260 their practices (Baker et al., 2018). 261

## 4 Creativity and Restructured Pedagogies: Towards Genuine Change in Instrument Learning and Teaching

The dimensions dealt with in the previous sections and others we cannot embark upon 264 here, conclude that there is a need for profound change in the ways music is taught and 265 learned in our classrooms - the key aim of this book. Since the millennium, several 266 studies in educational sciences (e.g., Bransford et al., 2000; Mayer & Alexander, 267 2016; Pozo, 2008, 2016; Pozo & Pérez Echeverría, 2009; Sawyer, 2015), and in the 268 psychology of music and musical education have stressed the need for a change in 269 model to reinforce the role of the learner with respect to taking decisions on their own 270 learning, so that their learning processes are appropriated (Hallam, 2001a, 2001b, 271 2006; Gatien, 2009; O'Neill, 2012; Virkkula, 2015; see also Chapters "Teaching 272

Music: Old Traditions and New Approaches" through "How Teachers and Students 273 Envisage Music Education: Towards Changing Mentalities") and to autonomously 274 manage which goals and contents should be learned (Gilbert, 2016; see, e.g., Chap-275 ters "SAPEA: A System for the Analysis of Instrumental Learning and Teaching 276 Practices" and "Student-Centred Music Education: Some Ideas to Improve Learning 277 and Teaching") through the most innovative and constructive approaches, centred 278 on the student and on the development of their competences (Bautista et al., 2006; 279 Musumeci, 2005; Zarzo, 2017). According to these studies, the traditional teacher-280 *learner* approach—currently the most used in the majority of musical teaching 281 institutions in the Western world (Daniel & Parkes, 2017; Duffy, 2016)-, do not 282 encourage students to be autonomous nor to self-regulate their learning (Gaunt, 2005; 283 López-Íñiguez & Pozo, 2014a, 2014b), but neither do they exercise the necessary crit-284 ical, reflexive and independent thinking to continue learning throughout life, some-285 thing which is crucial in the musical environment (Boud, 1989; Boud et al., 1999; 286 Carey, 2010; Carey et al., 2017; Daniel & Parkes, 2017; Duffy, 2016; Falchikov, 287 2007; Gaunt, 2008; López-Íñiguez & Burnard, 2021; Montalvo & Torres, 2004), and 288 without which professional opportunities in music would be limited (Hennekam & 289 Bennett, 2017), as we saw in the previous section. 290

Improving the quality of education in musical interpretation therefore requires, as 291 we noted at the beginning, overcoming the traditional conservatory model (Burwell, 202 2005; Tregear et al., 2016) which has been so much in vogue since the eighteenth 293 century. This model will be analysed in detail in Chapter "Teaching Music: Old 294 Traditions and New Approaches" and revisited in Chapter "Instrumentalist Teacher 295 Training: Fostering the Change Towards Student-Centered Practices in the Twen-296 ty-First Century". Both researchers and teachers, and even students themselves are 207 increasingly demanding a change in instructional practices in instrument or voice 298 classes which results in student centred teaching. In fact, this type of teacher is the 299 main focus of higher musical educational reforms in Europe (Klemenčič, 2017). 300 Thus, for example, the new pedagogic forms which appeal to the social change 301 confronting this passivity and reproductively by music learners is reminiscent in our 302 context with the demand for change proposed by the European Association of Conser-303 vatoires (AEC), which urges educational institutions to develop more comprehensive 304 and enlightened curriculums where contemporary traditional teaching approaches 305 which are "almost damaging the development of the student as a reflexive and innate 306 musician" are eliminated (Cox, 2007, pp. 12-13). Recent auto-ethnographic arti-307 cles have reflected critically on the complex trajectory in educational institutions of 308 professional musicians (López-Íñiguez, 2019; López-Íñiguez & Bennett, 2020). 309

In fact, this enlightened vision in musical education which appears to lead to the best results in learning (Biggs, 2003; Carey & Grant, 2014, 2015; Cranton, 1994; McGonigal, 2005; Mezirow, 1997, 2000; Taylor, 1998, 2007), has been receiving strong support from several groups and research projects during recent years. Beyond these and other specific investigations there are numerous initiatives by institutions, associations, universities or projects both on a national or international level, focused on improving musical education which shares to greater or lesser extent, the concerns

expressed in this chapter. Since it is not the aim of this book to list all the possible asso-317 ciations, institutions or research and dissemination networks involved from different 318 paradigms and methodologies, and so as not to overwhelm the reader, some of the 319 initiatives we believe to be more relevant are listed overleaf in an appendix. The 320 interested reader may thus probe deeper into whichever direction they choose. In any 321 event, all of these initiatives, like many others from different and more or less global, 322 but we believe complementary perspectives, coincide in the need to promote radical 323 changes to the traditional forms of learning and teaching music in musical institu-324 tions and in the functioning of the music industry in general (Tregear et al., 2016). 325 These traditions consequently require rethinking and alternative models must also 326 be put forward to help close the deep chasm between the academy and the society 327 with which we began this book. This is the aim of Chapter "Teaching Music: Old 328 Traditions and New Approaches": to propose new approaches after a critical analysis 329 of still dominant traditions in our classrooms and educational institutions. 330

### Appendix: Some Relevant Initiatives for the Redevelopment of Musical Education

In the international arena there are or have been initiatives with similar interests 333 such as, for example, the Reflexive Conservatory in the United Kingdom, where 334 the emphasis was on improving specialized education in the performing arts (e.g., 335 Gaunt, 2013) as also occured with international professional networks Innovative 336 Conservatory (ICON, Duffy, 2016) and Transforming 121 (see for example, Carey 337 et al., 2012; Carey & Grant, 2014, 2015; Carey, Bridgstock et al., 2013; Carey, Grant 338 et al., 2013), or the projects based on the format *Students as Partners* (Coutts, 2018; 339 Shihabi, 2017), which proposed restructuring ways of teaching at different education 340 levels of music mastery in general. In the report by Sarath et al. (2014, p. 14) we 341 mentioned previously, a long list of North American projects may also be consulted 342 which over the last 50 years have also proposed the need to reform musical education 343 from the conservatory model, such as the subject of music in primary schools and 344 secondary education institutions. 345

Moreover, the research project Transforming Musicianship, located in Finland 346 and the principal researcher of which is the main author of this chapter, begins 347 with the idea that this type of restructuring instructions—particularly in the area of 348 higher education in classic instrumentalists—are only possible from a construction 349 of the student identity as a true, life-long learner (see Chapter "Student-Centred 350 Music Education: Some Ideas to Improve Learning and Teaching"; see also, López-351 Iniguez & Bennett, 2020, 2021), who learns through the reflection on what s/he "does 352 not possess and is not" (Reay, 2010, p. 2), which necessarily occurs when the intrapsy-353 chological processes (individual dimension) and interpsychological processes (social 354 dimension) of the individual connect. For our part, as mentioned already in the 355

preface, the GIACM, as part of the *Interdisciplinary Seminar on Learning and Educa- tional Change* (SEIACE), has spent 15 years studying aspects which are partly related
 to improving educational quality and developing musical competences, from which
 this book is largely derived.

All of these projects and initiatives have also had the support of several interna-360 tional associations which are constantly making efforts to support the visibility of 361 the different research studies in the field this chapter focuses on in particular and the 362 book centres on in general. For example, the International Society for Music Educa-363 tion (ISME), is managed by the Commission on the Education of the Professional 364 Musician (CEPROM), which promotes comprehensive values in the education of the 365 musician reflecting artistic vision and diversity of learning in people within different 366 cultural and social contexts. It is also managed by special interest groups in Applied 367 *Pedagogies*, that centers on offering the latest theoretical advances in education to 368 teachers throughout the world, or in Assessment, Measurement and Evaluation which 369 encompasses different aspects on how to measure instruction practices in music and 370 its results. These issues are contained in many editorial lines and activities promoted 371 by ISME. 372

Similarly, but from an integrating perspective between musical education and 373 the psychology of music of a marked scientific bent and predominantly through 374 psychometric studies, the Society for Research on Education and Psychology of 375 *Music* (SEMPRE) fosters the promotion of different events and publications relating 376 to the science of interpretation and the holistic education of the musician, taking into 377 account sociological issues (gender, race, socioeconomic and employment status, 378 etc.) and psychological issues (skills, motivation, self-concept, self-sufficiency, self-379 regulation, etc.) These aspects are also present through the combination of biological, 380 cognitive and social processes enveloped in the acquisition of skills in the Australian 381 megaproject Understanding the Mechanism of Musical Mastery, and in some of the 382 topics present in the International Symposium on Performance Science (ISPS), one 383 of the most important forums for dissemination research relating to the essential 384 objectives of this book. From the Nordic framework, the interdisciplinary nature of 385 musical education comes under the umbrella of the Nordic Network for Research in 386 Music Education (NNMPF) which, like that of the German Association for Research 387 in Music Education (AMPF) in the Central European area, publishes annual books 388 and virtual journals each where the latest and most relevant research topics to their 389 respective authors and members are contained. 390

In the Ibero-American context we have for example, the Centre for Research in 391 Psychology of Music and Music Education (O-CIPEM), or the Columbian Society 392 for Investigation in Education and Psychology of Music (PSICMUSE), with similar 393 interests to those proposed by SEMPRE, but for the Portuguese and Colombian areas. 394 There is also the Spanish Association for Music Psychology and Musical Performance 395 (AEPMIM), which encompasses professionals from both areas simultaneously, from 396 psychology and music. Its objectives highlight the diffusion of knowledge of this 397 area through formative activities in formal education centres (conservatories and 398 universities) and other informal areas, in periodic scientific activities, together with 399

the fostering of research into the Psychology of Music, through events, publications and cooperation with several of the previously mentioned organisations and
other similar ones in the international field. These include European (ESCOM),
Argentinean (SACCOM) and Brazilian (ABCAM) societies for Cognitive Sciences
of music. Also in Spain, with a long and exemplary trajectory is the *Society for Music Education of the Spanish State* (SEM-EE) which has its own committees of *Music Education and Training in the Conservatories and Schools of Music* (EFMCE) and

<sup>407</sup> of *Musical Education and Training in Higher Education* (EFMES).

#### 408 **References**

- Angel-Alvarado, R., & Lira-Cerda, J. P. (2017). Instalaciones y recursos educativos para la educación
   musical según la representación social de los estudiantes chilenos [Educational installations and
   resources for musical education in keeping with the social representation of Chilean students].
- 412 Revista Electrónica de LEEME, 20, 19–31. https://doi.org/10.7203/LEEME.40.10412
- Anttila, E., & Suominen, A. (2018). Critical articulations of hope from the margins of arts education:
   International perspectives and practices. Routledge.
- 415 Ascenso, S., McCormick, J., & Perkins, R. (2019). Leadership in the transition from music student
- to professional musician: The Civic Orchestra of Chicago Fellowship. In J. Rowley, D. Bennett, &
   P. Schmidt (Eds.), *Leadership of pedagogy and curriculum in higher music education* (pp. 18–39).
   Routledge.
- Routledge.
  Baker, G., Bull, A., & Taylor, M. (2018). Who watches the watchmen? Evaluating evaluations of
- El Sistema. British Journal of Music Education, 35(3), 255–269. https://doi.org/10.1017/S02650
   5171800008
- Barrett, J. R. (2007). Currents of change in the music curriculum. In L. Bresler (Ed.), *International handbook of research in arts education* (Vol. 1, pp. 147–162). Springer.
- Bartleet, B.-L., Bennett, D., Bridgstock, R., Draper, P., Harrison, S. & Schippers, H. (2012).
   Preparing for portfolio careers in Australian music: Setting a research agenda. *Australian Journal* of *Music Education*, *1*, 32–41. https://files.eric.ed.gov/fulltext/EJ1000243.pdf
- Bath, D., Smith, C., Stein, A., & Swann, R. (2014). Beyond mapping and embedding graduate
  attributes: Bringing together quality assurance and action learning to create a validated and living
  curriculum. *Higher Education Research and Development*, 23(3), 313–328. https://doi.org/10.
  1080/0729.436042000235427
- 431 Bautista, A., Torrado, J. A., & Pérez Echeverría, M. P. (2006). Las concepciones de los profesores
- de conservatorio sobre el aprendizaje y la enseñanza [Conceptions of conservatory teachers on
  learning and teaching]. In M. A. Ortiz Molina & A. Ocaña Fernández (Eds.), *Cultura, culturas.*
- *Estudios sobre música y educación intercultural* [Culture, cultures. Studies on intercultural music
   and education] (pp. 159–178). Grupo Editorial Universitario.
- 436 Bennett, D. (2007). Utopia for music performance graduates: Is it achievable, and how should it
- be defined? *British Journal of Music Education*, 24(2), 179–189. https://doi.org/10.1017/S02650
   51707007383
- Bennett, D. (2009). Academy and the real world: Developing realistic notions of career in the
   performing arts. *Arts and Humanities in Higher Education*, 8(3), 309–327. https://doi.org/10.
   1177/1474022209339953
- <sup>442</sup> Bennett, D. (2014). The role of career creativities in developing identity and becoming expert selves.
- In P. Burnard (Ed.), Developing creativities in higher music education: International perspectives
- *and practices* (pp. 234–244). Routledge.

Bennett, D. (2016). Developing employability and professional identity through visual narratives.
 *Australian Arts Education*, 37(2), 100–115. https://search.informit.com.au/documentSummary;

447 dn=317336577724001;res=IELHSS

- Bennett, D., & Bridgstock, R. (2015). The urgent need for career preview: Student expectations and
   graduate realities in music and dance. *International Journal of Music Education*, *33*(3), 263–277.
   https://doi.org/10.1177/0255761414558653
- Biggs, J. B. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.).
   SRHE & Open University Press.
- Biggs, J. B., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). Open University
   Press.
- Blom, D., Rowley, J., Bennett, D., Hitchcock, M., & Dunbar-Hall, P. (2014). Knowledge sharing:
  Exploring institutional policy and educator practice through e-portfolios in music and writing. *Electronic Journal of e-Learning*, *12*(2), 138–148. https://doi.org/10.1080/0309877X.2014.
  895306
- Boud, D. J. (1989). The role of self-assessment in student grading. *Assessment and Evaluation in Higher Education, 14*, 20–30. https://doi.org/10.1080/0260293890140103
- 461 Boud, D. J. (Ed.). (2012). Developing student autonomy in learning. Taylor & Francis.
- Boud, D. J., Cohen, R., & Sampson, J. (1999). Peer learning and assessment. Assessment and
   Evaluation in Higher Learning, 24(4), 413–426. https://doi.org/10.1080/0260293990240405
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school* (Expanded). National Academy Press.
- Brown, J. E. (2009). Reflective practice: A tool for measuring the development of generic skills in
   the training of professional musicians. *International Journal of Music Education*, 27(4), 1–11.
   https://doi.org/10.1177/0255761409345437
- Brown, J. E. (2019). Developing leadership skills in performing arts graduates: A case study of an
   extracurricular community project. In J. Rowley, D. Bennett, & P. Schmidt (Eds.), *Leadership of pedagogy and curriculum in higher music education* (pp. 40–59). Routledge.
- <sup>472</sup>Burland, K., & Davidson, J. W. (2004). Tracing a musical life transition. In J. W. Davidson (Ed.),
- The music practitioner: Research for the music performer, teacher and listener (pp. 225–249). Ashgate.
- 475 Burnard, P. (2012). Music creativities in practice. Oxford University Press.
- 476 Burnard, P. (Ed.). (2014). Developing creativities in higher music education: International
- 477 *perspectives and practices.* Routledge.
- Burnard, P., & Haddon, E. (Eds.). (2015). Activating diverse musical creativities: Teaching and
   *learning in higher music education*. Bloomsbury Academic.
- Burwell, K. (2005). A degree of independence: Teachers' approaches to instrumental tuition in a
   university college. *British Journal of Music Education*, 22(3), 199–215. https://doi.org/10.1017/
   S0265051705006601
- 483 Burwell, K. (2012). Studio-based instrumental learning. Ashgate.
- Burwell, K. (2016). Dissonance in the studio: An exploration of tensions within the apprenticeship
   setting in higher education music. *International Journal of Music Education*, 34(4), 499–512.
   https://doi.org/10.1177/0255761415574124
- Burwell, K., Bennett, D., & Carey, G. (2017). Isolation in studio music teaching: The secret garden.
- Arts and Humanities in Higher Education, 18(4), 372–394. https://doi.org/10.1177/147402221
   7736581
- Carey, G. (2008). New understanding of 'relevant' keyboard pedagogy in tertiary institutions. Verlag
   Dr. Muller.
- 492 Carey, G. (2010). Performance or learning? Reflections on pedagogical practices within the conser-
- 493 vatoire. In M. Hannan (Ed.), Musician in creative and educational spaces of the 21st century
- (pp. 34–38). Proceedings from the International Society for Music. Commission for the Education
- 495 of the Professional Musician.

- Carey, G., & Grant, C. (2014). Teachers of instruments or teachers as instruments? Moving from
   transfer to transformative approaches to one-to-one pedagogy. *Education of the Professional Musician Commission (CEPROM)*. Porto Alegre, Brasil.
- Carey, G., & Grant, C. (2015). Teacher and student perspectives on one-to-one pedagogy: Practices
   and possibilities. *British Journal for Music Education*, 32(1), 5–22. https://doi.org/10.1017/S02
   65051714000084
- Carey, G., & Lebler, D. (2012). Reforming a Bachelor of music programme: A case study. *International Journal of Music Education*, 30(4), 312–327. https://doi.org/10.1177/025576141245
   9160
- Carey, G., Grant, C., McWilliam, E., & Taylor, P. (2013). One-to-one pedagogy: Developing a
   protocol for illuminating the nature of teaching in the conservatoire. *International Journal of Music Education*, 31(2), 148–159. https://doi.org/10.1177/0255761413483077
- Carey, G., Bridgstock, R., McWilliam, E., Taylor, P., & Grant, C. (2013). Characterising one-to-one
   conservatoire teaching: Some implications of a quantitative analysis. *Music Education Research*,
   *15*(3), 357–368. https://doi.org/10.1080/14613808.2013.824954
- Carey, G., Harrison, S., & Dwyer, R. (2017). Encouraging reflective practice in conservatoire
   students: A pathway to autonomous learning? *Music Education Research*, *19*(1), 99–110. https://
   doi.org/10.1080/14613808.2016.1238060
- Carey, G., Lebler, D., & Gall, S. (2012). Investigating the one-to-one teaching model in higher music
   education: Developing a collaborative model of inquiry. *Scientia Paedagogica Experimentali: International Journal of Experimental Research in Education*, 47(2), 175–198.
- <sup>517</sup> Chin, H. L. (2002). Group piano instruction for music majors in the United States: A study of instructor training, institutional practice, and values relating to functional keyboard skills
- (Unpublished Doctoral Dissertation). Ohio State University, Columbus, OH. *Dissertation Abstracts International*, 63(04), 1284A (UMI No. 3049003).
- Coutts, L. (2018). Exploring partnerships: A students as partners pedagogical approach for fostering
   student engagement within an academic music course. In *The musician's career lifespan in creative and educational spaces in the 21st century* (pp. 121–140). Proceedings from the
   22nd International Seminar of the Commission for the Education of the Professional Musician
   (CEPROM).
- <sup>526</sup> Cox, J. (2007). Curriculum design and development in higher music education. European
   <sup>527</sup> Association of Conservatoires. www.bologna-andmusic.org/curriculumdesign
- 528 Cranton, P. (1994). Understanding and promoting transformative learning: A guide for educators
   529 of adults. Jossey-Bass.
- Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, E., Potter, J., de Bezenac, C., Whyton,
   T., Himonides, E., & Welch, G. (2008). From music student to professional: The process of
   transition. *British Journal of Music Education*, 25(3), 315–331. https://doi.org/10.1017/S02650
   51708008127
- D'Alexander, Ch., & Ilari. B. (2016). La transformación social de dos estudiantes en un programa
   orquestal inspirado en El Sistema [Social transformation of two students in an orchestral El
   Sistema-inspired programme]. *Revista Internacional de Educación Musical*, 4, 76–84. https://
   doi.org/10.12967/RIEM-2016-4-p075-084
- Daniel, R., & Parkes, K. (2017). Music instrument teachers in higher education: An investigation
   of the key influences on how they teach in the studio. *International Journal of Teaching and Learning in Higher Education*, 29(1), 33–46. https://doi.org/10.1080/14613808.2015.1122750
- 541 Duffy, C. (2016). ICON: Radical professional development in the conservatoire. Arts and
- Humanities in Higher Education, 15(3–4), 376–385. https://doi.org/10.1177/474022216647385
   Falchikov, N. (2007). The place of peers in learning and assessment. In D. Boud & N. Falchikov
- Falchikov, N. (2007). The place of peers in learning and assessment. In D. Boud & N. Falchikov
   (Eds.), *Rethinking assessment in Higher Education* (pp. 128–144). Routledge.
- Gatien, G. (2009). Categories and music transmission. Action, Criticism, and Theory for Music
   *Education*, 8, 94–119. http://act.maydaygroup.org/articles/Gatien8\_2.pdf
- 547 Gaunt, H. (2005). Breathing and the oboe: A musical, educational and clinical study. In G. Odam &
- 548 N. Bannan (Eds.), *The reflective conservatoire* (pp. 33–59). Ashgate.

- Gaunt, H. (2008). One-to-one tuition in a conservatoire: The perceptions of instrumental and vocal
   teachers. *Psychology of Music*, *36*(2), 215–245. https://doi.org/10.1177/0305735607080827
- Gaunt, H. (2010). One-to-one tuition in a conservatoire: The perceptions of instrumental and vocal
   students. *Psychology of Music*, *38*(2), 178–208. https://doi.org/10.1177/0305735609339467
- Gaunt, H. (2011). Understanding the one-to-one relationship in instrumental/vocal tuition in higher
- education: Comparing student and teacher perceptions. *British Journal of Music Education*, 28(2),
   159–179. https://doi.org/10.1017/S0265051711000052
- Gaunt, H. (2013). Promoting professional and paradigm reflection amongst conservatoire teachers
   in an international community. In H. Gaunt & H. Westerlund (Eds.), *Collaborative learning in higher music education* (pp. 68–81). Ashgate.
- Gaunt, H., Creech, A., Long, M., & Hallam, S. (2012). Supporting conservatoire students towards
   professional integration: One-to-one tuition and the potential of mentoring. *Music Education Research*, 14(1), 25–43. https://doi.org/10.1080/14613808.2012.657166
- Gaunt, H., & Westerlund, H. (2013). The case for collaborative learning in higher music education.
- In H. Gaunt & H. Westerlund (Eds.), *Collaborative learning in higher music education* (pp. 1–9).
   Ashgate.
- Gilbert, D. (2016). Curious, collaborative, creativity: Applying student-centered principles to
   performing ensembles. *Music Educators Journal*, *103*(2), 27–34. https://doi.org/10.1177/002743
   2116677553
- Green, L. (2017). How popular musicians learn: A way ahead for music education. Ashgate.
- Hallam, S. (2001a). The development of expertise in young musicians: Strategy use, knowledge
   acquisition and individual diversity. *Music Education Research*, 3(1), 7–23. https://doi.org/10.
   1080/14613800020029914
- Hallam, S. (2001b). The development of metacognition in musicians: Implications for education.
   *British Journal of Music Education*, 18(1), 27–39. https://doi.org/10.1017/S0265051701000122
- Hallam, S. (2006). *Music psychology in education*. University of London.
- Harrison, S. D., Lebler, D., Carey, G. M., Hitchcock, M., & O'Bryan, J. (2013). Making music
   or making grades? Assessment practices in tertiary music ensembles. *British Journal of Music Education*, 30(1), 27–42. https://doi.org/10.1017/S0265051712000253
- Hennekam, S., & Bennett, D. (2017). Sexual harassment in the creative industries: Tolerance, culture
   and the need for change. *Gender, Work & Organization, 2*(4), 417–434. https://doi.org/10.1111/
   gwao.12176
- Jääskeläinen, T., & López-Íñiguez, G. (2017). How about equality and equity in higher music education? A theoretical framework for researching quality of music teaching and learning. In
- J. Domenech, M. C. Vicent-Vela, E.de la Poza, & D. Blázquez (Eds.), Proceedings of the 3rd
- International Conference on Higher Education Advances (HEAd'17) (pp. 775–783). Universitat
   Politècnica de València.
- Johnsson, M. C., & Hager, P. (2008). Navigating the wilderness of becoming professional. *Journal* of Workplace Learning, 20(7/8), 526–536. https://doi.org/10.1108/13665620810900346
- Jónanson, P., & Lisboa, T. (2019). Leading changes through a study on memorisation: Professional
   musicians as researchers. In J. Rowley, D. Bennett, & P. Schmidt (Eds.), *Leadership of pedagogy and curriculum in higher music education* (pp. 133–149). Routledge.
- Jørgensen, H. (2000). Student learning in higher instrumental education: Who is responsible? *British* Journal of Music Education, 17(1), 67–77. https://doi.org/10.1017/S0265051700000164
- Juuti, S., & Littleton, K. (2012). Tracing the transition from study to a contemporary creative
   working life: The trajectories of professional musicians. *Vocations and Learning*, 5(1), 5–21.
   https://doi.org/10.1007/s12186-011-9062-9
- Kallio, A. A., & Heimonen, M. (2018). A toothless tiger? Capabilities for indigenous self determination in and through Finland's extracurricular music education system. *Music Education Research*, 21(2), 150–160. https://doi.org/10.1080/14613808.2018.1545014
- 599 Kivijärvi, S., & Väkevä, L. (2020). Considering equity in applying Western standard music notation
- from a social justice standpoint: Against the notation argument. Action, Criticism, and Theory
- for Music Education, 19(1), 153–173. https://doi.org/10.22176/act19.1.153

- Klemenčič, M. (2017). From student engagement to student agency: Conceptual considerations of 602 European policies on student-centered learning in higher education. Higher Education Policy, 603 30, 69-85. https://doi.org/10.1057/s41307-016-0034 604
- Lebler, D. (2007). Student-as-master? Reflections on a learning innovation in popular music peda-605 gogy. International Journal of Music Education, 25(3), 205-221. https://doi.org/10.1177/025576 606 1407083575 607
- Lebler, D. (2008). Perspectives on assessment in the learning of music. In D. Bennett & M. Hannan 608 (Eds.), Inside, outside, downside up: Conservatoire training and musicians' work (pp. 181–193). 609 Black Swan Press. 610
- Lebler, D. (2019). Foreword: Pathways to leadership in higher music education. In J. Rowley, D. 611
- Bennett, & P. Schmidt (Eds.), Leadership of pedagogy and curriculum in higher music education 612 613 (pp. 1–9). Routledge.
- López-Íñiguez, G. (2019). Epiphonies of motivation and emotion throughout the life of a cellist 614 [Special issue on applications of Arts-Based Educational Research (ABER), Arts-Based Research 615
- (ABR), and Creative Analytical Practices (CAP)]. Action, Criticism, and Theory for Music 616 Education, 18(2), 157-189. https://doi.org/10.22176/act18.1.157 617
- López-Íñiguez, G., & Bennett, D. (2020). A lifespan perspective on multi-professional musicians: 618 Does music education prepare classical musicians for their careers? Music Education Research, 619 22(1), 1-14. https://doi.org/10.1080/14613808.2019.1703925 620
- López-Íñiguez, G., & Bennett, D. (2021). Broadening student musicians' career horizons: The 621 importance of being and becoming a learner in higher education. International Journal of Music 622 Education, 39(2), 134-150. https://doi.org/10.1177/0255761421989111 623
- López-Íñiguez, G., & Burnard, P. (2021). Towards a nuanced understanding of musicians' profes-624 sional learning pathways: What does critical reflection contribute? Research Studies in Music 625 Education. https://doi.org/10.1177/1321103X211025850 626
- López-Íñiguez, G., & Pozo, J. I. (2014a). Like teacher, like student? Conceptions of children from 627 traditional and constructive teachers regarding the teaching and learning of string instruments. 628 Cognition and Instruction, 32(3), 219-252. https://doi.org/10.1080/07370008.2014.918132 629
- López-Íñiguez, G., & Pozo, J. I. (2014b). The influence of teachers' conceptions on their students' 630 learning: Children's understanding of sheet music. British Journal of Educational Psychology, 631 84(2), 311-328. https://doi.org/10.1111/bjep.12026 632
- MacNamara, Á., Holmes, P., & Collins, D. (2006). The pathway to excellence: The role of psycho-633 logical characteristics in negotiating the challenges of musical development. British Journal of 634 Music Education, 23, 80-98. https://doi.org/10.1017/S0265051706007066 635
- MacNamara, Á., Holmes, P., & Collins, D. (2008). Negotiating transitions in musical development: 636 The role of psychological characteristics of developing excellence. Psychology of Music, 36(3), 637 335-352. https://doi.org/10.1177/0305735607086041 638
- Mayer, R. E., & Alexander, P. A. (Eds.). (2016). Handbook of research on learning and instruction. 639 Routledge. 640
- McGonigal, K. (2005). Teaching for transformation: From learning theory to teaching strategies. 641 Speaking of Teaching, 14(2), 1-4. http://www.teo-education.com/teophotos/albums/userpics/tra 642 nsformation.pdf 643
- Mezirow, J. (1997). Transformative learning: Theory to practice. New Directions for Adult and 644 Continuing Education, 74, 5-12. https://doi.org/10.1002/ace.7401 645
- Mezirow, J. (2000). Learning to think like an adult. In J. Mezirow (Ed.), Learning as transformation: 646 Critical perspectives on a theory in progress (pp. 3–33). Jossey-Bass. 647
- Mills, J. (2002). Conservatoire students' perceptions of the characteristics of effective instrumental 648 and vocal tuition. Bulletin of the Council for Research in Music Education, 153/154, 78-82. 649 https://www.jstor.org/stable/40319144 650
- Montalvo, F. T., & Torres, M. C. G. (2004). Self-regulated learning: Current and future directions. 651
- Electronic Journal of Research in Educational Psychology, 2(1), 1–34. http://www.investigacion-652 psicopedagogica.org/revista/new/english/ContadorArticulo.php?27 653

- <sup>654</sup> Musumeci, O. (2002). Hacia una educación de conservatorio humanamente compatible. *Actas de*
- la Segunda Reunión Anual de SACCoM [Towards a humanly compatible conservatory education.
- Proceedings of the second annual meeting of SACCoM]. Quilmes, Argentina. http://saccom.org.
   ar/v2016/sites/default/files/Orlando%20Musumeci%20-%20Hacia%20una%20educaci%C3%

658 B3n%20de%20conservatorio%20humanamente%20compatible.pdf

- <sup>659</sup> Musumeci, O. (2005). Audioperceptiva humanamente compatible [Humanly compatible audioper-<sup>660</sup> ception]. *Eufonía*, *34*, 44–59.
- 661 O'Neill, S. A. (2012). Becoming a music learner: Towards a theory of transformative music engage-662 ment. In G. E. McPherson & G. F. Welch (Eds.), *The Oxford handbook of music education*
- (pp. 163–186). Oxford University Press.
- Perkins, R. (2013). Learning cultures and the conservatoire: An ethnographically-informed case
- study. *Music Education Research*, 15(2), 196–213. https://doi.org/10.1080/14613808.2012. 759551
- Perkins, R., & Williamon, A. (2014). Learning to make music in older adulthood: A mixed-methods
   exploration of impacts on wellbeing. *Psychology of Music*, 42(4), 550–567. https://doi.org/10.
   1080/17482631.2018.1484219
- Persson, R. S. (2000). Survival of the fittest or the most talented? Deconstructing the myth of the
   musical maestro. *Journal of Secondary Gifted Education*, *12*(1), 25–39. https://doi.org/10.4219/
   isge-2000-638
- Pozo, J. I. (2006). La nueva cultura del aprendizaje en la sociedad del conocimiento [The new
   culture of learning in the society of knowledge]. In J. I. Pozo, N. Scheuer, M. P. Pérez Echeverría,
- M. Mateos, E. Martín, & M. de la Cruz (Eds.), *Nuevas formas de pensar la enseñanza y el aprendizaje. Las concepciones de profesores y alumnos* [New ways of contemplating teaching and learning: Teacher and student conceptions] (pp. 29–53). Graó.
- Pozo, J. I. (2008). Aprendices y maestros: la psicología cognitiva del aprendizaje [Learners and
   masters: The cognitive psychology of learning] (2nd ed.). Alianza.
- Pozo, J. I. (2016). Aprender en tiempos revueltos. La nueva ciencia del aprendizaje [Learning in
   troubled times: The new science of learning]. Alianza.
- Pozo, J. I., & Pérez Echeverria, M. P. (Eds.). (2009). *Psicología del aprendizaje universitario: de la adquisición de conocimientos a la formación de competencias* [Psychology of university
   learning: From knowledge acquisition to training in competences]. Morata.
- Pozo, J. I., Bautista, A., & Torrado, J. A. (2008). El aprendizaje y la enseñanza de la interpretación
   musical: cambiando las concepciones y las prácticas [Learning and teaching musical interpreta tion: Changing conceptions and practices]. *Cultura & Educación*, 20(1), 5–15. https://doi.org/
- 688 10.1174/113564008783781495
- Presland, C. (2005). Conservatoire student and instrumental professor: The student perspective on
   a complex relationship. *British Journal of Music Education*, 22(3), 237–248. https://doi.org/10.
   1017/S0265051705006558
- Reay, D. (2010). Identity making in schools and classrooms: The Sage handbook of identities. In
   M. Wetherell & C. T. Mohanty (Eds.), *The SAGE handbook of identities* (pp. 277–294). Sage.
- Regelski, T. A. (2006). Reconnecting music education with society. Action, Criticism & Theory for
   Music Education, 5(2), 1–20. http://act.maydaygroup.org/articles/Regelski5\_2.pdf
- Reid, A., Madeleine, A. D., Petocz, P., & Dahlgren, L. O. (2011). From expert student to novice
   professional. Springer.
- Rostvall, A. L., & West, T. (2003). Analysis of interaction and learning in instrumental teaching.
   *Music Education Research*, 5(3), 213–226. https://doi.org/10.1080/1461380032000126319
- Sarath, E., Campbell, P. S., Myers, D., Chattah, J., Higgins, L., Levine, V. L., Rudge, D., & Rice,
- T. (2014). Transforming music study from its foundations: A manifesto for progressive change in
- the undergraduate preparation of music majors. Task Force on the Undergraduate Music Major.
- Universidad de Washington, DC: College Music Society. http://mtosmt.org/issues/mto.16.22.1/
   manifesto.pdf
- Sawyer, R. K. (Ed.). (2015). The Cambridge handbook of the learning sciences. Cambridge
   University Press.

18

- <sup>707</sup> Shihabi, Z. (2017). Music education in the UK: The power of omission and the potential of aware-
- ness. In P. Burnard, V. Ross, H. J. Minors, K. Powell, T. Dragovic, & E. Mackinlay (Eds.), *Building interdisciplinary and intercultural bridges: Where practice meets research* (pp. 123–132) [Online
   book]. https://doi.org/10.17863/CAM.12138
- <sup>711</sup> Smilde, R., Page, K., & Alheit, P. (2014). While the music lasts: On music and dementia. Eburon.
- Taylor, E. W. (1998). *The theory and practice of transformative learning: A critical review*. ERIC
   Clearinghouse on Adult, Career, and Vocational Education.
- Taylor, E. W. (2007). An update of transformative learning theory: A critical review of the empirical
   research (1999–2005). *International Journal of Lifelong Education*, 26(2), 173–191. https://doi.
   org/10.1080/02601370701219475
- Tregear, P., Johansen, G., Jørgensen, H., Sloboda, J., Tulve, H., & Wistreich, R. (2016). Conservatoires in society: Institutional challenges and possibilities for change. *Arts and Humanities in Higher Education*, *15*(3–4), 276–292. https://doi.org/10.1177/1474022216647379
- Uzler, M. (1992). Research on the teaching of keyboard music. In R. Colwell (Ed.), *Handbook of research on music teaching and learning* (pp. 584–593). Schirmer Books.
- Verhagen, F., Panigada, L., & Morales, R. (2016). El Sistema Nacional de Orquestas y Coros
   Juveniles e Infantiles de Venezuela: un modelo pedagógico de inclusión social a través de la
   excelencia musical [The national system of orchestras and youth and child choirs in Venezuela:
- excelencia musical [The national system of orchestras and youth and child choirs in Venezuela:
   A pedagogic model of social inclusion through musical excellence]. *Revista Internacional de Educación Musical*, 4(1), 35–46. https://doi.org/10.12967/RIEM-2016-4-p035-046
- Virkkula, E. (2015). Informal in formal: The relationship of informal and formal learning in popular & jazz music master workshops in conservatoire. *International Journal of Music Education*, 34(2), 171–185. https://doi.org/10.1177/0255761415617924
- Walmsley, B. (2013). A reflective perspective on the challenges facing research-led teaching in
   the performing and creative arts. *Arts and Humanities in Higher Education*, *12*(2/3), 222–233.
   https://doi.org/10.1177/1474022212473944
- Yeager, D. S., & Dweck, C. (2012). Mindsets that promote resilience: When students believe that
   personal characteristics can be developed. *Educational Psychologist*, 47(4), 302–314. https://doi.
   org/10.1080/00461520.2012.722805
- Young, M. M. (2016). A national survey of university-level group piano programs. *MTNA e-Journal*, 7(3), 13–35.
- Zarzo, A. (2017). El aprendizaje por competencias en las enseñanzas musicales. Una oportunidad
   para el cambio educativo [Learning by competences in musical teaching. An opportunity for
- r40 educational change]. Música: Revista del Real Conservatorio Superior de Música de Madrid, 24,
   r41 99–126.
- Zhukov, K. (2019). Identifying skills for successful classical music careers: Implications for higher
   education studio teaching leadership. In J. Rowley, D. Bennett, & P. Schmidt (Eds.), *Leadership*
- of pedagogy and curriculum in higher music education (pp. 115–132). Routledge.
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