

Student-Centred Music Education: Principles to Improve Learning and Teaching



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1 Educational Principles That Support Student-Centred Instrumental Teaching

Please keep calm, dear reader, this book is nearly at an end, and we began it by drawing attention to the need for a profound change in instrumental music education. The first two chapters examined the reasons why this change seemed necessary and the presence of a general social awareness that instrumental teaching is currently a non-starter. Several times the book has referred to Ertmer (1999) for whom there are two types of obstacles, Type I and Type II which we interpreted as extrinsic and intrinsic in chapter “[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)”. These obstacles impede educational change and by overcoming them we could rid ourselves of this feeling of failure. Without wishing to undermine the importance of extrinsic obstacles about the way in which education in a country or a community is organised, or about conservatory environments and pathways to the teaching profession (see chapters “[Learning and Teaching Music in the Twenty-First Century](#)”, “[Teaching Music: Old Traditions and New Approaches](#)” and “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”), this book has essentially concentrated on

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the intrinsic obstacles. These involve the way in which educational intermediaries, and particularly teachers and students, perceive of learning and teaching for both music, as well as other educational contents in formal education, and consequently how educational spaces are organised for learning and teaching (see the chapters from Part I of this book). Furthermore, throughout the book and especially in Part II, alternative non-traditional ways of learning and teaching have been presented. We believe these accomplish a double mission of providing better instrumental learning and paving the way, together with many other factors, towards a change in teachers' and students' conceptions about teaching (see chapter "[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)") and the practices to be implemented in the classrooms (see chapter "[SAPEA: A System for the Analysis of Instrumental Learning and Teaching Practices](#)"). We used two tools (or restrictions as we called them in chapter "[Learning and Teaching Music in the Twenty-First Century](#)") for this project. Firstly, the book is mainly targeted at music teachers, advanced level music students and at researchers who have a passionate interest in how music is taught and learned in the classroom. We believe that the drive for educational change is specifically inherent in what goes on in the classroom, and the type of learning this may involve. Our decision to target teachers, advanced music students and researchers has led us to focus on the types of knowledge and situations which we think may interest these types of readers. This knowledge embraces how to teach and learn better and more effectively and involves another related aspect which is how we can gain more enjoyment from these learning situations. Secondly, one of the tools of analysis we have used is the enlightenment offered by psychology on how we learn and acquire knowledge of different types, because psychology has always been our working context. However, we are aware that in doing so we are ignoring several doubtlessly highly important artistic and sociological aspects which if included, would have made this a different type of book.

To summarise the material we have worked on throughout the book, we could say that student-centred education (Fung, 2018; Hallam, 1995; Hallam et al., 2009; Hultberg, 2002; Viladot et al., 2010), is none other than that which starts with the students' own traits. This implies realizing that music class activities cannot be designed without taking into account what these students already know (intuitive or embodied knowledge of music, knowledge obtained in other music classes and outside of these classes) but neither can they be removed from their musical tastes and the music they share with their friends and companions, whether this be in garages (Westerlund, 2006), concerts, or YouTube. Starting with the students' own traits also involves knowing how they learn, what learning processes need putting into practice, as explained in chapter "[The Psychology of Learning Music](#)", and what conceptions they have on what learning is and how to do it (chapter "[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)"). Lastly, it involves knowing how students really face these different learning situations, what their techniques and strategies are, their fears, their insecurities and their convictions, and how they emotionally react to their instruments.

Nevertheless, as we have also seen throughout the book, starting from these traits is not enough. All education begins with the need to help the learner, either partially

(the way they read music, their tastes, their sensations or the way they hold the instrument) or more globally and holistically with changes referring to the individuals themselves, as music students or musicians. These changes also have a direction and a purpose: learning music is facilitated by the use (or appropriation) of a musical instrument. The content of what will be learned also determines and impacts learning processes. Learning music is not the same as learning physics. Music is tied to the expression of emotions, whilst physics refers to objects. Our approach to these subjects is therefore necessarily distinct, as are our different intuitive knowledge on these objects (the sounds that express emotions or bodies falling). We need to add to this list of factors relating to student-centred learning—again with its double connotation of significance and the emotional dimension of that activity—that students study music with very different goals in mind. They may wish to be a music professional, either interpreting music, teaching it or exercising any other profession related to musical content. Learner-guided teaching therefore also means contemplating the different reasons why music is studied and the need to develop a curriculum which promotes the necessary skills and expertise for these different objectives, including those connected to professional development.

An analysis of the traditional conservatory teaching approaches (see chapter “[Teaching Music: Old Traditions and New Approaches](#)”) suggests that the majority of factors and characteristics we have just referred to are not normally considered. The chapters in Part II of this book demonstrated that the teaching of the different aspects of music is far from learner-centred. They also showed there are alternative ways to teach and learn which, as we shall see, take some aspects of learning and teaching into informal contexts, but also add emphasis on more constructivist and restructuring learning processes. Student-centred education does not imply undermining the teachers’ role, but instead broadening and changing it. The student cannot be just surrendered to the music, or simply exposed to it, as occurs in some informal contexts. The idea is to design activities which may change the way they approach music, beginning with that embodied intuitive musicality mentioned so often previously, which helps them to feel and experience the more standard musical forms but impedes participation in more complex forms. This is similar to intuitive physics which is there to move us and move the objects in the everyday world but not to understand the underlying principles to those movements and even less to produce cultural or technological devices capable of moving around in the real world (Pozo & Gómez Crespo, 1998). The idea is therefore to start with the student, to place them at the centre of educational processes but with the aim being to modify his or her forms of feeling, living, knowing, interpreting and enjoying music. In reality, the purpose is not so much to help the learner by stopping him or her liking funk and beginning to enjoy a repertoire of baroque or romanticism as to expand their repertoire of knowledge. Constructivist learning processes (chapter “[The Psychology of Learning Music](#)”) lead not only to accumulative but also restructuring results. Previous learning is not forgotten or immobile. The tunes which previously got your body into dance mode may still do so. Similarly your football team’s anthem still affects you and you want to cry when you hear it either after you’ve won a match or after you’ve lost one. Just like the case of the children in chapter “[Early Initiation to Music Learning:](#)

[Little Children Are Musicians Too](#)” we continue using musical parameters which communicate these emotions. However, this knowledge should be modified during teaching so that it can be applied to an instrument, expanding and engaging to create and feel emotion about other types of music.

In chapter [“How Teachers and Students Envisage Music Education: Towards Changing Mentalities”](#) we saw that changing educational concepts is guided by a series of processes which included progressive clarification of intuitive or embodied knowledge about music. This clarification, which involves realising which resources are normally being used to manage sounds or how learning itself is taking place (numerous examples of which were given in Part II of the book), along with the acquisition of other knowledge, enables intuitions to take on other formats (for example, musical scores), which in turn helps to drive theoretical modifications and changes that restructure intuitive knowledge. In other words, interpreting intuitive knowledge through other formats modifies and reorganises that knowledge, or combines it hierarchically with the new knowledge learned. This same process of change also comes into play when music is learned. Clarification is impossible without help or competition from others, in this case teachers, who should design activities so that students increase this awareness and simultaneously develop metacognitive processes, progressively taking control of what they have learned and how they have learned it (Pozo, 2014; Weimer, 2012).

With music, prior knowledge is essentially embodied, i.e., knowledge about the body itself and in the body itself, which helps us to manage sounds so as to cause an emotional impact on the listener, as occurred in the telephone example given in chapter [“Instrument Mastery Through Expression: The Learning of Instrumental Technique”](#). As with informal situations, this embodied knowledge is what gives learning meaning and lets the teacher or the teaching situation take its first steps towards its own modification so that the student can clarify, modify and hierarchically integrate his or her own knowledge. But teaching has to offer its students spaces designed to solve problems to help them develop their personal and artistic identity and their learning skills and, above all, develop their identity as a music learner throughout their life (see further on in this chapter). This will help them adapt to new situations, depending on what demands for change future societies have. Also, this emphasis on learning forces them to modify spaces and learning and teaching activities, setting up more fruitful and more diverse scenarios (see chapters [“Learning and Teaching Music in the Twenty-First Century”](#) and [“Teaching Music: Old Traditions and New Approaches”](#)). In doing so, challenges arise and problems to resolve are pursued. Music learning is then approached through exploration, structure, supportive learning and collaboration (Carey et al., 2013) among peers and between teachers and students.

As we saw in chapters [“How Teachers and Students Envisage Music Education: Towards Changing Mentalities”](#) and [“How to Know and Analyse Conceptions on Learning and Teaching”](#), changes in pedagogic practices are not at all easy for teachers (Baker, 2006; Jørgensen, 2001) or students. Although several authors state that today’s so-called “Generation X” students reject traditional teaching methods focused on the teacher and on the class contents, as described in chapters [“Learning](#)

and Teaching Music in the Twenty-First Century”, “Teaching Music: Old Traditions and New Approaches” and “Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century” (see also Barnett & Coate, 2005; Garrison & Akyol, 2009), others consider that it is precisely their “consumer” notions on education (Healey et al., 2016; Pauli et al., 2016) which preclude them from being proactive in their learning processes (Entwistle, 2009). Our outlook in this book is to explain this problem in view of studies on students’ notions of learning, which are very similar to their teachers’ notions (see chapters “How Teachers and Students Envisage Music Education: Towards Changing Mentalities” and “The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning”), and which are extremely difficult, albeit not impossible, to change in both cases. Most of the chapters in Part II of the book deal with this. We may hope that the change in these conceptions will occur simultaneously in teachers and students (e.g., Martín & Cervi, 2006; Mateos & Pérez Echeverría, 2006). For this to occur modification of teacher professional development and education is crucial (see chapter “Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century”). These changes are unquestionably linked to a progressive modification of learning and teaching practices, as will be shown in the following section.

1.1 Guidelines for Music Learning as a Personal Search for Meanings

As previously stated, one essential issue that needs changing in music classes is to understand that to learn, the focus must be placed on the student. The educational content, instrumental music and the student’s individual characteristics are also salient. In all the previous chapters, and particularly in Part II, our intention has been to show what a teacher can do to focus teaching on the students. We will now summarize the applied and contextualised principles from those chapters. It is not a question of creating a recipe book with instructions on what should be done. Points of interest repeated throughout the book referring to specific contexts or situations will be highlighted:

- **We should start from the premise of what the students know, from their prior knowledge, both explicit and implicit.** For Ausubel et al. (1978), the most important principle of all education was to begin with the learners’ knowledge. Chapter “Early Initiation to Music Learning: Little Children Are Musicians Too” showed how very small children already have intuitive knowledge on the parameters which convey expressiveness in music. Working from this and other knowledge is, as we have previously demonstrated (and may also be seen in chapter “The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning” with small children and in chapters “Instrument Mastery Through Expression: The Learning of Instrumental Technique” and “Learning Music Through ICT” with

older students), the only way of finding a meaning from the different teaching situations. It is also the driving force for developing authentic experiences to activate or respond to these previous embodied and implicit learnings, or for those which are within their *zone of proximal development* (Vygotsky, 1978; also see chapter “[The Psychology of Learning Music](#)”). A certain idea or procedure, even an attitude, only makes sense and is significant when the students possess the necessary means of interpreting it. Change is only possible from that interpretation.

- **Classrooms have to be regarded as *problem-solving spaces*, with a problem being understood as a situation somebody wants or needs to resolve** (e.g., Pérez Echeverría & Pozo, 1994). In this sense, being able to arrange one’s body to obtain the desired sound or reproducing the musical scale in a specific instrument could be conceived as a problem when it responds to the student’s needs. In chapters “[Early Initiation to Music Learning: Little Children Are Musicians Too](#)”, “[Instrument Mastery Through Expression: The Learning of Instrumental Technique](#)” and “[Learning Music by Composing: Redescribing Expressive Goals on Writing Them](#)” we saw how the teachers used the need to take an action (make the doll go to sleep), express a certain emotion, or create a story or song (three different problems) to provide meaning to the musical scores (also see chapter “[Reading Music: The Use of Scores in Music Learning and Teaching](#)”), and to the technical and bodily knowledge needed to play the instrument.
- **An activity becomes a problem when it has a purpose or a direction at which to aim and a medium is created to resolve it.** When this problem becomes routine, it stops being a problem and becomes an exercise. As such, *a problem always begins with a situation where there is a conflict* of greater or lesser import (in line with D’Angelo et al., 2009) or where the thoughts and actions and presumptions of the students (and teachers) are challenged. Problems and conflicts always start from personal interest and from known and new differences, as may be seen in chapter “[Instrument Mastery Through Expression: The Learning of Instrumental Technique](#)” when the students are asked to play the same musical score expressing different emotions.
- **Working at problem-solving also means working with the student’s *creative processes in several different ways*.** On the one hand, it encourages the search for solutions through processes that are new to the student. Thus, *activity objectives should be shared* by teachers and students. In the two chapters mentioned above (“[Instrument Mastery Through Expression: The Learning of Instrumental Technique](#)” and “[Learning Music by Composing: Redescribing Expressive Goals on Writing Them](#)”) we saw that teachers and students were searching for the same things. They agreed about what they were searching for—the expression or creation of a story-song—, which helped them value the mediums used—the musical score, postural control—as being more or less appropriate and to modify and innovate the use of these mediums whenever necessary. In chapter “[The Choir Conductor: Interpreter or Maestro?](#)” we saw that during the classes of the constructivist teacher there was much more dialogue than in the classes of the direct teacher and that this dialogue fostered the establishment of common aims for singing “prepositions”, whilst the language of the more traditional teacher aimed

at the students meeting objectives (those of the head teacher). Several examples of this type also appeared in chapter “[From Individual Learning to Cooperative Learning](#)” which clearly pointed out the differences between working in a group and working through cooperation and that cooperation begins with these common objectives, either between teacher and students or between the students. On the other hand, processes leading to innovation through the creation of songs, improvisation, technological arrangements and usage, and through regulatory processes in the arts, such as dance, song or movement, are conceived as problem-solving processes (e.g., Brinkman, 2011; Burnard & Younker, 2004; DeLorenzo, 1989).

- **Establishing objectives and assessing the mediums used requires that the student becomes aware of how to use these mediums and this often demands making the procedures and knowledge explicit.** In chapter “[Learning Music Through ICT](#)” we saw how the use of technologies (recording videos and giving explanations through WhatsApp) helped this clarification and subsequent awareness raising. The teacher of the constructivist choir in chapter “[The Choir Conductor: Interpreter or Maestro?](#)” also provided clarification using dialogue between the students with one another, guiding this dialogue towards awareness of the resources used by the students in each case. Feedback provided by the teacher with this model did not focus on telling the students what actions were good or bad (what the more traditional teacher in chapter “[The Choir Conductor: Interpreter or Maestro?](#)” did or the *Tuba* with the invisible baton of the first example of chapter “[From Individual Learning to Cooperative Learning](#)”), but rather on guiding dialogue so that the student became aware for him or herself, which is what the constructivist teacher in chapter “[The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning](#)” also does. Questions about “why” something is done in a certain manner and “how” it could be done differently, using an appropriate language to avoid pressure and tensions (Dweck, 2007; Green, 1986), may be another form of guiding towards clarification and awareness raising. There are explanations of this type in chapter “[Reading Music: The Use of Scores in Music Learning and Teaching](#)”, in the dialogues between teachers and students about understanding certain symbols (*f*, *mf*) of the musical score, or knowing how to interpret a musical style.
- **Working with errors is another tool for dealing with clarification and feedback.** Errors provide information on the student’s type of comprehension, and on their intuitive ideas or ones they previously had. They are also an opportunity for joint reflection. In fact, immediately stopping a student when they make an error should not be the teacher’s first option, because it reduces the student’s ability to think for themselves, and sends out a critical message that undermines them and induces resistance to feedback (Lerman & Borstel, 2003). Furthermore, this feedback should always be specific if it is to be of use to the student (Biggs & Tang, 2011; Sadler, 1989; also see chapter “[Learning Music Through ICT](#)”). As stated in chapter “[Learning Music by Composing: Redescribing Expressive Goals on Writing Them](#)”, when the objective of the music is expressive, the only possible error is not to express what one desires, and when the student becomes aware of that error, it is the starting point to reconstruct musical knowledge itself.

- At the same time, **this clarification and awareness raising helps the students *toprogressively take control* and develop the *metacognitive processes* they need so as to be the architect of their own learning, to develop learning strategies and address conceptual processes of change.** This leading role played by the students (through self-management, initiative, critical reflection, learning to learn, etc.) will be greater the more plentiful the musicality models offered. For this, the student has to travel further than the classrooms (concerts, cultural activities, etc.) to observe and participate in a variety of aesthetic experiences which stimulate and enrich their interests and achievements in the arts (see chapters “[The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning](#)”, “[Learning Music by Composing: Redescribing Expressive Goals on Writing Them](#)” and “[Learning Music Through ICT](#)”).
- Moreover, **although the majority of interpretation classes are dyadic, a large part of the learning and teaching processes previously described could be offered in collective class where *cooperative work* is fostered with classmates, with peers.** As we saw throughout chapter “[From Individual Learning to Cooperative Learning](#)”, or in the WhatsApp messages of the chamber musicians in chapter “[Learning Music Through ICT](#)”, regulatory processes and awareness raising become easier when one is surrounded by companions who both help with these processes and also offer different perspectives. Chapter “[Learning Outside the Music Classroom: From Informal to Formal Learning as Musical Learning Cultures](#)” also shows several examples of this type of references by flamenco and jazz musicians. This work also helps to provide opportunities for solo or group interpretation. Working in a group is not enough, as chapter “[From Individual Learning to Cooperative Learning](#)” shows. For group work to become cooperative, learning in joint cooperative activity is required.
- **The most important aim of instrumental education is being able to communicate musically, and connect with your audience, developing interpersonal skills which can only be had by *working in groups and for groups*.** As a result, a multidimensional environment/context needs to be established for conversation and interaction, similar to that seen in the informal teaching mentioned in chapter “[Learning and Teaching Music in the Twenty-First Century](#)”, and to organize the classes and materials around these objectives.
- As observed in several chapters (e.g., “[Reading Music: The Use of Scores in Music Learning and Teaching](#)”, “[The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning](#)”, “[Instrument Mastery Through Expression: The Learning of Instrumental Technique](#)” and “[Learning Music by Composing: Redescribing Expressive Goals on Writing Them](#)”), **motivation with this model is linked to the sensation of learning and progression and to the search for a musical learning aim.** If the problems proposed are *authentic* in the dual sense of being *student problems and relevant problems* regarding music and musical interpretation, the student’s purpose is intrinsic and connected to resolving these musical problems.
- **All of the processes we have just described change the meaning of *evaluation*, for both teacher and student,** as shown in chapter “[Re-thinking How to Assess](#)

Students of Musical Instruments". This includes the *initial evaluation* where the knowledge of the teacher was sought and the *evaluation of progress* at the different learning stages. In this model, evaluation and accreditation have different goals although they should be interlinked. Formative evaluation becomes part of the process of learning and teaching and is not the final purpose of that process. This optimises learning.

- **Evaluation practices should therefore be understood as tools of self-analysis rather than tools for giving out marks, scores or numbers.** Evaluation should be more interlinked with learning and teaching that emphasizes the results of learning (formative evaluation). This would be easier if during the actual learning process one also learned how learning and teaching could be *evaluated collaboratively* amongst colleagues and students. However, as shown in chapters "[Re-thinking How to Assess Students of Musical Instruments](#)" and "[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)", collaboration between teachers, sharing rubrics and forms of assessment would provide students with common criteria which could doubtlessly help in this self-analysis.
- **Teachers should therefore *critically reassess the role of musical education access systems and exams, including giving a score to interpretation exams, tests with scores of any type, music competitions or contests, or awards where the aim is to motivate the students from outside*** (more detail in chapters "[Re-thinking How to Assess Students of Musical Instruments](#)" and "[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)"). Instead, musical production spaces would be useful where goals were communicative and collaborative, with autonomy and self-regulation. So too would the creation of activities to promote composing and generating music to accompany other activities, etc.
- **All these constructivist processes should necessarily be accompanied by *more repetitive learning processes, aimed at learning and automation techniques***, as shown in chapter "[The Psychology of Learning Music](#)". When these more repetitive processes are shared-goal orientated and the student is aware of this, they make sense. They stop being visionless and form part of a process in which a wide variety of methods and strategies are used. Practicing is not just to repeat, it is for exploring variations or forms which inevitably involve repeating known sequences. However, these processes will always be surpassed by more constructivist processes and become a means not an end.

1.2 Guidelines for Promoting Deliberate Changes in Teaching Practices

As we saw in chapter "[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)", the processes from the previous section demanded both a different perception from the learner and

enforced changes on the teacher, their vision of themselves and their work. Similarly to the previous section we would like to highlight the principles and activities driving these changes and which have been referred to in the different chapters:

- **It is important to reflect on *teaching experience* with consideration of what teaching ideas are actually held and what practices are actually carried out.** Similarly to the students, teachers need individual reflection, but cooperative reflection with other teachers promotes both clarification and the development of alternatives. As we saw in several chapters (“[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)”, “[How to Know and Analyse Conceptions on Learning and Teaching](#)”, “[SAPEA: A System for the Analysis of Instrumental Learning and Teaching Practices](#)”, “[The Impact of Teaching Conceptions and Practices in Early Musical Instrument Learning](#)”) and possibly due to changes in professional development and education, new teachers may have more novel and complex pedagogic ideas, which are closer to the constructivist tendencies in the latest educational reforms, but they also have fewer strategies or experiences for putting these ideas into practice. Collaboration between teachers with different experiences is therefore highly useful. The different continuous professional development courses may also be a place to foster this reflection. More experienced teachers should also attend these courses because they promote a large range of strategies and innovative pedagogical approaches (López-Íñiguez et al., 2014; Torrado & Pozo, 2006; also chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”). Here again, regulatory and awareness raising processes are much easier to trigger when one is surrounded by companions who both help with them and also propose other outlooks (see chapter “[How to Know and Analyse Conceptions on Learning and Teaching](#)”).
- **There is a need to undertake *research in the classroom* and read current research on the different aspects affecting the learning and teaching of music** (musical pedagogy, educational psychology of music centered on new musical learning and teaching approaches, enriching teaching experiences), **and document their practices and thoughts, which means dedicating time to critically reflect on research, teaching practice, and pedagogic ideas.** These practices would be more worthwhile if they were employed within collaborative groups than if they were individual, as we saw in the previous paragraph (see also chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”).
- **Exchange knowledge and experiences with colleagues and experts in pedagogy in cooperative and reflexive situations of learning to become a reflective practitioner** (Marchesi & Martín, 2014; Schön, 1987) and thus seek opportunities to observe different practices of teaching and offer companions the chance to observe them to be able to develop *reflexive teaching strategies* (see chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”).

- **Reflect on or design instrumental teaching methods which highlight the principles described in this section and analyze teaching practice itself.** Class recordings that can be analyzed afterwards may be useful here (chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”). For this SAPEA may be used (a system for the analysis of music learning and teaching practices) as described in detail in chapter “[SAPEA: A System for the Analysis of Instrumental Learning and Teaching Practices](#)”.

1.3 Developing Musicians’ Identity as Learners

Throughout this book and as summarized in this chapter, our purpose has been to illustrate the changes we believe should be introduced into learning and teaching processes, and which should involve students and teachers respectively. However, music teaching cannot be modified by these necessary changes alone. It was not the aim of this book to deal with institutional changes but in chapter “[Learning and Teaching Music in the Twenty-First Century](#)” we noted that there is a clear division between the study of instrumental music in educational institutions and genuine practice in the professional world. This divide begs an in-depth revision of these institutions with their hermetic music classrooms and the welcoming of this professional practice, together with the twenty-first century’s huge array of music production and listening scenarios. Several chapters dealt with how educational institutions and the staff in charge of teaching in them have not yet adapted their practices to a multidisciplinary vision which encompasses the expression, innovation, technical mastery and declarative knowledge required for learning an instrument (Sarath et al., 2014), all upheld from a student-centred focus. With regard to the differentiation between associative and constructivist learning processes (chapter “[The Psychology of Learning Music](#)”), and the differences between implicit and explicit cognition (chapters “[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)”, “[How to Know and Analyse Conceptions on Learning and Teaching](#)” and “[SAPEA: A System for the Analysis of Instrumental Learning and Teaching Practices](#)”), we have tried to point out the existing differences between more traditional forms of teaching and those which focus on the student. Our conviction is that with this focus, music students will not only learn an instrument and convey expressiveness and emotions, but will also become the managers of their own learning, mastering above the art of learning to learn. These changes are only possible when the teachers, as shown in chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”, have been capable of making changes to their own ideas about what learning and teaching is (chapters “[How Teachers and Students Envisage Music Education: Towards Changing Mentalities](#)” and “[How to Know and Analyse Conceptions on Learning and Teaching](#)”). This requires a different approach to teacher training, addressing the same processes mentioned above in the case of the students, as well as the need for insight and

investigation on learning and teaching methods offered by continuous professional development, classroom research and the creation of teacher groups capable of analyzing and discussing their professional business (see chapter “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”).

We insist, however, that it is not sufficient to change how music is taught and learned and how teachers are trained. As shown in chapter “[Learning and Teaching Music in the Twenty-First Century](#)” and reflected in studies and statements by a large number of music teaching associations, a paradigmatic change is required in the education of musicians. Much greater emphasis needs to be placed on factors such as all-round education, the social function of music, or revolutionary learner-centred pedagogies. However, as discussed in chapters “[Learning and Teaching Music in the Twenty-First Century](#)”, “[Teaching Music: Old Traditions and New Approaches](#)” and “[Instrumentalist Teacher Training: Fostering the Change Towards Student-Centered Practices in the Twenty-First Century](#)”, for this to occur music education centres need to foster spaces of reflection and the development of critical thinking for future musicians so that they can develop their identities as interpreters and will be capable of composing, innovating and developing as teachers or for other professions a musician can hold. In chapter “[Learning and Teaching Music in the Twenty-First Century](#)” we also saw that all of this is impossible if there are no spaces for working in a group. These spaces need to be represented by students, teachers, musicians from different professions and also the people responsible for political and curricular decisions, as well as specialists in psychology. In that same chapter, we briefly introduced the idea that one of the ways of addressing the multidisciplinary of learning and teaching was the development of the *learner identity in the students*, which is the central identity in any educational situation, but also on professional levels (Larsen, 2017). This multidisciplinary would include the interests and motivations of the students and their psychological processes, the necessary conditions for learning to produce holistic, inclusive results and simultaneously respond to the professional demands of the job market of a specific culture. In other words, the idea is to help build up knowledge relating to who we are (Coll & Falsafi, 2010; Monereo & Pozo, 2011), and also to what one “does not have and is not” (Reay, 2010, p. 2)—what one wishes to be and what one still needs in order to obtain one’s objectives and dreams that constantly change. All of this will affect the preparation for different professional roles a musician adopts during his or her life. However, there are many other aspects also inherent in the development of musicians, such as knowledge about employability (see chapter “[Learning and Teaching Music in the Twenty-First Century](#)”), artistic and expressive agency (Kondo, 2019; Kondo & Wiggins, 2019), creativity (e.g., Clarke, 2012), or conceptual and historical issues about the repertoire canon. It is therefore a matter of going beyond the “training” of a virtuoso, who has been trained as a soloist, and to understand the toing and froing between several roles of the same person (see *multiple-selves* by Monereo & Badía, 2011 or the cognitive plurality of the “I” in Pozo, 2011). Managing all of this essentially requires addressing the relationships between cognition (*what I think*), behaviour (*what I do*) and a person’s emotion (*what I feel*) (e.g., McPherson et al., 2017), with regard to

oneself (individual dimension, intrapsychological process) and other people (social dimension, interpsychological process). The role musicians play in society and in each individual culture is important too, as is learning from informal spaces, learning about the inclusive function music has within groups of different urban tribes, and the changes in musical repertoire that move and touch the entire diversity of the world's inhabitants. Above all, we need to understand that educating musicians does not mean "training" cultural elites who produce works that by their very nature only a few people can afford to interpret or listen to. Throughout this book we have continuously advocated for conservatories not just to mould *rara avis*, but to train musicians who are integrated into the culture and fabric of society and who genuinely enjoy what they do and the processes they have gone through to get there.

As stated in the long-forgotten chapter "[Learning and Teaching Music in the Twenty-First Century](#)", the education of musicians should not be removed from the ways in which music is experienced and felt in a society. Since these ways change, musical education must also change in response to demand. We know that no society or culture can exist without music. For some strange reason our species cannot have a social life without music. In all societies, both on a personal and group level, melodies and organised sounds are needed. We use them to synchronise our emotions: our images and actions converge but they also mutate and become personalised. If we wish to respond at one and the same time to the cultural universality and diversity that characterizes music, twenty-first century societies need melodies that stop making us feel the same in standard globalization productions and start making us feel the diversity that exists amongst us and deep inside each one of us.

Our society needs highly self-aware musicians, who construct their new, multi-faceted identities and who, through their music, help everyone and society at large to get to know themselves better and to multiply their identities and sensibilities. Music which enriches us instead of belittling, dividing or excluding us, is multifarious and inclusive. To achieve it we need musicians who retain their own cultural history but at the same time dare to explore new identities and new ways of making music, and who enjoy learning and being learners all their lives, with each new day discovering the pleasure of continuing to learn, surprising themselves and us with their music.

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