

Production of digital content in music teacher education: a study about podcast's possibilities

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Abstract. This short paper presents an ongoing research that intertwines the theme of educational digital content production for the internet, specifically the audio podcast format, with the pedagogical practices developed in the context of music teacher education and emergency remote teaching. We aim at analyzing the experience of producing digital pedagogical-musical content in the podcast format by students of two Music Education Degree courses. The study uses a qualitative approach and the methodological strategy is based on concepts of action-research. The research is being developed by Technologies and Music Education Research Group (Tedum-UFPB) and by a team of professors from two federal higher education institutions. Data collection will be carried out through the development of field diaries by the research team and through conversation roundtables with the participant students, besides the entire process of documentation, registration and analysis of the phases that make up the action-research cycle. The research presented here can contribute to the processes of creation and conception of audio format content, seeking methodologies that are specific to the musical field, enhancing collective spaces for creation, valuing different authorships and encouraging pedagogical and musical diversity.

1. Background information

The health crisis generated by the Covid-19 pandemic had instant effects in the field of education. Isolation and social distancing measures forced the abrupt suspension of classes and the closing of schools and universities. The appropriation of digital media for the continuation of classes and the teaching of content was presented as an alternative most welcomed by educational systems in order to overcome the imposed situation [1].

Thus, this ongoing research* interweaves the theme of educational digital content production for the internet, specifically the audio podcast format, with the pedagogical practices developed in the context of music teacher education and emergency remote teaching.

A podcast "is a digital media file, or a collection

of related files, [...] for playback on portable media players and personal computers" [2]. The production process of a podcast can mobilize a diversity of knowledge: about the subject that will be dealt with, as well as the characteristics of this format, in addition to the technical knowledge of recording. According to Telles "the four stages of the process are: planning, recording, editing and publishing." [2]

According to the TIC Education 2019 survey [3], 19% of the teachers who work in private schools use the podcast format to prepare their classes. Among those who teach in public schools, the percentage is 17%. The survey also points out that "podcasts are not a recent media resource on the Internet, [...] however, their appropriation by the public and professionals from the most diverse areas has recently intensified" [3].

The relationship of podcasts in Education is discussed by Bottentuit and Coutinho [4]. The authors address aspects of the potential use of this tool in teaching and learning processes, whether face-to-face or at a distance, in particular, highlighting that the podcast allows teachers to provide teaching materials in audio format that can be listened to at any time of day and anywhere.

Moura and Carvalho [5] point out the podcast as an educational medium and indicate that "the recording of classes [in podcast format] can help the teacher to manage and save time in classes whose contents do not change significantly from one year to the next". The authors also state that "talking about a podcast is talking about a class that can be studied or recalled at anytime, anywhere." Thus, one can reflect the appropriation of the tool in different pedagogical moments.

2. Review literature

We carried out a search on the Scopus database. By combining the terms "podcast" and "music education", we obtained four publications as a result. I present them below, in chronological order.

Among the works found, Gillies [6] highlights the impacts of technological evolution in relation to the different formats in which information can currently be archived, consulted and produced, thus altering spaces

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such as libraries and archive collections. While not discussing the podcast format per se, the author brings the term in his title as a provocation: “pen to podcast”. He points out such impacts in three contexts (university study, musical biography and musical analysis), and points out that such changes imply new forms of research and learning.

A pedagogical experience with podcasts in a Music Education class of elementary school in Portugal is presented by Coutinho and Mota [7]. Both teachers and students were involved in the process of creating content for a podcast. The authors emphasize that the “Web 2.0 offers educators an assortment of technologies and tools with enormous educational potential” [7] in addition to offering the opportunity for students to produce and publish content on the Internet. Furthermore, they indicate that podcasts have adequate characteristics for musical pedagogical practices, especially with regard to digital training. After analyzing the data, the authors indicate that once the Music Education context has an emphasis on audio, the production of podcasts in the classroom is relevant. Through the developed practices, students were able to develop musicality, technical and artistic skills, in addition to understanding the relationship between music and society, history, culture, different artistic languages and other areas of knowledge. At the end of the productions, the participants used positive adjectives to describe the experience performed. Among the difficulties found and reported, they highlighted the technical characteristics of the software used, such as the audio treatment and volume equalization of captures and recordings. Finally, the researchers point out that the “mere use” of podcasts can positively influence student learning and that the tool has potential for the area of Music Education.

Bolden and Nahachewsky [8] developed a pedagogical practice of creating podcasts with students from a music degree course in Canada. The authors highlight the concept of participatory culture in the sense that the students have the opportunity to create, produce and share podcasts, and not just consume them. They analyzed the perception of the students involved in the creative process and identified that once engaged in the tasks of creating a podcast, they developed skills to work with audio editing software, and those of self-knowledge and self-expression. The students also shared their productions, thus being able to celebrate their own achievements in a collaborative way and connect with others, thus developing meaningful personal connections. The authors concluded that it was a significant and effective experience and indicate that the production of podcasts can also be used in activities where there would normally be written work, such as the discussion of curriculum content, teaching experiences, vocal and instrumental practices, results of research, among so many other possibilities. They suggest that there is potential for the construction and representation of knowledge through the production of podcasts.

In another account of the same experience, Bolden and Nahachewsky [9] discuss the potential of creating podcasts as a methodology for exploring oneself. They collected data through interviews with students and the

participants were asked to create a three-to-five-minute podcast about their own story of, with and through music. There was a combination of narratives and music to describe and reflect personal experiences.

The authors discuss themes that emerged from the data: the integration between music and personal narratives that enhance the possibility of reflections, the speech previously written in contrast to the one actually spoken at the time of recording, listening to oneself through the repetition necessary for technical adjustments, enabling self-understanding, refining and developing ideas, the “personal” factor, in the sense of taking ownership as one's own creation, and the artistic and creative possibilities. A point highlighted by Bolden and Nahachewsky [9] is the interdisciplinarity in the practice of creating podcasts, since there is a combination of written text, narratives, different oralities, music, audio editing, sharing and social interaction, among so many possibilities in the context of Music Education.

Through the publications raised in the Scopus database, timid efforts can be seen in an emerging field. There is a report about elementary school and also about Higher Education. Although there is an experience developed with music teachers in training, the focus was not on their training process itself, in addition to the training pedagogical practice aimed at such students. Thus, there is a starting point in the works of Bolden and Nahachewsky [8] [9] that leads us to reflect on this scenario in the Brazilian context, also contemplating the pedagogical process itself developed through the curricular components of a music degree course.

It is also necessary to be aware of the quality of content production in the podcast format. In this sense, we highlight the work of Bottentuit Júnior and Coutinho [10]. The authors suggest recommendations on the production process in general, the initial and final moments of recording, the content, and group work. And they point out that “it is good to know how to proceed to create a good episode, which implies familiarizing yourself with technical issues, with aspects related to communication and, most importantly, with the suitability of the content provided”, leading us to reflect and propose quality podcast content production practices in the Music Education scenario.

Barros and Menta [11] reinforce that podcasts can help access music produced independently, and we add that several music students can take advantage of podcasts to release their digital albums and lessons. Thus, the authors emphasize that “some PodCasters, as PodCast producers are called, use music in their programs [...], in some cases entire programs are dedicated to the theme, a way to disseminate the productions that do not always have access to formal and institutional spaces for dissemination” [11].

In the context of a degree in music, when dealing with experiences involving a virtual learning environment and collaborative strategies in the development of a curricular component, Araldi [12] discusses an experience with the creation of podcasts by students. This activity was highlighted by the students as the one that best enabled the collective creation and the engagement among the undergraduates in the creation of a podcast.

It is clear that the exploration of podcasts as a format of pedagogical content still lacks further development and research in order to demonstrate the particularities of the format in music teacher training processes, besides the experimentation of producing digital audio content by the area of Music Education in Brazil.

3. Research design

General objective: Analyze the experience of producing digital pedagogical-musical content in podcast format by teachers and students in two Music Degree courses. And specific: Characterize the concept of podcast related to methodological specificities for the production of musical content; Provide a space for content production with music teachers and students; Identify the demands for pedagogical content to be developed in the podcast format; Produce pedagogical-musical material in audio with a focus on the context of primary and secondary schools levels; Analyze the process of producing podcasts by those involved.

In view of the objective of this research, the study is qualitative in nature and the methodology applied is based on the theoretical-methodological concepts of action research. Action research is a form of self-reflective investigation, carried out by participants in social situations in order to improve the rationality and justice of their own practices, the understanding of these practices and the situations in which they take place [13]. The authors reveal that the three aspects – the practices, the understanding of the practices and the conditions that shape them – are inevitably and incessantly linked together by unstable and volatile ties, continuously shaping each other.

In the educational field and also in music education, action research has been presented as a methodological strategy of great potential as it promotes the improvement of the professional teaching practice and the sharing of knowledge which can be useful in similar or different situations [14]. Therefore, we chose the practice of action research because we understand it is the most appropriate in relation to the object of study: the experience of producing pedagogical-musical content in the context of music teacher education.

The research is being developed by a team of faculty members of the Technologies and Music Education Research Group (Tedum-UFPB) linked to two federal educational institutions: Federal University of Paraíba (UFPB) and Federal Institute of Sertão Pernambucano (IF Sertão PE). The teaching team is responsible for selecting the participating students and planning the activities. Participating students are being selected from institutions that offer degree courses in music (UFPB; IF Sertão PE) and the selection criteria are: i) to be regularly enrolled in a degree course in Music at UFPB and IF Sertão PE; ii) have some previous experience with the use of digital technologies; iii) availability to develop experience in podcast creation.

Data collection will be carried out through the development of field diaries by the research team and

through conversation circles with the students participating in the research. In addition to the entire process of documentation, registration and analysis of the phases that make up the action research cycle.

It is noteworthy that the involvement of the faculty and of undergraduate students from the music degree course in the podcast production processes implies an immediate return in their training and pedagogical praxis, benefiting them with the experience and immersion in digital practices that pay attention to contemporary particularities.

3.1 Hypothesis

Through this study, we expect to conclude that the production of pedagogical-musical content in the podcast format implies knowledge and contact with specific methodologies for this content format, allowing the participating undergraduates the opportunity to learn about content production for online and blended teaching, and for the teachers involved, a reflection on the potential of this practice.

4. Risks, benefits and outcomes

Considering the possibility of holding press conferences during face-to-face meetings, the students may present some discomfort in exposing their ideas and criticism regarding the work process. One way to alleviate this discomfort can be a mix of group and individual interviews.

The possibility of participating in the research indicating the lessons learned, doubts and suggestions about improvements in the production of these pedagogical resources in audio/podcasts allows participants to expand the possibilities of digital content production for courses that can be used both in remote and on-site teaching.

We expect that from the analysis of the perception of students and teachers participating in the research, it will be possible to understand specific practical and methodological aspects in the development of pedagogical-musical podcasts, thus contributing to the implementation of this format in the performance of these undergraduate students in primary and secondary schools levels. The research process will also enable a first systematization about the contributions of creating digital pedagogical-musical content.

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