Studying Inclusion in Music Education – An Integrative Literature Review as a Support in the Choice of Methodology, Using WebQDA

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Studying Inclusion in Music Education - An Integrative Literature Review as a Support in the Choice of Methodology, Using WebQDA

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Abstract. To reflect and clarify the methodological paths we are following, the objectives of this work were to base the choice of the methodology to be used in our research project related to the Inclusive Education of children with special needs in Arts Education Programmes in Music in Portugal. We started by comparing methodologies used in other research studies on the same theme. We carried out an integrative literature review according to the theme of our study. We began by searching articles through selected keywords in English between 2015 and 2020 in the search engine Google Scholar and b-on, and in the databases: ERIC, Web of Science, and Scopus. All the compiled information was organised and studied through content analysis supported by the webQDA software. We compared methodological options of 40 selected studies. We found 3 empirical studies, 27 studies using an interpretative paradigm and 10 studies using a socio-critical perspective. However, according to the subject of our study, there is only one study using the Action-Research Methodology. Nevertheless, considering the other methodological possibilities, we confirmed that this methodology is the most appropriate for our type of study. The flexibility and collaborative nature of Action-Research is an advantage. The researcher can be considered as part of the reality under study, allowing us to achieve an in-depth understanding of the problems and practical situations. From this perspective, all subjects can be participants in the construction of knowledge, in a continuous dialectical process, in favour of inclusion.

Keywords: Methodology · Integrative literature review · webQDA · Music education · Inclusion

1 Introduction

In Portugal, educational inclusion is considered fundamental, as advocated by the Basic Law of the Educational System, Law No. 46/86 [1], and Decree-Law N°. 344/1990 [2], and N°. 54/2018 [3], and N°. 55/2018 [4]. However, when the mother of a child with Cerebral Palsy (CP) went to an Artistic School to enrol her 7-year-old child, in the first
year of the First Cycle of Arts Education Programmes (AEP) in Music she considered that the necessary conditions were not met for the child to be able to attend this type of teaching, and eventually withdrew the enrolment, “the mother of a child with … CP, Unfortunately, she ended giving up the enrolment, because she considered that the Artistic School did not meet the necessary conditions for her son, to be able to attend this teaching modality” [5, p. 539]. We, as *inquisitive teachers, and researchers*, faced with this situation, in the year 2018, started with an action-research project to find a solution to this problem.

Referring to what has been done so far, it is important to highlight different literature reviews that have been carried out whose objective was to find technological solutions to facilitate the inclusion of children with CP in the learning of music. That is, different literature reviews were carried out to find resources, namely adapted instruments, and software, which facilitate the access of children and young people with Special Needs (SN) in AEP in Music [5–7]. Also, the evaluation done in a short session on the theme of inclusion for healthcare professionals, AEP in Music professionals, special needs teachers, instrumentalists, parents and guardians, the academic community and society in general showed the need for further training [8]. A study was also carried out to characterize the child with CP which gave rise to the research project [9, 10], to know his potential and identify his needs. The results obtained show the cognitive development considerably above the average and the importance given to the use of Support Products, curricular adaptations, and the support network (people) for the child under study to succeed, namely in Learning Music [5–10].

We wanted with this work to reflect and try to clarify the methodological paths that we, *inquisitive teachers, and researchers*, are following, because when we look for something, we do it somewhere, with some intention and in some way [11–14]. In this framework we will start to identify our objectives.

## 2 Objectives

The objectives we have set ourselves are the following: (i) to establish the methodology to be used in our research project - Inclusion of children with CP in AEP in Music; (ii) to carry out an integrative literature review according to the theme of our study to identify the articles related to it; (iii) to analyse the methodological options of this set of flagged studies, with the support of the content analysis technique through the webQDA platform; (iv) to compare the methodological options of these selected studies with our own methodological options; and, (v) How to choose the best methodology to perform research by using integrative literature review?

## 3 Theoretical Framework

Faced with the initial problem presented, it was our curiosity as researchers, recognizing the flexible and cooperative nature of our practice as a valuable and necessary resource available, which was our driving force in seeking answers to our questions [13, 14]. According to McNiff & Whitehead [15], we know that we can resort to an abstract logical way of accessing knowledge, considering reality as an external object, looking at
theories as static models of reality that can be understood intellectually - propositional perspective, or conversely, we can opt for an overview look with a fluid and relational logic [13, 15]. In this case, as the one we identify ourselves with, reality is seen as something of which the researcher is a part, embedded in his experience, in real life. Knowledge is seen as a process of creating new forms starting from previous forms, asking questions, getting answers that generate new questions in a continuous process - dialectical perspective [13, 15].

If we consider the empirical paradigm, the way to find answers to our questions would be to raise hypotheses, subjecting them to an empirical confrontation over a rigorous experimental control. From this perspective, if we confirm our hypotheses, we can generalize them and apply them to other similar situations [11, 16], “thus operating in a double delocalization of the object of research: from the focus on stabilized social institutions to the search for the sense of social action of concrete subjects, and from the focus on the frameworks of the professional researcher to the attention of the actor/user” [17, p. 8]. But when we go down this road, we may not find the answers to our questions, “since behind an investigation there is always a theory that guides it, and often the central objective of scientific research is purely and simply the verification of that same theory” [11, p.12]. Or, as Olson complements, “the research which is now seen as educational research deserves to be seen as what it is: psychological, sociological, and linguistic attempts which try to appear respectable before educators” [14, p. 7].

In our study, the concern is not so much with the control of the environment producing rational and technical knowledge, characteristic of an empirical paradigm, but with the search for understanding of the other in favour of change, in an attitude that goes beyond rational and scientific interaction [13, 15].

Another possible way forward, in which the participants are part of the research, and sometimes their observations are as valid as the researcher’s observations, is through the interpretative paradigm [11, 15]. From this perspective, the research process, although somewhat different from the empirical perspective, assumes the same kind of relationship regarding the legitimate owner of knowledge, the decision about the practice to be studied and which knowledge is considered. An example of this type of research work is case studies [13, 15]. The researcher must consider people as objects of study and make considerations about their actions, purposes, and intentions. The form of the theory remains conceptual: the researcher generates knowledge based on an external situation [11, 13].

We have therefore gone in search of other paths for which it “is important to understand the significance of events and interactions for ordinary people in particular situations” [11, p. 18]. The search for the path we should follow, should first “reveal the procedures leading to the acquisition of knowledge” [16, p. 12], instead of remaining only in the technical vocabulary, known only to a few, and sometimes even misused in the investigation processes [13, 16]. As Olson states, “the research professor aims to develop his own research methodology, a methodology that recognises the cooperative and flexible nature of his discipline” [14, p. 7].

After studying the different possibilities provided by the paradigms predominantly used in educational research (Empirical, Interpretive or Socio-Critical), for the development of our research, we focused on the Paradigm that would help us to find answers to
our questions. We have arrived at the Socio-Critical Paradigm, oriented towards Change, understood as a Critical Science of Education, “not because we want to scalpel here its characteristics, potentialities, virtues and limitations, but rather to serve as an antechamber to the entry on the scene of a research methodology with very specific characteristics: Action-Research” [11, p. 362].

In short, our study is not only related to a chosen response and the expected or unexpected consequences of that choice [13]. Our study has much more to do with the actions, procedures, behaviours, and attitudes we will develop as inquisitive teachers, and researchers in relating our teaching practice to the theory surrounding it [13], because “theory and practice are interrelated” [14, p. 8].

Starting from the initial knowledge of a situation (the Problems), to obtain answers to our questions, through the learning achieved in theory (Planning), we will start to apply the knowledge obtained (Act) to improve our practices (Monitoring). Thus, we intend to improve the results obtained in the learning processes, evaluating the processes and the results, meanwhile obtained so far (Evaluate), through the cooperation between several research teachers (Collaboration). To further improve our practices (Replan) we will continue this process to find answers to the needs that all children have (including children with CP) to improve their learning and enhance their skills in AEP in Music.

Once we have defined the methodological process to be used in our research, we will start talking about the literature review process to be carried out.

4 Literature Review

When we develop a process of searching, analysing, and describing information to find answers to our research questions, we are developing a Literature Review [11, 12]. On the other hand, the written materials, audio-visuals, social mass media, etc. that are relevant to the topic we are considering is what we define as Literature [18].

Among the various literature reviews commonly used: Rapid review; Scoping review; Critical review; Literature review; Mapping review/systematic review; Mixed studies review/mixed methods review; Meta-analysis; Overview; Systematic qualitative review/synthesis of qualitative evidence; State of the art review; Systematic review; Systematic search and review; Umbrella review and Integrative Literature Review [18], we wanted to search for the one that best fits our study.

We considered the Integrative Literature Review method, “as an approach that allows for the inclusion of diverse methodologies (i.e., experimental, and non-experimental research) and has the potential to offer a great contribution in evidence-based practice” [19, p. 547], to be the literature review method that best answers this task of ours.

With this method [18, 19], we intend to determine the current state of knowledge on the topic under study; combine research that uses different methods in different contexts, expanding the possibilities of literature analysis and identify some existing gaps in our area of study - Inclusion of children with CP in AEP in Music.

Having defined the strategies for Literature Review, more specifically, the integrative Literature Review [18, 19], we will now specify the methodological processes developed.
5 Methodology

About the ethical criteria that any study should contain, these were especially considered, since we are working with inclusive terminologies related to a doctoral project. Thus, specifically, this work - integrative literature review - is embedded in a doctoral project entitled: “Inclusion of children with SN in AEP: from research to action”. For its proper development, we requested a favourable opinion from the Ethics and Deontology Council of the University of Aveiro in Portugal. This opinion was approved July 7, 2021, by the plenary of the Permanent Committee for Research Affairs of this higher education institution, as we believe that the ethical requirements and the principles of justice, autonomy, and well-being of the participants, which includes the research work compiled in this literature review, are safeguarded.

As a first step, we have chosen to carry out a conceptual personalised analysis on ways of accessing knowledge, using a set of reference authors’ books. Throughout the analysis, we placed ourselves in a socio-critical perspective, justifying our choices according to our research questions.

In a second moment, the integrative literature review was carried out, which emerged as an alternative to analyse and rigorously combine studies with various methodologies, experimental and non-experimental [18], given the limited number of studies on this topic of ours. Thus, we used the integrative literature review method proposed by [19], a process that comprises 5 stages of development, as presented in Table 1.

Table 1. Integrative literature review phases [19, p. 549].

<table>
<thead>
<tr>
<th>Phases</th>
<th>Process steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identification of the problem, theme, or research question (previously carried out) for the elaboration of the integrative revision</td>
</tr>
<tr>
<td>2</td>
<td>Literature Review (Establishing criteria for inclusion and exclusion of studies/sampling or literature research)</td>
</tr>
<tr>
<td>3</td>
<td>Definition of information to be extracted from selected studies/categorisation of studies</td>
</tr>
<tr>
<td>4</td>
<td>Discussion and interpretation of the results obtained</td>
</tr>
<tr>
<td>5</td>
<td>Presentation of the review/knowledge synthesis</td>
</tr>
</tbody>
</table>

Next, we will define in detail the procedures and results achieved in the Integrative Literature Review, in each of the five phases established by these authors [19].

5.1 Phase 1

Our aim was to identify articles related to our research project - Inclusion of children with SN in AEP - and observe which methodological options were used.
5.2 Phase 2

Based on the theme of our study and the results obtained in the work linked to our study, already carried out [5–10], we came across a series of keywords that guided us in our search for information. We have organised these keywords into the following groups by affinity (Group 1, 2, 3 and 4). We began by doing a quick search with each of these keywords in the publications from 2015 to 2020 in the search engine Google Scholar and b-on, and in the following databases: ERIC, Web of Science, and Scopus. In each group of words, we selected and eliminated the words according to the results of the search made, namely:

Group 1: *Music, music education, music teacher education, teacher music education, school music, school music programs, arts education programmes, arts education programmes in music, teacher education, special music education, music therapy and music education therapy* - of these words we only selected *music education*, since the remaining words referred to studies not related to our study theme or referred to studies already referenced with music education. The terms *arts education programmes* and *arts education programmes in music*, despite being the most correct for our study, did not find any associated study that could be considered.

Group 2: *Inclusion, including education, special education, including music education, including education for students with disabilities and including education for students with cerebral palsy* - of these words *inclusion* and *special education* were maintained because the articles found with the remaining words were the same or not related to the subject of the study.

Group 3: *Cerebral Palsy, disability, physical disability, functional diversity, special needs* - The words *disability* and *functional diversity* were discarded because they derive from works that do not necessarily have to do with our field of study. As a result, we established *cerebral palsy, physical disability, and special needs* as our search words for this group.

Group 4: *Adaptive instrumental music, adaptation instrument music, technology integration, assistive technology, music support products, accessible musical* - words maintained were *assistive technology* and *assistive devices* because the articles found with the remaining words were the same or did not have to do with the subject of the study.

In short, the words *music education* and *inclusion or special education and cerebral palsy* or *physical disability or special needs* and *assistive technology or assistive devices* are our selected keywords for database searches.

As a first exclusion criterion, we determined to consider only articles published in the last 6 years of research (between 2015 and 2020) with the “selected keywords”. We will now present the results obtained in this literature search, per database and per set of “selected keywords”, together with a Boolean operator: the term “and” (Table 2).
Table 2. Results obtained.

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Google scholar</th>
<th>b-on</th>
<th>ERIC</th>
<th>Web of science</th>
<th>Scopus</th>
</tr>
</thead>
<tbody>
<tr>
<td>music education inclusion special needs</td>
<td>2230</td>
<td>48</td>
<td>9</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>music education inclusion cerebral palsy</td>
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<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
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<td>music education inclusion physical disabilities</td>
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<td>13</td>
<td>2</td>
<td>6</td>
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<td>music education special education special needs</td>
<td>1780</td>
<td>540</td>
<td>12</td>
<td>156</td>
<td>4</td>
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<tr>
<td>music education special education cerebral palsy</td>
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<td>10</td>
<td>2</td>
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<td>music education inclusion special needs assistive technology</td>
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<tr>
<td>music education inclusion cerebral palsy assistive technology</td>
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<td>music education inclusion physical disabilities assistive technology</td>
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<tr>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
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<td>66</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(continued)
Table 2. (continued)

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Google scholar</th>
<th>b-on</th>
<th>ERIC</th>
<th>Web of science</th>
<th>Scopus</th>
</tr>
</thead>
<tbody>
<tr>
<td>music education special education physical disabilities assistive technology</td>
<td>86</td>
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<tr>
<td>music education inclusion special needs assistive devices</td>
<td>37</td>
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<td>0</td>
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</tr>
<tr>
<td>music education inclusion cerebral palsy assistive devices</td>
<td>19</td>
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<td>0</td>
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<tr>
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<td>20</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>music education special education special needs assistive devices</td>
<td>33</td>
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<td>0</td>
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</tr>
<tr>
<td>music education special education cerebral palsy assistive devices</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>music education special education physical disabilities assistive devices</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The results obtained in Table 2 indicate that there is almost no research work related to music education and the cerebral palsy and physical disabilities terms linked to assistive devices and assistive technology. Even so, with the terms music education, inclusion, and special needs there are texts to consider in each of the presented search engines. Knowing that, if we consider the breadth of the search (between the years 2015 and 2020) and furthermore do not put any other restriction, there are few works found in these areas of study, Music Education, as compared to other areas of study, for example Music Therapy.

Among the papers found, we observed that many of them were repeated both within the same platform and between platforms, such as between the search engines Google Scholar and b-on, and each one of the other databases used in this study ERIC, Web of Science, and Scopus.
Therefore, the second exclusion criterion used in our research, was determined: i) not to consider books, parts of books, theses, dissertations, reports, randomly published works without scientific support and online journals and webpages only with information and, ii) to exclude all repeated works, selecting in detail only those studies related to our research theme. Thus, we ended up with a total of 40 selected studies [20–59].

5.3 Phase 3

The selected texts were submitted to treatment through the content analysis technique supported by the webQDA software [11, 12]. This software enabled the organisation and systematisation of the data analysis, enhancing the definition of the dimensions [12]. More specifically, in the Internal Sources system in the webQDA, the selected articles were inserted. We started by performing a more frequent word search, eliminating the words with less than 4 characters, which gave rise to a word cloud (Fig. 1). These results were guidelines to start the source coding.

![Fig. 1. Word cloud obtained through the webQDA](image)

Based on the results obtained in the word cloud, we observe that the words music, education, students, followed by the words research, including disabilities, special, teachers, instruments, learning and musical stand out, which is not surprising because this word cloud is in tune with the theme of our study.

5.4 Phase 4

Then, on the webQDA platform, an analysis was made by categories (tree codes) related to the methodology used in each of the selected studies. These categories have been built together by the researchers, taking advantage of the facilities that webQDA offers for working online synchronously or asynchronously. Each category was considered only when there was agreement between two of the researchers involved. The set of categories
was then validated by the other two researchers. With these categories, the tree codes, a hierarchical system of linking the codes was organised giving rise to a category tree (Fig. 2).

![Diagram of category tree](image)

**Fig. 2.** Categories obtained through webQDA

In an inductive way, we attributed a theoretical positioning to the various methodolo-
gies used in each of the selected articles. For example, the articles that used experimental study methodologies with control and experimental group, led us to a more positivist and *empirical* paradigm. On the other hand, the papers that referred us to case studies were associated with an *interpretative* paradigm and the papers that implied a more collabora-
trative logic related to effective practice were associated with a *socio-critical* paradigm [11].

As we can see in Fig. 2 most of the studies analysed use an *interpretative* methodology (27 studies). These include *Literature Review* studies (7 studies), *Case Study/Multi-
Case Study* (7 studies), studies with *interview and content analysis* (6 studies) and finally studies of a *Descriptive/Informative* nature (7 studies). Very few *empirical* studies (3 studies) were carried out, including two studies with a *Scale Survey* and one with *Experimental and Control Group*. The *socio-critical* paradigm includes studies referring to *participant observation* (4 studies), *participatory design* (5 studies) and only one study with the *action-research* methodology.
As we can see in Fig. 3 the studies were distributed over the years. There was no incidence in any of the years studied.

### 5.5 Phase 5

As we can observe in Phase 3 of this review, the methodological processes used by researchers in their research work were diverse, because “the need for new lines of research on how to best serve different types of people and learners is inevitable” [36, p. 9].

Some studies “tried to identify the main articles concerning the topic with a focus on the analysis of the characteristics, barriers and successful practices of such type of education” [46, p.1]. Others discussed processes around the integration of various inclusive music technologies [32–35, 54]. “In my work explores opportunities for new music to be included in a variety of environments and settings, attempting not to exclude any methods from the process of composition, or anyone from the performance of a new work” [44, p. 33]. Several literature reviews were also carried out with different objectives, focusing on both music production, concerning the types of technology available, the development of Accessible Digital Musical Instruments or Accessible Music Technologies for users with different needs [21, 25, 28, 29, 32–35, 40, 43, 44, 47, 49–51, 53, 54]. And, in addition to these studies, one study used to state that “the action research cycle of developing a focus, creating and implementing a plan, collecting and analysing the data, then reflecting, modifying practice, and replanning can be an empowering experience” [39, p. 32].
Therefore, as results of the analyses carried out, we can observe the following: (i) Considering the range of years of research (2015–2020) and the quantity of searches carried out, we consider that there are a small number of studies related to our theme (40 studies); (ii) there are few empirical studies; (iii) most of the studies selected within this theme of ours use a methodology inserted in an interpretative paradigm. It should be noted that literature reviews and informative/descriptive articles constitute one third of the studies that use this paradigm (14 studies); (iv) there are also a considerable number of studies inserted in a socio-critical paradigm, although only one with the methodology chosen for this study.

The information compiled in webQDA on the selected studies also indicates that: (i) when teachers seek knowledge and, in addition, gather experiences of working with individuals with different needs and/or potentialities, they have an easier time including all students in the musical activities they wish to develop; (ii) when there is a joint work between all involved - students, family, engineers, researchers and education and health professionals - accurately and actively assessing the strengths and challenges that users must overcome, there is success in the students’ journey. Real opportunities are even provided in the teaching-learning of music; (iii) the design and research of Adaptive Instruments and ADMI, which crosses many different disciplines, including music therapy, education and even engineering, has a dual perspective, in which it can consider both therapeutic and pedagogical objectives and; mainly, (iii) when there is open communication between all involved (students, families, caregivers, and the community in general), encouraging parents to be more involved in the teaching-learning process of students, solutions can be found to promote the full participation of all in music learning. The search for answers to the different questions posed to teachers on How, When, Where and in What Way they could contribute so that people with disabilities could study music was a constant cross-cutting issue in the research work selected [20, 22–24, 27, 30, 31, 35, 36, 39, 41–43, 45, 46, 48, 51, 52, 55–59].

Through qualitative analysis of interviews, results were presented whose contents showed discourses on social justice and inclusion in music education [37, 38, 48, 52, 55–59]. They highlighted some macro-social problems in promoting inclusion in music learning and provided examples of how education systems, in a rapidly changing world, can be transformed to promote inclusion [55–59]: The analyses of the interviews alert on the little importance that is given to the teaching of music, both in the development of school curricula and in the undeclared policies, namely regarding the meagre government budget that some countries implement. For example, “Hong Kong’s primary music classrooms offer a site where three policies interact—the education reform policy entitled “Learning to Learn,” the policy of inclusive education, and the undeclared “policy” of making savings in the government budget” [56, p. 130]. Due to this situation, music teachers, in relation to teachers of other subjects considered fundamental to the school curriculum, feel professionally isolated, even abandoned. What is left is their individual creativity to find solutions that promote inclusive classrooms “professionally isolated, each individual school’s music teacher is left to find their own inclusive-classroom solution” [55, p. 973]. Despite all this, music education teachers were evidenced to be successful in their classes. These teachers act in anticipation of both the needs of their students and changes in future government educational policies [55–59].
The need of the students has been averagely overcome by virtue of the proactivity of some music teachers. These teachers develop diversified teaching strategies or pedagogical approaches, which aim to meet the diverse needs of the students, including those of children with SN, their learning styles, and abilities [37, 43, 48, 52, 53, 55–59]. As an example, “Resonaari offers empowerment beyond care and protection, creating connections between music and the outside world, and between pedagogical leadership and the modelling of possibilities for students” [37, p. 20]. This proactivity on the part of education professionals means that “participants expressed some of these as: self-confidence, a sense of achievement, social skills, the opportunity for creating friendships and meaningful social relationships” [43, p. 161].

While inclusive education is an admirable ideal, it is often difficult to implement [27]. In the interview with Patrick Anderson wheelchair basketball athlete, of Team Canada [22], the need to reflect on the importance of no longer thinking of disability as a fixed state is described “(dis)Ability serves as a tool to focus on ability” [22, p. 123]. In this context, “the field of music education errs by presuming that the absence of people with impairments in classrooms and community contexts is representative of reality” [22, p. 122]. Therefore, it is also important to seek individualised and meaningful solutions, leading to the construction of new instrument designs and modifications to include more people in music education [23] “In music education, there is great potential for hacking to lead to new instrument designs and modifications to include a broader spectrum of people, especially as it relates to bodily differences [23, p. 13]. Thus, about accessibility and inclusion, for hacking to be meaningful and emancipatory in music education, it should always be conducted with the limitations of the possible users in mind. “As it concerns accessibility and inclusivity, for hacking to be meaningful and emancipatory in music education, it must be disability-led” [23, p. 14]. Music teachers should be encouraged to make lessons innovative, inclusive, democratic, and diverse. “We encourage teacher educators to take advantage of the different strengths, perspectives, and types of expertise as opportunities for cooperation that not only complement inclusive music education, but also help to move beyond inclusion and towards a democratic, diverse society” [38, p. 43].

Because literature reviews, the use of digital resources, specific working techniques or methods, the adaptation and construction of accessible musical instruments and/or the political curricular analysis of music education programmes are not sufficient to find specific solutions for all, more research is needed: “the need for new lines of research on how to best serve different types of people and learners is inevitable” [35, p. 9]. Namely, also for the child with Cerebral Palsy, which gave rise to our study, more research is needed. Digital tools and technologies, and the methods that use them, seem to be effective in supporting the teaching of music to children with Cerebral Palsy, but further research is needed “the use of the described digital educational resources, techniques, and methods of working with them is an effective pedagogical tool for the development of cognitive activity of students with cerebral palsy, including remotely” [45, p. 373].

We consider that one of the viable methodological paths to achieve the empowerment of Music Teachers to improve their teaching practices towards inclusion, evidenced by the selected studies, is in Action-Research (Fig. 4). But we can question: “What do you
need to know to feel confident in making action research a method of bettering your teaching and your students’ learning?” [39, p. 28].

As shown in Fig. 4, Action-Research can be seen as creating a plan which involves gathering and analysing information to answer a question or better understand a situation, developing the focus of the study, creating, and implementing the work plan, gathering, and analysing data to reflect on and modify practice, with the aim of re-planning the action to bring about change for inclusion [39]. “Action research, can be described as a cycle of developing a focus, creating and implementing a plan, collecting and analysing data, and then reflecting on and modifying your practice and replanning” [39, p. 29]. This research has that Action-Research will be the ideal methodology to enhance change. “Using the action research cycle of developing a focus, creating, and implementing a plan, collecting, and analysing the data, then reflecting, modifying practice, and replanning can be an empowering experience” [39, p. 32].

Finally, and considering the needs of teachers, the selected studies [23, 24, 26, 27, 30, 31, 35, 36, 38, 39, 41–43, 46–48, 51, 52, 55, 57–59] highlight that it is essential to consider the size of the time we have available. As well as the resources we must develop and complete our research. “The time, resources, and participants needed to fulfil your vision for the research should also be considered before continuing with the action research cycle” [39, p. 30]. Lastly, “the lack of educational preparation of teachers in including students with disabilities in string and ensemble classrooms seems to have been improved through teacher training programmes, in-service conferences, clinics, and videos” [24, p. 30], situations that we are fortunately considering and developing in our research work. Finally, we will present the final reflections of this study.
6 Final Reflections

In this work, we have not sought to construct new methodological processes. Instead, in this work we sought to clarify, based on what the methodology says, our methodological choices. Based on this objective, with this research work, we were able to answer our questions and, furthermore, to confirm that our methodological choice of Action-Research is the most appropriate for our doctoral research: “Inclusion of children with SN in the AEP: from research to action”.

The use of the webQDA software was an excellent methodological support as a tool to promote the content analysis technique, mainly because it allowed for synchronous and asynchronous collaborative work among the researchers involved. The simplicity that this platform provides us to organize the compiled information, making it much easier to develop a good collaborative work. In addition, the “Word Cloud” obtained through the “Most Frequent Words”, facilitates the construction of Categories and Subcategories. Subsequently, the Codification and Classification of the compiled information facilitates its analysis.

Therefore, this literature review arises from the need to find answers in the literature to the need for inclusion that children with CP have because “the quality of educational experiences provided to children will depend on the ability of the teacher to stand back, question and reflect on his or her practice, and continually strive to make the necessary changes” [13, p. 1]. The search for the answers to these changes, in favour of inclusion, did not require us to focus only on studies linked to a single Research Paradigm, so we decide to use the Integrative Literature Review. This type of Revision proved to be the most appropriate given the scarcity of studies with the Action Research Methodology. As Coutinho [11] points out, in teaching-learning we can say that action research is also a form of teaching and not only a methodology to study it. The reflection on the practices contributes not only to the solution of problems, but also to the planning and introduction of changes in those same practices [11]. This is our aim: the change of practices towards inclusion, as no other methodology meets this aim so well. The characteristics of Action Research [11, 13–15, 39], namely: (i) situational, because it aims at the diagnosis and solution of a problem in a specific context; (ii) interventional, because it does not merely describe the problem but intervenes towards change; (iii) participatory, since everyone is involved and not only the researchers and (iv) self-evaluative, as the modifications are being assessed with a view to producing new knowledge, are in line with our research perspective [11, 13–15, 39].

The integrative literature review also made us aware of: (i) the need for more studies focused on the Teaching of Music, to children with CP, to the detriment of studies related to Music Therapy. There is some confusion between these two concepts which is yet to be properly clarified; (ii) in the research carried out, we observed in all studies, even in empirical studies, a concern for the generation of change in favour of inclusion in the teaching of music, which seems to demonstrate the concern of the various authors with this theme of inclusion. This may be motivated by the notorious lack of studies related to this research area. We urgently need more studies related to the inclusion of children with CP in the teaching of music and we believe that the methodology of Action-Research could be an asset to generate knowledge and changes in this perspective.
“Doing action research facilitates evaluation and reflection in order to implement necessary changes in practice” [13, p. xiii].

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