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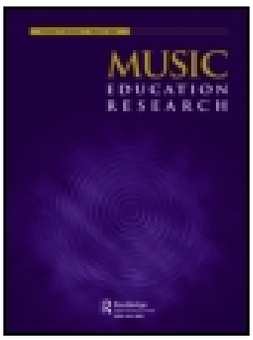

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Creative pedagogies in the time of pandemic: a case study with conservatory students

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ABSTRACT

The present paper reports data from an original qualitative study that investigates how music students reacted to novel remote teaching strategies that emerged during the COVID-19 pandemic. A population of twenty learners enrolled at an Italian conservatory responded to an open-ended survey, verbalising their recent learning experiences concerning three complementary aspects of their everyday practice: (i) how efficiently new remote education settings were implemented, (ii) what novel musical activities have been creatively developed with the help of technology, and (iii) how peer interaction was transformed by the lockdown period. By providing concrete examples, our participants offered insights into the benefits, challenges, and transformations this sudden pedagogical change has produced. Our findings show how different approaches to rehearsal and time management have emerged, in turn impacting on how students prioritise short-term and long-term goals, enhance their creative potential, and establish and renew interactions with peers.

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COVID-19; music student; online learning; creativity; music technology

At the beginning of 2020, the world rapidly changed due to the COVID-19 pandemic. The outbreak produced a significant shock for public health organisations, administrations in private and public sectors, businesses, pedagogical systems, and citizens for most countries. A large majority of governments introduced restrictions to face the immediate threat the spread of the virus entailed. This impacted human behaviour in multiple ways; for instance, many countries promulgated emergency measures that included limitation of free movements and interpersonal contact, producing substantial social stress in a variety of contexts – from everyday interaction to school organisation. Because of these changes, arguably more people than ever currently work, teach, communicate, and learn remotely (Antonini et al. 2020). But while there is already a rich literature highlighting the advantages and drawbacks this type of settings provides for work and social interaction in different sectors, its impact on music education remains to be explored in greater detail. In other words, because much music teaching was delivered in a new way during the lockdown period, broader changes in the students' learning experience were expected.

With this in mind, the present research aims to provide qualitative-based examples and insights into how the pandemic might have re-shaped various aspects of our music pedagogy landscape. To do so, we asked a total of 20 students from an Italian music conservatory to reflect upon, verbalise, and communicate the concerns, thoughts, beliefs, and perspectives they

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developed as their educational experience suddenly switched from face-to-face tuition to remote lessons. We recruited students from an Italian institution, as Italy was one of the most significantly impacted countries by the virus and one of the first to systematically implement considerable pedagogical changes.

Because it has been suggested that 'the advent of digital technology in the early 1980s marks the beginning of what is the most fundamental change in the history of Western Music since the invention of music notation in the ninth century' (Taylor 2001, 3; quoted in Crow 2006), it is of major importance to gain critical insights into how technologies might have transformed the students' musical experiences during the COVID-19 pandemic. We were particularly interested in understanding how efficiently novel remote education settings were implemented; what kind of impact these new methods had on the students' creativity; and if (and how) habits of collaboration among students were transformed by new, technology-enhanced teaching methods.

Commonly defined as the capacity to generate novel and valuable outputs (artefacts, ideas, products), creativity is now considered as a necessity rather than a luxury (Glăveanu and Kaufman 2019). As Simonton (2004) notes, it is thus not surprising that its study has grown exponentially in the last 70 years, gaining a legitimate status of scientific inquiry. In music, recent work on this topic has increasingly focused on creative practices – such as collective improvisation – where music-makers are most of times physically present to each other (e.g. Borgo 2005). This research offers fascinating insights that resonate with broader theories in creative cognition interested in how co-actors develop creative outcomes in the moment-to-moment process of their reciprocal interaction (Sawyer 2003). Here, the synergies that interpersonal couplings bring forth are studied as forms of continuous dialogues, which decentre the focus on individual activity; rather, participation and collaboration are seen as the locus of creative action, thereby orientating thoughts and behaviour toward novel solutions, strategies, and outcomes.

Contributions with a more specific focus on music education have further extended these insights to examine how different technological resources can help music students cultivate their creative potential in a variety of ways (Burnard 2007; Watson 2011). Among others, one can consider the *Music Paint Machine*, an innovative system designed to enhance musical learning by letting performers realise digital paintings through the movements necessary to make music. Nijs and Leman (2014) suggest that tools such as the Music Paint Machine can be particularly useful to foster skill acquisition and critical thinking on the basis of the learner's personal interests, at the same time stimulating collaboration and dialogue with peers. In a similar vein, it has been argued that technology-enhanced settings can augment one's creativity by stimulating online interaction and mutual discovery (Yalcinalp and Avcı 2019), as well as promoting divergent and convergent thinking (Hickey and Webster 2001; Webster 1990). Internet-based tools for joint learning have been studied across different educational fields for both teachers and students (Milner-Bolotin 2018), and 'e-learning, has become an important part of today's society, which consists of a wide variety of approaches to digitization, components and delivery methods' (Lee, Abdullah, and Kiu 2016, 97).

But as technologies evolve, new practical challenges for students and teachers may emerge. Students may need to creatively use these resources inside and outside of the classroom, optimising their learning by navigating different possibilities and settings in original and effective ways. Similarly, educators are asked to maintain high professional standards while adapting to new teaching formats and tools. As we will see later on, students and teachers may face some problems when changes between settings must occur suddenly. Indeed, the (fast) implementation of technology in educational contexts is not an easy task, particularly when considering differences in economic, social, and cultural backgrounds (Creech 2019). The present research provides concrete examples of the range of difficulties and positive outcomes experienced by learners when technologies are used creatively for learning music remotely, and how these are implemented in exceptional educational contexts, such as those stemming from the COVID-19 pandemic.

Methods

A population of conservatory students was asked to reflect upon, verbalise, and share their more recent learning experiences – those that emerged during the lockdown period. A similar methodology based on written reflections was recently adopted in studies exploring the wide range of preoccupations music teachers and students developed when engaging in individual and collective instrumental tuitions (Schiavio et al. 2019a, 2020). This approach has the advantage to give respondents more time to think about their answers, provide clarification, offer extensive examples where necessary, and articulate their consideration with precision.

Participants

A total of 20 students (7 women, 13 men) currently enrolled in an Italian music conservatory, took part in the study. Their age ranged between 21 and 56 years, with an average of 31.50 ($SD = 9.29$). Their main instruments were guitar ($n = 2$), piano ($n = 2$) violin ($n = 1$), viola ($n = 1$) organ ($n = 1$) drums ($n = 3$), bass guitar ($n = 3$), double bass ($n = 1$) and voice ($n = 6$). Participation in the study was voluntary and respondents received no payment, credits, or financial reward. Participants were recruited by MB after an announcement was circulated during one of the online-courses they were taking. Because the latter was a collective theory course, the sample included students with various background and expertise, whose musical instrument teachers might have adopted different pedagogical strategies to implement online classes. This ensured enough variability within the context in which data were generated. The study was carried out in accordance with the Declaration of Helsinki and the Code of Ethics and Conduct of the British Psychological Society. All participants were informed about the anonymization of the data, and about each procedural step of the research, from data collection to analysis and publication. Ethical approval for the recruitment of questionnaire respondents was granted by the Research Ethics Committee of the University of Graz.

Materials and procedure

The research team designed an open-ended questionnaire focused on a variety of interrelated dimensions of musical learning that may be impacted by the current lockdown measures. Example of questions include: 'How have the COVID-19 lockdown measures influenced your ability to collaborate with other students?'; 'Did you encounter difficulties in adapting to these novel teaching settings? Which ones?'; 'The COVID-19 lockdown measures have transformed face-to-face instrumental music teaching into other modalities. Could you please describe your experience?' The instrument comprised a total of 13 items to which participants were instructed to respond to discursively and without word limits. The questionnaire (in Italian) was circulated via email, and respondents were encouraged to offer concrete examples to illustrate their experiences and provide a detailed account of their perspective, thoughts, beliefs, and feelings, before sending it back to the research team via email. All written reports were then anonymised, translated into English, and organised for the subsequent analysis (i.e. they were merged into one Word document).

Data analysis

The content analysis began with a thorough immersion phase, in which all researchers gained familiarity with the richness of the data and the range of meanings they described. The material was then segmented into single-item quotes, and emerging patterns were determined following a grounded theory approach. As a process open to a suite of different solutions, the systematization of quotes into thematic areas was discussed by the authors, and substantive codes were generated directly from the data. The codes were (i) *missing opportunities*, (ii) *benefits*, (iii) *novelty seeking,* (iv) *improving performance*, (v) *the need for collaboration*, and (vi) *rediscovering interactions*. The codes

were then collapsed into three macro-categories: *implementation* (codes i and ii); *creative learning* (codes iii and iv); and *peer-interaction* (codes v and vi). The analysis ended with the interpretation of the results, which entailed dialogue and constructive mutual feedback between research team members. Figure 1 depicts the analytical process, and presents codes and macro-categories; Table 1 provides a short description for each code.

Findings

Here, we report written accounts of experiences associated with the implementation of new teaching methods, the emerging forms of creative learning supported by technology, and the transformation of peer collaboration, as described by our participants. To guarantee anonymity, all respondents are assigned the letter P and different numbers (i.e. 1-20).

Implementation

Missing opportunities: Many conservatoires and music schools around the world have shown major effort in transforming and renewing their teaching offer rapidly. Yet, the sudden pedagogical change caused by the Coronavirus crisis led to concerns and organisational problems. As one participant admits:

> "Since no one was waiting for this to happen we couldn't prepare ourselves with good recording devices and faster internet connections and this made the adaptation much harder. And by "we" I mean both students and professors. For instrument lessons this is quite important, since the teacher has to listen to details and sometimes it is just not possible". (P.5)

This is acknowledged by another participant, who draws a distinction between instrumental and theoretical lessons:

> "In our conservatoire, online courses for both musical instrument and other theoretical disciplines have now been offered. My instrument teacher decided he will not teach 'live', through the internet; instead, he has been recording videos where he explains different aspects [of the pieces we are learning]. Also, my 'arrangement' teacher adopted this teaching method. Sincerely, I find the latter more efficient than the former, because I can re-watch the video how many times I want when I need to. For instrumental learning, instead, I find the online lesson [via Zoom, or Skype] more useful". (P.8)

An additional issue might arise when there is a lack of uniformity in providing a coherent teaching offer. Indeed, 'there have been some teachers who literally refused to start a new course with the

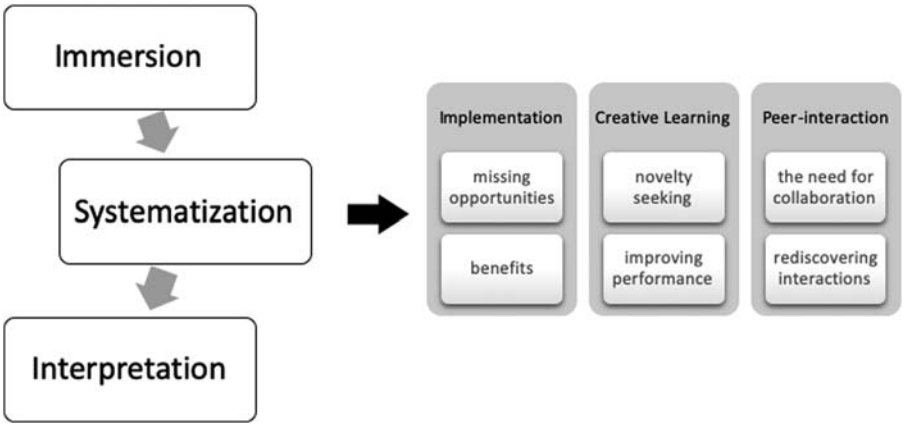

Figure 1. Analytical phases and generation of codes and macro-categories.

Table 1. Overview of codes and macro-categories.

1. Implementation: How did the teaching offer change during the lockdown period?	
(i) Missing opportunities	What aspects of remote musical learning can be improved?
(ii) Benefits	What are the main advantages of a technology-enhanced music education?
2. Creative learning: What original and useful modes of learning emerged in this changing educational landscape?	
(iii) Novelty seeking	How to actively develop new creative ways of learning music?
(iv) Improving performance	In what ways can musical skills improve in such context?
3. Peer-interaction: How did online learning change students' interactions and communication?	
(v) The need for collaboration	How did students remain in touch with their peers without physical presence?
(vi) Rediscovering interactions	Did the lockdown period help rethink the value of peer-interaction?

tools that have been provided by their institutions' (P.17). This can be highly stressful for students, particularly when teachers do not communicate their intentions, or plans, to carry on with the planned programme. The following quote highlights again differences in the use of technology:

> "I have found important differences with regard to the teachers approach to technology; many organized themselves wonderfully, but others did not make contact [to the students] for some time, and faced many difficulties when trying to conform to the new teaching modalities". (P.20)

In fact, even when using Skype or Zoom, a number of problems may still emerge. As P.4 comments:

> "With Skype it is more difficult for the teacher to show me a visual example that can help me improve my technique. Issues in the Internet connections also make communication more difficult and increase confusion". (P.4)

Further descriptions of such an issue are illustrated in the following quote:

> "Surely the practical part [of the musical lesson] has changed. While it can still be approached through different technical exercises, there is lack of feedback from the teacher, who does not dare to offer great suggestions through the microphone of a computer". (P.6)

Benefits: Notably, this last preoccupation is not shared by all our participants: one respondent, for example, commented that '[this online teaching method, actually] makes instrumental lessons more enjoyable, free from elements of distraction' (P.10). And indeed, another student thinks that 'the main thing that changed is that now the teachers have to be much clearer on their explanations' (P.5). A similar view is shared by the following respondent:

> "I must say, there are several differences between how my teacher and I approach the lesson now, and how we did it before the whole thing [i.e. the pandemic] broke loose. Playing piano live via internet is not easy and requires additional concentration […]. This also impacts how we communicate […]. For instances, when camera and mic are placed too close or too far from the piano, he [the teacher] may become aware of something new, both positively or negatively. However, this happens rarely and often makes me think about how we are still 'far' from a perfect communication system. I have also noticed how he is worried about the new format: how he controls what we do and how we do it. Probably we both need more time to adjust to such a system". (P.3)

This last issue, however, can be mitigated by organising the teaching plan more openly. For example, it can be helpful to share the programme with the students from the beginning of the course. While final goals and outcomes are usually well-known by conservatory students before their lessons begin, some can also benefit from a more systematic approach in which 'lesson after lesson' plans are carefully checked and discussed, helping students find new motivations. Consider the following two quotes:

> "I think that now students can organize their days much better. It is really easy to lose the motivation since lessons and some exams were cancelled. One has to really look to the big picture and think about the long-term goals to keep motivated". (P.5)

> "I have received all material online at the beginning, and my teacher and I verify together how the program develops lesson after lesson. […] The teaching methodology has not changed too much, except when it comes to repeating certain parts of an exercise as sometimes the internet connection is not optimal". (P.7)

Perhaps this approach can be quite useful to compensate for the lack of physical presence, keeping the student involved in different organisational aspects of the lesson. As the same participant comments:

> "I have noticed […] how the lesson is much more productive and focused. There is less time for compliments and human contact, but more attention is now placed on content". (P.7)

This might provide the learner with more responsibilities, at the same time stimulating open dialogue and discussion between educators and pupils. As we will see next, these latter aspects are also important factors underlying creative learning and discovery.

Creative learning

Novelty seeking: Because creativity involves outcomes that are at the same time functional and innovative (Runco and Jaeger 2012), in this section we focus on those learning dynamics that students found original and useful. A first thing to consider involves the daily routine of music students, which often includes long trips to the conservatoire. Online courses can make things easier:

> "I usually commute with my car to reach the conservatory and this takes away time from practice, making me a bit nervous because of the traffic. By staying home, instead, I can concentrate more when rehearsing, and prepare for the lesson just before it starts. This gives me more confidence to try out new technical solutions also during the lesson". (P.3)

This observation is echoed by another respondent, who highlights the benefits of having more time at their disposal: 'among the different interesting aspects of such a teaching method, there is mainly the possibility to elaborate all information emerged during the lesson with much more tranquillity' (P11). Yet, because the physical distance between student and teachers remains an obstacle, there is a need for novel approaches:

> "As far as I have seen so far, there is the need to rethink visual information and feedbacks and to make up for the lack of contact (e.g. in correcting wrong movements or hands/finger positions)". (P.4)

Technological resources are highly important to assist teachers and students in improving their reciprocal presence and stimulate novel ways of learning, helping the student acquire novel skills for his or her future:

> "[O]nline didactics should be seen as an opportunity to improve one's professional carrier: not knowing how home-recording software work in 2020 is definitely not a good thing". (P.14)

Technologies can play a key role in optimising distance musical learning, enhancing creativity and interaction among students and teachers. Here's an example of how this can be so:

> "For more humanistic subjects, like 'history of jazz' nothing really changed. When talking about instrumental learning, of course there is a lack of physical contact, but that's normal [given the current situation]. [When playing our instrument] we have been working on sound to make ourselves more audible to each other, and now [me and my teacher] often have good lessons. Another example is 'complementary piano'[1] which we can now handle well. […] We share online our respective arrangements so that everyone can see them, and then our teachers make his corrections live through dedicated software. Thanks to a second camera we are also able to see the piano when he plays. For composition, our teacher chose to record his lectures instead". (P.18)

Improving performance: Not only can teachers develop novel creative settings to help students follow their lectures; students can also come up with innovative ideas and find new motivations to learn effectively. Consider the following two quotes from another participant:

> "It is not like I have consciously changed my playing style or the way I prepare for my lesson. It is more like I have discovered some new ways to spend my time while I rehearse. For instance, I could go through a full set of different interpretations of the same piece found on the Internet and systematically compare different aspects of it. I just didn't do that before the lockdown as basically I didn't have time, nor did I know how useful that could have been. In fact, this made me actually re-think certain stylistic choices". (P.3)

> "In a way, this feels way more creative than my previous usual [learning] habits. I have discovered novel things with the help of a classmate who is also preparing the same repertoire for his final exam. It is basically like we had to re-program how we engage with the pieces, and find something new to keep ourselves focused during the lockdown". (P.3)

As we will also see in the next section, this creative outcome is strongly linked with the students' need to renew their collaborative effort, and develop novel ways to work together with other students. Before we move on, however, it should also be mentioned that while remote learning may have its advantages, it is also limited as it might not be ideal for everyone. As P.5 notes:

> "Some students can benefit from this [remote] method, like the ones that suffer from stage fright. On the other hand, the performance of the students that need the adrenalin that the stage provides can be less interesting than if they were in front of a public/jury". (P.5)

From a practical perspective, some students need to 'feel' the performative experience, preparing them for concerts and auditions. As one participant put it, cultivating this dimension can be highly beneficial: 'perhaps remote learning will be the only training future performers will get; because of this, we should make sure it will be as "real" as possible'. (P1). In fact, real, concrete musical experiences not only involve musician-audience or learner-teacher interactions; they also include collaborations with other peers. As this aspect is potentially put at risk by remote learning, it requires further scrutiny. In the next section, we thus explore how students can build important connections together to facilitate their learning and compensate for the lack of physical engagement the current situation brought forth.

Peer-interactions

The need of collaboration: The absence of physical interaction between students and teachers is an important aspect to be considered. One respondent, for example, mentioned that 'one of the things that changed for me is that now there is no interaction with other students, apart from the group lessons. But even like this it is not the same' (P.5). The same point is raised by another student, who states that 'perhaps what is mostly missing now is the collaborative effort among students, which for me represents one of the most important steps in our entire learning trajectory' (P.17). Another quote from a different participant illustrates a possible solution:

> "It is essential to work without being in isolation […]. I understand the measures are done with a noble purpose, but of course one cannot play naturally from home as if there was someone there, while, in fact, there is not. I find this too complicated and artificial. Perhaps, rather than simply having teacher-students classes like before, we could have students-group who more informally play together, or create music." (P.2)

In order to face this challenge, some students spent considerable time to (re)build connections and establish communicative systems to help them with their learning. As another participant comments: 'the e-learning experience made me discover a collaborative spirit shared with other students, which I haven't previously developed' (P.11).

Rediscovering Interactions: For other students, communication and joint practice were the norm also before the lockdown. However, this exceptional situation made them realise how important it is to have a community of colleagues who face similar challenges and can provide encouragement and useful suggestions through dialogue and mutual support:

> "collaboration was there also before the lockdown; let's say that through these regulations I have realized that I have a number of colleagues in the exact same situation as me, and recognized the power of helping each other, and make interesting projects together online". (6)

Though useful and helpful, it should be noted that online collaborations, dialogue, and open communication among students may not be enough when compared to the live presence of others. This point is made by another respondent:

> "as a student I am pretty happy with the methodologies proposed by my conservatoire. Surely there is still a lack of attention to detail, which you can only have when physically present and through discussion with other students during the lesson. I think that dialogues and positive confrontations or comparisons are always highly constructive. Maybe, what I miss the most, even more than the instrumental teacher's presence, is the collective dimension one can only achieve when making music together with my colleagues. The feeling of all instruments played 'as one', rehearsing, and arranging, guided by the teacher is very fulfilling and, at the same time, useful for my development as a musician". (P.7)

Additional help and inspiration to further improve such settings may come from the consideration of non-musical contexts, where remote learning has been implemented with more continuity. Indeed:

> "it is […] necessary to improve the quality of online teaching and collaborations, perhaps drawing from those realities who already use e-learning every day, and explore as many solutions as possible". (P.9)

Bringing together musical and non-musical contexts may thus open up interesting scenarios for improving online learning, allowing students to use technological resources in different ways, develop creative learning modalities in isolation, or with others, and establish novel interactions with teachers and peers.

Discussion and conclusion

The present research aimed to address how music students in an Italian conservatory experienced the sudden shift in pedagogical offers caused by the COVID-19 health emergency. To achieve this objective, 20 students responded to an open-ended questionnaire providing concrete examples of their lived musical experiences, placing particular emphasis on three interrelated aspects: (i) how efficiently new remote education settings were implemented, (ii) what novel musical activities have been creatively developed with the help of technology, and (iii) how peer interaction was transformed by the lockdown period.

With regard to the implementation of novel teaching methods, it was reported in several quotes that the use of technology remains problematic. As mentioned by Waddell and Williamon (2019), the role of technological resources for musical learning has been increasingly explored in the last decades. This involves research that focused on access and use of technological tools in classroom settings (Rogers 1997), as well as on their repercussion for teacher development (Hunt and Kirk 1997), and self-assessment (Daniel 2001). Among others, Kenny and McDaniel (2011), as well as Gall (2013), found that educators can encounter difficulties in implementing technologies in their teaching, particularly when considering poor institutional support, and a lack of technical training. Similar issues also emerged in our study, where students report how technological issues may create taxing situations concerning mutual communication and feedback.

While some teachers did not fully complete their adaptations to online settings, our data point to two personalised strategies that educators used to face the challenge of remote teaching. The first one involved live settings, where students and teachers can interact as if they were present to each other, yet only virtually. The other strategy consisted in providing the students with recorded videos where relevant aspects of the lesson (e.g. a particularly difficult passage, a novel fingering solution, etc.) were examined. Both strategies may have positive and negative effects. For instance, while the former solution may be helpful for maintaining the communication between teacher and student at an ordinary level, it can also suffer from poor technological optimisation, often creating frustrating experiences. One participant also mentioned that such an approach may not give the teacher enough room to operate naturally, leading to a possible lack of feedback. Conversely, a strategy based on video recordings, perhaps combined with the teacher sharing information about programme and curriculum in advance, has been described as less problematic. This is consistent with previous research suggesting that teaching roles can be distributed across pupils, giving rise to more responsible ways of learning that emphasise the creative and world-making potential of the students (Schiavio et al. 2019b).

In both cases – whether students more often use recorded material or interact directly with the teacher via Zoom or Skype – a need to compensate for the reciprocal lack of physical presence has been reported. This desideratum may offer a meeting point to educators and learners to rethink possible pedagogical strategies creatively, and develop novel tools to discover new knowledge through their own effort. This resonates well with insights offered by Luquet, who maintains that '[w]hereas at one time teaching and learning was information being passed, memorised, and repeated, students can now find their own knowledge. Learning now consists of using information in creative ways and requires a shift in how students are taught' (2015, 60). Moreover, a number of quotes have highlighted important changes in approaches to rehearsal and time management, setting career goals, and establishing novel collaborative interactions with peers. When successfully implemented, such aspects can be regarded as creative as they involve both novelty (e.g. re-organisation of plans) and effectiveness (e.g. improving learning outcomes), leading to self-development and enhanced experiences (see Amabile 1996).

In terms of time management, students reported that lockdown measures have impacted the way they rehearse. For instance, those who need to commute to the conservatory and spend time in traffic have reported improved concentration while preparing for lessons: with more time at their disposal, they can elaborate all information better and explore novel musical solutions (e.g. supported by online resources such as YouTube) with more confidence. Such comments resonate with the observations concerning professional development made by P.14, who considers e-learning as a fruitful opportunity to learn more about musical software, and technological resources more generally. In a sense, having more time translates into enhanced short-term and long-terms strategies where goals and plans can be prioritised accordingly. Perhaps a good example of this comes from the remarks offered by one participant when discussing how one course (i.e. 'complementary piano') involved advanced visual techniques (the simultaneous use of two cameras and a dedicated software) to improve students' engagements and mutual feedback.

This brings us to the discussion of collaborative effort that many quotes have highlighted. The students' capacity to form collaboration within and beyond the classroom has been well documented in music research (e.g. Green 2001). Our findings align with this work, suggesting that the need to discover novel valuable opportunities for learning have prompted a number of students to actively seek for connections that go beyond their relationship with the teacher. On the one hand, this can result from the lack of physical interaction that online learning involves; on the other hand, however, the need to explore novel musical territories stemming from a more responsible way of learning could have also played an important role.

A combination of such factors can be individuated in several quotes reported above, where students repeatedly underlined the benefits of joint work. With this in mind, consider how the lockdown period helped P.6 realise he is part of a community of practice, and how 'interesting projects' are thought to evolve from mutual entanglement and collaboration; or, again, how another participant spontaneously started to chat with a colleague, leading to the discovery of novel learning opportunities supported by online resources. It is interesting to note that the need for novelty and exploration led to new forms of communication among students, highlighting the link between creativity and social connectedness explored in recent musical and non-musical literature (Sawyer and DeZutter 2009; Schiavio and Benedek 2020), particularly in pedagogical contexts (Burnard and Murphy 2013). More in general, the experiences reported by our participants well aligns with the three main avenues indicated to constitute the basis of e-learning:

> Technology-supported collaborative learning in higher education represents a confluence of trends: the development of new tools to support collaboration […], the emergence of constructivist-based approaches to teaching and learning […], and the need to create more powerful and engaging learning environments. (Resta and Laferrière 2007, 65)

The development of new tools recalls the lack of systematized and coordinated resources from institutions noted by our participants, which led to potential difficulties in coherently implementing

efficient online teaching; the emergence of constructivist-based approaches to learning brings together insights emerged when discussing the spontaneous collaborative activity of the students; and the need to create more powerful and engaging learning environments is also one of the main drivers behind the creative outputs both students and teachers developed during such complex historical time.

Before concluding, we briefly wish to address two important limitations of this study, namely, the lack of generalizability and the absence of reports from the teachers' perspective. Indeed, qualitative insights of a population of 20 students from an Italian conservatory do not allow us to articulate formulations broad enough to confirm hypotheses or corroborate initial claims; nor can they provide us with a complete overview of the pedagogical changes occurring in the music education community. Nevertheless, the reported data offer a number of concrete examples regarding the lived experiences of music students who are approaching for the first time a drastic change in their learning trajectory, complementing data from another recent study exploring experiences, insights, and perspectives, reported by music teachers (Biasutti et al., in press). While many unknowns on the horizon remain to be addressed, the current research presented first-person accounts of present-day musical practices, aligning with existing pedagogical research that places major emphasis on creativity, collaboration, and the fluid relationships between students and teachers.

Note

1. This is a collective course for advanced instrumentalists - non-pianists - offered by the conservatory attended by our participants. Here attendees can learn basic piano rudiments such as arrangement, sight reading, and first-sight melody harmonisation.

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Declaration availability statement

The data that support findings of this study can be accessed by contacting AS or MB.

Notes on contributors

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