



ARTICLE

Common musical mistakes in Early Childhood Education textbooks

Judith Sánchez-Marroquí¹  and Gregorio Vicente-Nicolás² 

¹Universidad de Murcia, Murcia, Spain and ²Universidad de Murcia, Facultad de Educación, Campus Universitario de Espinardo, 30100 Espinardo, Murcia, Spain

Corresponding author. Email: gvicente@um.es

Abstract

The aim of this study is to detect and analyse mistakes in musical activities included in Early Childhood Education textbooks from a musical and didactic viewpoint. The sample comprised 2,200 activities corresponding to the textbooks of four leading publishers in Spain. An instrument designed *ad hoc* for collection of information was developed, proposing a taxonomy of mistakes in three categories: *musical*, *didactic* and *worksheet*. Results revealed that 22.6% of analysed activities contained some type of mistake. The most frequent were in the *musical* category (concepts, terms or graphic representation), followed by *didactic* (level, planning or methodology) and, finally, those related to student worksheets.

Keywords: Textbooks; Early Childhood Education; publishing house; music education; textbook mistakes

Introduction

There is currently a wide range of educational resources and materials of which the textbook (TB) is the most widely used in many countries, especially in Spain, where this study has been carried out (Vicente Nicolás, 2010a; Rodríguez Rodríguez & Martínez Bonafé, 2016; Ramos Ahijado, Botella Nicolás & Rodríguez Pérez, 2019). Among reasons explaining this hegemony are the advantages it entails: the security it brings to teachers and the help it provides in organisational, social and intellectual decisions (Molina Puche & Alfaro Romero, 2019), or the fact it saves teachers significant time and effort, and that it also enables self-study by students (Ponce de León, 2016). Despite these advantages, there are those that oppose their use: TBs imply the loss of teaching professionalism (López Hernández, 2007) and become a means of control over teachers who are required to apply the mechanics and techniques of others (Martínez Bonafé, 2008). Taking into account these disadvantages, “anti textbook” school cultures have been developed, most notably in the United Kingdom, where several groups of teachers regard them as inadequate tools for developing the curriculum and believe they are detrimental to the dynamics of learning (Platt, 2018). Another example is Italy, where since 2013, the education policy has promoted the use of open educational resources or self-made texts, not only those provided by publishers (Anichini, Parigi & Chipa, 2017). Nowadays, in order to adapt to the challenge posed by new technologies, publishers not only offer TBs and other printed materials in their *educational projects* but also provide digital resources and web pages (Beas Miranda & González García, 2019).

In the case of Early Childhood Education (ECE), the use of TBs is gaining popularity (Martínez Bonafé & Rodríguez Rodríguez, 2010). However, TBs and worksheets, being a static and individual content, put at risk the child’s cognitive skills and collaborative learning (Rodríguez Moreno et al., 2014). Rentzou et al. (2019), following a study in eight countries, indicated that ECE is becoming pre-primary, due to priority given to theoretical knowledge as opposed to other more practical or recreational knowledge.

In relation to musical activities in TBs, if we start from a didactic-musical approach understood as “creative play with sound” (Brand, Gebrian & Slevc, 2012, p. 3), these activities should be aimed at discovering the sounds, instruments and expressive possibilities of the body through games and musical experiences (Koops & Taggart, 2011). However, books do not seem to echo this experiential approach to music (Ponce de León, 2016).

According to a study by Marín-Liébaña and Botella-Nicolás (2019), there are several studies on musical education TBs mainly limited to Primary (48.65%) and Secondary (25.68%) stages, while those related to ECE are minimal (2.70%). The most recurrent themes of these works revolve around: music and sociological studies (Pérez-Caballero, 2017; Bernabé-Villodre & Martínez-Bello, 2018); music and other arts (Vicente Nicolás, 2010b; Botella Nicolás & Gimeno Romero, 2014); musicological aspects (Park, 2018; Kuposova, 2019); historical and cultural aspects (Chang, 2018; Martínez-Delgado, 2019; Ramos Ahijado, Botella Nicolás, & Rodríguez Pérez, 2019); methodology and didactics of music (Neziri, 2019) and music and technology (Park, 2016; Ferreira & Ricoy, 2017).

For some authors, most activities in music TBs are based on “pencil and paper” and therefore promote memoristic and non-significant learning (Vicente Nicolás, 2010a; Alonso Vera & Vicente Nicolás, 2019), or prioritise a more academic approach to music; in other words, they focus on theoretical musical content (Pérez-Caballero, 2017). Likewise, in the midst of the digital era, publishers hardly ever promote the use of ICT in music books (Ferreira & Ricoy, 2017); although they incorporate digital musical materials, innovations do not often go beyond replacing paper format with digital support (Vicente Álvarez, Marín Suelves & Cepeda Romero, 2018). These modifications are of little use if they do not bring methodological changes to school organisational and didactic practices (Rodríguez Rodríguez & Martínez Bonafé, 2016).

All these reasons justify why many music teachers decide not to use TBs and prefer instead to produce their own material, which allows them a more flexible and creative approach (Vicente Nicolás, 2010a). In this line, the study by Nardo et al. (2006) indicated that more than two-thirds of ECE teachers in the United States designed their own music curricula and only 6% of schools used commercially developed music programmes.

Although some TBs neither present adequate planning nor encourage musical reasoning, they can be useful as guides for teachers with little experience or musical competence (Newton & Newton, 2006). In the Spanish context, some authors have highlighted gaps in ECE teachers’ musical knowledge (Vicente Álvarez & Rodríguez Rodríguez, 2010, 2014; López Casanova & Nadal García, 2018) or have emphasised the need for teacher training in the area of musical content (Rodríguez-Quiles, 2017). In addition, according to Vicente Álvarez and Rodríguez Rodríguez (2014), 80% of ECE teachers have no knowledge of models for evaluating musical materials and therefore do so intuitively, based on their experience or the recommendations of publishers.

Research on the veracity of content and the coherence of didactic approaches in TBs provides interesting data: books containing conceptual mistakes (Fernández Palop, Caballero García & Fernández Bravo, 2013; Nurjanah & Retnowati, 2018; Ibáñez Ibáñez, Romero López & Jiménez Tejada, 2019), which are not always well elaborated according to the curriculum (Rodríguez Rodríguez & Martínez Bonafé, 2016; López Sánchez, García Prieto & Travé González, 2018) or that have not been evaluated before being commercialised (Martínez Bonafé, 2008). In the case of ECE, teachers’ books present deficiencies in planning and evaluation of content creating a gap that teachers must fill (Fukkink, 2010).

The fact that TBs contain deficiencies or mistakes can be an obstacle to learning (Fernández Palop & Caballero García, 2017). In addition, Letić (2017) warns that TB mistakes are often ignored and then distributed commercially. For this reason, this author considers that mistakes should be identified and corrected and their causes analysed and investigated. In this line, Gutiérrez Cordero and Cansino González (2001) believe that TBs should have scientific as well as didactic validity, taking into account student level, grading of knowledge and internal coherence. Among the most common mistakes in the musical field, Martínez-Delgado (2019)

Table 1. Ranking of Early Childhood Education textbooks in the Region of Murcia (Spain)

RP	Textbook title	Publishing House		Edition year	Schools		
		Name	ID		F	%	Cum. %
1	<i>Sirabún</i>	Edelvives	PH1	2016	70	23.5	23.5
2	<i>Los increíbles Mun</i>	Santillana	PH2	2016	52	17.4	40.9
3	<i>Pompas de jabón</i>	Anaya	PH3	2014	51	17.1	58.1
4	<i>Sonrisas</i>	Sm	PH4	2016	32	10.7	68.8
5	<i>Nubaris</i>	Edelvives	PH1	2012	29	9.7	78.5
6	<i>El viaje de Suso</i>	Santillana	PH2	2012	23	7.7	86.2
7	<i>Guau</i>	Sm	PH4	2013	11	3.7	89.9
8	<i>Retos</i>	Anaya	PH3	2017	7	2.3	92.3
9	<i>Colorines</i>	Sm	PH4	2013	6	2.0	94.3
10	<i>Friend.Ly</i>	Edebé	PH5	2017	4	1.3	95.6
11	<i>Mica y sus amigos</i>	Santillana	PH2	2014	2	0.7	96.3
12	<i>Minitribu</i>	Edebé	PH5	2017	2	0.7	97.0
13	<i>Espiral mágica</i>	Vicens Vives	PH6	2010	2	0.7	97.7
14	<i>Papelillos</i>	Anaya	PH3	2010	2	0.7	98.3
15	<i>Kids</i>	Edebé	PH5	2013	2	0.7	99.0
16	<i>La batuta mágica</i>	Alhambra	PH7	2004	1	0.3	99.3
17	<i>Suena Suena</i>	Real Musical	PH8	2003	1	0.3	99.7
18	<i>Aprendo música</i>	Santillana	PH2	2003	1	0.3	100.0
Total					298	100.0	100.0

RP = Ranking position; PH = Publishing House.

points out the lack of updated content related to cultural transmission. Likewise, in the case of ECE, Botella Nicolás and Adell Valero (2019) emphasise that planning of musical activities at this stage cannot simply be improvised and become a random system where coherent experiences are lacking.

Taking into account the various studies that warn the presence of mistakes in didactic material most used by teachers and the importance of detecting them, the aim of this study is to detect and analyse from a musical and didactic point of view errors made by musical activities included in ECE TBs.

Method

Sample

The study sample comprised 2,200 musical activities from the most used ECE TBs in the Region of Murcia (Spain). We must clarify that the ECE TB in this country is a global educational project including all content from the curriculum. Most publishers offer musical proposals together with the rest of the content and rarely present a TB exclusively on music.

Of the 497 schools in Murcia, 298 (60%) used TBs at this stage. A ranking of TBs was established from schools using methodology based on TB (Table 1). To determine sample size, a confidence level $\alpha = .01$ and a 2% margin of error were established, obtaining result $n = 275$. To reach this number of schools, the first eight TBs in the ranking of most used were selected.

Each TB is articulated in three volumes, one for every stage level numbering 24 teachers books in total. The TBs proceeded from four different publishing houses (PHs), and each had an old and new TB edition. These four are among the leading publishers in the country in terms of turnover (Beas Miranda & González García, 2019).

Instrument

For data collection, an *ad hoc* instrument was developed, comprising the following sections:

- I. TB data: title, publisher and year of publication (edition).
- II. Data identifying activity: level, quarter, unit, page, activity title and description.
- III. Planning of activity: type of activity (Musical Activities [MA] or Activities with Music as a Resource [AMR]).
- IV. Categories and types of mistakes in activity.
 - a) Musical Mistake:
 - 1) *Conceptual*. The activity presents terminological mistakes, wrong musical concepts or incorrect use.
 - 2) *False association*. The activity establishes artificial or erroneous associations between musical concepts (Willems, 1963).
 - 3) *Graphic representation*. The graphics used (conventional or unconventional) do not correctly represent musical concept or procedure.
 - b) Didactic mistake:
 - (4) *Planning mistake*. The activity does not respond to the objectives or musical contents programmed.
 - (5) *Methodological*. The didactic process of the activity does not allow its correct execution.
 - (6) *Omission*. The activity lacks information, resources or materials for correct implementation.
 - (7) *Level*. The difficulty of the activity differs considerably from the level for which it has been programmed.
 - (8) *Incoherence*. The skills or competences involved in the activity make it unfeasible to carry out.
 - c) *Worksheet mistake* (this is a misuse of the worksheet rather than a mistake itself).
 - (9) *Non-musical worksheet*. The worksheet is not related to any musical concept or procedure.
 - (10) *Unnecessary musical worksheet*. The worksheet is related to musical concepts or procedures, but does not complement or contribute to the musical activity proposed.

In order to verify the content validity of the instrument, the level of intra- and inter-evaluator agreement was checked ($K = .92$, $K = .85$ respectively). Likewise, expert judgement was achieved through a validation scale (1 = *very low* to 4 = *very high*), whose results indicated a very high content validity ($M = 3.8$) and moderate concordance among judges ($W = .65$). The item covariation method was used to calculate instrument reliability and data reflected good internal consistency ($\alpha = .82$).

Procedure

All school websites in the region were consulted to see the ranking of most used TBs. Where information was unavailable, the school board was contacted personally by e-mail or telephone.

Once ranking of ECE TBs in the Region of Murcia was established, those needed to reach the required sample size were selected.

Data analysis

An initial exploratory analysis was performed for description of variables (frequencies, mean and testing of parametric assumptions). In addition, an inferential analysis was carried out to study relationships between different variables (Chi-square, Spearman's correlation and Cronbach's alpha) and the agreement of several observers regarding the same variable (Cohen's *K* and Kendall's *W*). A 95% confidence level and r_s values $> .05$ for correlations were accepted for interpretation of results. Information was analysed with the SPSS version 24 programme.

Results

In the 2,200 activities analysed, 544 mistakes were detected, affecting a total of 497 activities (22.6%). There were significant differences among the eight TBs, with TB4 containing most mistakes (27%) and TB7 least (14.8%). There were also differences in TB edition as the most current ones had more mistakes than older versions. If type of activity is considered, 1,435 (65.2%) of music activities programmed by TBs were MA, while 765 (34.8%) were AMR. The number of activities with mistakes was also related to type of activity, as 29.8% of MA contained errors compared to 9% for AMR. There was also an association between level and mistake frequency, as mistakes increased in proportion to level. No relationship was established between TB ranking position and mistake frequency (Tables 2 and 3).

Of the 497 activities containing a mistake, 53.9% were *musical*, 30.2% *didactic* and 25.4% *worksheet* mistakes. The frequency of musical mistakes ($F = 268$) was significantly related to the different TBs, PHs, edition, type of activity, but not to level or position in ranking. Mistakes of this type had a higher presence in TB3 (91%) and PH1 (71.7%). Likewise, older TBs had 23.9% more mistakes of this type than current TBs, and MA exceeded AMR by 21.6% (Tables 2 and 3). Within the category of *musical* mistake, the most frequent were *conceptual* mistakes (90.7%), of which 72% were related to incorrect use of the terms *rhythm/pulse/tempo*. Some examples of this type were: *sing the song slowly and increase the rhythm little by little* [TB3-Level 3]. To a lesser extent, *false association* mistakes were detected (7.8%), most linked the intensity parameter to musical tempo or pitch: *play slow when the sound is soft and fast when loud* [TB8-Level 1]. Finally, mistakes were also found in graphic representation (6.7%), as the following examples indicate: *draw big pictures when the sound is low and small pictures when it is high* (without any reference to the verticality of the pitch representation) [TB8-Level 2].

With regard to *didactic* mistakes ($F = 150$), significant differences were found among the eight TBs, the four PHs, newer and older editions, the three levels and type of activity; however, there was no relationship with ranking. These mistakes were more frequent in TB4 (52.1%), and PH4 (50.9%), in current TBs (20.3% more than older editions), in the MA (19.9% more than AMR), and they increased according to level. Of all activities classified as a *didactic* mistake, the *level one* was most frequent (58.7%). Examples of this type were: *identify the three sounds that form the main chord of C major* (the teacher makes inversions of the chord, and children must identify the main note and the corresponding inversion) [TB7-Level 3]. The *omission* mistake accounted for 16.7% of this category, with examples such as: *recognise bass and treble sounds from marine animals in the recording* (not including audio) [TB3-Level 2]). *Planning* mistakes (14.7%) and *methodological* mistakes (14%) yielded similar percentages. Within the first type, the following examples can be cited: *recognises slow and fast "rhythms" while listening to the work of a composer* (however, the proposed work actually varies intensity and not tempo) [TB4-Level 3]. With respect to *methodological* mistakes, some examples were: *identify string, percussion and wind instruments* (without having worked on instrument families) [TB5-Level 2]. The *incoherence* mistake was the

Table 2. Mistakes in music activities in Early Childhood Education textbooks

	N° Activities with mistakes		Mistakes Categories (%)		
	F	%	Musical	Didactic	Worksheet
All activities ($N = 2,200$)	497	22.6	53.9	30.2	25.4
Textbook					
TB1	83	26.3	62.7	36.1	3.6
TB2	38	17.8	42.1	34.2	55.3
TB3	67	22.4	91.0	16.4	6.0
TB4	71	27.0	59.2	52.1	2.8
TB5	44	20.1	88.6	11.4	6.8
TB6	48	25.1	27.1	2.1	77.1
TB7	37	14.8	56.8	48.6	2.7
TB8	109	24.3	22.0	32.1	50.5
Publishing House					
PH1 (TB1 + TB5)	127	23.7	71.7	27.6	4.7
PH2 (TB2 + TB6)	86	21.3	33.7	16.3	67.4
PH3 (TB3 + TB8)	176	23.5	48.3	26.1	33.5
PH4 (TB4 + TB7)	108	21.1	58.3	50.9	2.8
Edition					
Old (TB3 + TB5 + TB6 + TB7)	196	20.4	68.4	17.9	23.0
New (TB1 + TB2 + TB4 + TB8)	301	24.3	44.5	38.2	26.9
Level					
1st level	160	20.4	47.5	24.4	38.1
2nd level	156	20.7	60.3	26.9	21.2
3rd level	181	27.4	54.1	38.1	17.7
Type of activity					
MA (<i>Musical Activity itself</i>)	428	29.8	50.9	32.9	26.6
AMR (<i>Activities with Music as a Resource</i>)	69	9.0	72.5	13.0	17.4

Table 3. Mistakes in music activities in Early Childhood Education textbooks (χ^2 test)

	<i>df</i>	All mistakes	Mistakes Categories		
			Musical	Planning	Worksheet
Textbook	7	19.007**	122.654**	55.481**	193.238**
Publishing House	3	1.866	33.284**	31.725**	144.349**
Edition	1	4.506*	27.174**	22.657**	0.979
Level	2	12.620**	5.179	8.761*	20.876**
Type of activity	1	123.523**	11.085**	11.167**	2.683

* $p < .05$.** $p < .01$

lowest value (7.3%), but the impossibility of performing activities with this type of mistake must be highlighted, as the following examples show: *hang socks on a string while following the rhythm of the music* [TB2-Level 1].

Finally, activities containing *worksheet* mistakes ($F = 126$) showed an association between the eight TBs, the four PHs and the three levels, but not with edition, activity type or ranking. These mistakes were more present in TB6 (77.1%) and PH2 (67.4%). It was also observed that mistakes decreased in proportion to level. From activities counted in this category, 57.9% included *non-musical worksheets* not related to sound or music (e.g., *count people and write their number* [TB2-Level 1]; *colour the animals by continent they live on* [TB2-Level 3]; *look up words in alphabet soup and write their names* [TB6-Level 3]). The rest (42.1%) were *unnecessary musical worksheets*; in other words, although they were related to musical concepts, they did not imply any musical learning or procedure (e.g.: *colour the xylophone* [TB2-Level 1]; *stamp your fingerprints inside the drum pattern* [TB8-Level 1]).

Discussion

The results of the study show that one in every five activities analysed in ECE TBs contains mistakes, especially music-specific activities (MA), which are double the amount of errors of those which use music as a resource for other areas (AMR). It has also been found that mistakes increase in proportion to level. Correctness and precision of activities were not a variable which influenced TB selection, since the most widely used publisher produces material with most mistakes. This coincides with other studies indicating that TB choice is based more on the intuition and experience of ECE teachers rather than analysis of content and the activities they propose (Vicente Álvarez & Rodríguez Rodríguez, 2014; Platt, 2018). Furthermore, newer TB editions not only do not reduce the number of mistakes compared to older editions, but actually increase them.

The *musical* mistake category was most frequent, present in half of activities with some mistake, mainly those related to the definition of concepts or their incorrect use. Conceptual mistakes were also highlighted by several authors in other areas and educational stages (Fernández Palop, Caballero García & Fernández Bravo, 2013; Nurjanah & Retnowati, 2018; Ibáñez Ibáñez, Romero López & Jiménez Tejada, 2019). Mistakes in graphic representation and false musical associations were also detected, which, though infrequent, are no less serious. It must be remembered that false associations were mentioned decades ago by Willems (1963), and yet they remain present in music activities proposed by the supposed experts who have developed the TB.

Almost a third of mistakes were *didactic*, especially those corresponding to activities with a difficulty which was too high (*level* mistake). In this respect, it should be remembered that one of the most important criteria for the didactic validity of TBs is adaptation to student level (Gutiérrez Cordero & Cansino González, 2001). Some activities lacked information, resources or materials for correct implementation. Although these results are much lower compared to other studies of different subjects and levels (Ibáñez Ibáñez, Romero López & Jiménez Tejada, 2019), they show that TBs present information deficiencies in content (Fukkink, 2010). Despite TBs proposing a certain sequencing of objectives and content (Martínez Bonafé, 2008), the presence of *planning* and *methodological* mistakes indicates that these are often not related to the activities proposed and the learning process can sometimes be inappropriate. There were few errors of *incoherence* (7.5%) regarding the set of *didactic* mistakes; however, this does not reduce their seriousness if we consider that these activities cannot be performed even at higher levels. These types of mistakes have also been mentioned in the study by Nurjanah and Retnowati (2018) with similar results.

A quarter of mistakes were found in activity worksheets. Although half of these had been classified as musical by authors, they actually developed learning related to the knowledge of other subjects (mathematics, reading and writing, art...), but not to music. To a similar extent,

unnecessary musical worksheets were confirmed which contributed nothing to the musical activity. Moreover, unlike other mistake categories (*musical* and *didactic*), *worksheet* mistakes increased in lower levels, in particular where activities which focused on non-musical resources could be dispensable. In this line, other studies warn of TBs adopting didactic strategies typical of other subjects (such as the use of worksheets), which are not directly related to sound and music (Vicente Nicolás, 2010a; Alonso Vera & Vicente Nicolás, 2019).

Finally, we would like to raise the following messages to each of actors involved in the educational reality analysed: publishing houses, university professors and ECE teachers.

- *To Publishing Houses*: the results of this study show some weaknesses of published TBs and evidence that authors often do not master the music (musical mistakes) or do not know the educational stage for which the musical activities are designed (didactic mistakes). We hope that this work will attract the attention of publishers and encourage them to include in a specialist in music with a great knowledge in ECE in their team of authors. Likewise, it is of vital importance that publishers produce TBs that meet the criteria indicated by Gutiérrez Cordero and Cansino González (2001) of scientific validity and didactic validity. The former, presenting objective knowledge with accuracy and clarity of musical terms and the latter, didactic validity, through organised and coherent content adapted to student level.
- *To University Professors*: educators who train future ECE teachers should alert their students to this problem and pay closer attention to selection and evaluation of musical didactic materials in their study programmes. This action is much more important in cases where, due to different kinds of limitations, university students cannot achieve the minimum desired musical skills. These students with little musical training are likely to be those who make most use of the TB and, at the same time, do not possess the necessary knowledge to identify and correct possible mistakes.
- *To ECE Teachers*: considering that one advantage of TBs is to facilitate and organise a teacher's work (Molina Puche & Alfaro Romero, 2019), the presence of mistakes in these materials not only hinders ECE teachers but also impedes the implementation of TB musical activities. Teachers unable to detect such mistakes will often perform these activities wrongly, and others believe they do not possess the necessary musical knowledge to perform them and will therefore ignore them. For this reason, ECE teachers should maintain a critical attitude to TBs when choosing one. In the event that they do not have the knowledge to assess the music section of such materials, the ECE teaching staff should be assisted by a specialist in the subject (e.g., the Primary Education music teacher who works in the same school). Likewise, these teachers should be aware of the need for continuous training, especially in those areas where they may be less well trained, as is the case with music in Spain. Finally, and taking into account the results of the study, the high number of unnecessary worksheets in musical activities must be highlighted, which should help ECE teachers to understand that, on many occasions, worksheets do not involve any musical action and should therefore consider avoiding them as much as possible. In other words, the fact that teachers need the TB to plan their music teaching does not imply that ECE children need to use a TB to carry out their musical activities.

Funding. The authors received no financial support for the research, authorship and/or publication of this article.

References

- ALONSO VERA, M. & VICENTE NICOLÁS, G. (2019). El libro de texto de música: perspectiva del profesorado de educación secundaria [Textbooks for music education: secondary school teachers' perspectives]. *Espiral. Cuadernos del Profesorado*, 12(25), 49–59.

- ANICHINI, A., PARIGI, L. & CHIPA, S. (2017). Between tradition and innovation: the use of textbooks and didactic digital contents in classrooms. *RELATEC: Revista Latinoamericana de Tecnología Educativa*, **16**(2), 97–110.
- BEAS MIRANDA, M. & GONZÁLEZ GARCÍA, E. (2019). Fuentes para la elaboración de un mapa editorial de libros de texto en España [Sources for the elaboration of a textbook editorial map in Spain]. *Revista História da Educação (Online)*, **23**, 1–32.
- BERNABÉ-VILLODRE, M. Del M. & MARTÍNEZ-BELLO, V. E. (2018). Analysis of gender, age and disability representation in music education textbooks: A research update. *International Journal of Music Education*, **36**(4), 494–508.
- BOTELLA NICOLÁS, A. M. & ADELL VALERO, J. R. (2019). Conceptual bases for the design of a methodology of musical didactics. *Revista de Comunicación de la SEECI*, **49**, 1–18.
- BOTELLA NICOLÁS, A. M. & GIMENO ROMERO, J. V. (2014). Música de cine y audición en los libros de texto de Enseñanza Secundaria: consideraciones sobre su didáctica [Film music and listening in secondary school textbooks: teaching considerations]. *Espiral. Cuadernos del Profesorado*, **7**(14), 45–53.
- BRANDT, A., GEBRIAN, M. & SLEVC, L. R. (2012). Music and early language acquisition. *Frontiers in Psychology*, **3**, 1–17.
- CHANG, H. K. H. (2018). Colonial circulations: Japan's classroom songbooks in Korea, 1910–1945. *Ethnomusicology Forum*, **27**(2), 157–183.
- FERNÁNDEZ PALOP, M. P. & CABALLERO GARCÍA, P. A. (2017). El libro de texto como objeto de estudio y recurso didáctico para el aprendizaje: fortalezas y debilidades [The textbook as an object of study and a teaching resource for learning: strengths and weaknesses]. *Revista Electrónica Interuniversitaria de Formación Del Profesorado*, **20**(1), 201.
- FERNÁNDEZ PALOP, P., CABALLERO GARCÍA, P. & FERNÁNDEZ BRAVO, J. A. (2013). ¿Yerra el niño o yerra el libro de Matemáticas? [Does the child miss or does he miss the math book?] *Números. Revista Didáctica de las Matemáticas*, **83**, 131–148.
- FERREIRA, V. & RICOY, M. C. (2017). Contribuição dos manuais de educação musical para a utilização das TIC [Contribution of music education manuals to the use of ICTs]. *Cuadernos Info*, **40**, 203–217.
- FUKKINK, R. G. (2010). Missing pages? A study of textbooks for Dutch early childhood teacher education. *Teaching and Teacher Education*, **26**(3), 371–376.
- GUTIÉRREZ CORDERO, R. & CANSINO GONZÁLEZ, J. I. (2001). Música y libro de texto. *Música y Educación*, **47**, 51–65.
- IBÁÑEZ IBÁÑEZ, M. M. I., ROMERO LÓPEZ, M. C. & JIMÉNEZ TEJADA, M. P. (2019). Which type of science is presented in Secondary Education textbooks? *Enseñanza de las Ciencias*, **37**(3), 49–71.
- KOOPS, L. H. & TAGGART, C. C. (2011). Learning through play: Extending an early childhood music education approach to undergraduate and graduate music education. *Journal of Music Teacher Education*, **20**(2), 55–66.
- KOPOSOVA, I.V. (2019). Musical form and its elucidation in school textbooks of music literatura. *Music Scholarship*, **2**, 178–189.
- LETIĆ, M. (2017). How should repeated gross mistakes in textbooks be treated? *Advances in Physiology Education*, **41**(1), 99.
- LÓPEZ CASANOVA, M. B., & NADAL GARCÍA, I. (2018). La estimulación auditiva a través de la música en el desarrollo del lenguaje en Educación Infantil [Auditory stimulation through music in the development of language in Early Childhood Education]. *Revista Electrónica De Investigación Y Docencia (REID)*, **20**, 107–124.
- LÓPEZ HERNÁNDEZ, A. (2007). Libros de texto y profesionalidad docente [Textbooks and teaching professionalism]. *Avances en supervisión educativa: Revista de la Asociación de Inspectores de Educación de España*, **6**, 14.
- LÓPEZ SÁNCHEZ, F. J., GARCÍA PRIETO, F. J. & TRAVÉ GONZÁLEZ, G. (2018). La enseñanza sobre el medio y los libros de texto en Andalucía: Un análisis de contenido y de concepciones del profesorado [Learning environment and textbooks in Andalucía: An analysis content and teacher knowledges]. *Revista Complutense de Educación*, **29**(2), 539–557.
- MARÍN-LIÉBANA, P. & BOTELLA-NICOLÁS, A. M. (2019). El análisis de los manuales escolares en la educación musical [The analysis of textbooks in music education: a literature review]. *Revista Música Hodie*, **19**, 1–20.
- MARTÍNEZ-DELGADO, C. (2019). Análisis de la transmisión cultural de los libros de texto de música en Educación Primaria [Analysis of the cultural transmission of music textbooks in Primary Education]. *RELATEC: Revista Latinoamericana de Tecnología Educativa*, **18**(2), 117–132.
- MARTÍNEZ BONAFÉ, J. (2008). Los libros de texto como práctica discursiva [Textbooks as discursive practice]. *Revista de la Asociación de Sociología de la Educación (RASE)*, **1**(1), 62–73.
- MARTÍNEZ BONAFÉ, J. & RODRÍGUEZ RODRÍGUEZ, J. (2010). El currículum y el libro de texto escolar. Una dialéctica siempre abierta [The school curriculum and textbook. A dialectic always open]. In J. GIMENO (ed.), *Saberes e incertidumbres sobre el currículum* (pp. 246–268). Spain: Morata.
- MOLINA PUCHE, S. & ALFARO ROMERO, A. (2019). Ventajas e inconvenientes del uso del libro de texto en las aulas de Educación Primaria. Percepciones y experiencias de docentes de la Región de Murcia [Advantages and disadvantages of the use of the textbook in Primary Education classrooms. Perceptions and experiences of teachers in the Region of Murcia]. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, **22**(2), 179–197.
- NARDO, L. R., CUSTODERO, L. A., PERSELLIN, D. C. & FOX, D. B. (2006). Looking back, looking forward: A report on early childhood music education in accredited American preschools. *Journal of Research in Music Education*, **54**(4), 278–292.

- NEWTON, D. P. & NEWTON, L. D. (2006). Could elementary textbooks serve as models of practice to help new teachers and non-specialists attend to reasoning in music? *Music Education Research*, **8**(1), 3–16.
- NEZIRI, M. (2019). Analysis of curricular content that urges the development of critical thinking of pupils in Kosovo schools. *Journal of Educational and Social Research*, **9**(2), 48–55.
- NURJANAH, A. & RETNOWATI, E. (2018). Analyzing the extraneous cognitive load of a 7th grader mathematics textbook. *Journal of Physics: Conference Series*, **1097**(1), 1–10.
- PARK, J.H. (2016). A Study on the functional features of digital textbooks for music education in Korea. *Advanced Science Letters*, **22**(11), 3386–3389.
- PARK, J.H. (2018). Direction for developing textbooks through analysis on contents and physical features of music textbooks in Korea. *Indian Journal of Public Health Research & Development*, **9**, 644.
- PÉREZ-CABALLERO, B. (2017). Libros de texto, o “todo” lo que debes saber sobre música [Textbooks, or “everything” you need to know about music]. *Dedica. Revista de Educação e Humanidades*, **11**, 133–149.
- PLATT, N. (2018). Powerful knowledge and the textbook. *London Review of Education*, **16**(3), 414–427.
- PONCE DE LEÓN, L. (2016). El libro de texto como recurso en la clase de lenguaje musical. Pros y contras [The textbook as a resource in the Music Language class. Pros and cons]. *Docencia e Investigación: Revista de La Escuela Universitaria de Magisterio de Toledo*, **41**(26), 89–108.
- RAMOS AHIJADO, S., BOTELLA NICOLÁS, A. M. & RODRÍGUEZ PÉREZ, J. L. (2019). Tratamiento del libro de texto en la historia del sistema educativo español como mediador didáctico en la educación musical [Treatment of the textbook in the history of the Spanish educational system as a didactic mediator in music education]. *Revista Música Hodie*, **19**, 1–17.
- RENTZOU, K., SLUTSKY, R., TUUL, M., GOL-GUVEN, M., KRAGH-MÜLLER, G., FOERCH, D. F. & PAZ-ALBO, J. (2019). Preschool teachers’ conceptualizations and uses of play across eight countries. *Early Childhood Education Journal*, **47**(1), 1–14.
- RODRÍGUEZ-QUILES, J. A. (2017). Music Teacher Training: A precarious area within the Spanish university. *British Journal of Music Education*, **34**(1), 81–94.
- RODRÍGUEZ MORENO, J., MOLINA JAÉN, M. D., CALLADO MORENO, J. A. & PÉREZ, E. (2014). Key competences in preschool text books. Utopia or reality? *EDULEARN14 Proceedings*, 192–201.
- RODRÍGUEZ RODRÍGUEZ, J. & MARTÍNEZ BONAFÉ, J. (2016). Libros de texto y control del currículum en el contexto de la sociedad digital [Textbooks and curriculum control in the context of the digital society]. *Cadernos CEDES*, **36**(100), 319–336.
- VICENTE ÁLVAREZ, R. M., & RODRÍGUEZ RODRÍGUEZ, J. (2010). *Os materiais didácticos e musicais en Educación Infantil* [Didactic materials and music in Didactic materials and music in Early Childhood Education]. University of Santiago de Compostela.
- VICENTE ÁLVAREZ, R. M. & RODRÍGUEZ, J. (2014). Opinión y valoración del profesorado sobre los materiales didácticos de música en Educación Infantil [Teacher opinion and appraisal of didactic music materials in Early Childhood Education]. *Bordón. Revista de Pedagogía*, **66**(3), 149–163.
- VICENTE ÁLVAREZ, R. M., MARÍN SUELVE, D. & CEPEDA ROMERO, O. (2018). Analysis of musical didactic materials for Primary Education in digital school. *Revista Electrónica de LEEME*, **42**, 1–15.
- VICENTE NICOLÁS, G. (2010a). El libro de texto en educación musical [The textbook in music education]. *Espiral. Cuadernos del Profesorado*, **3**(5), 30.
- VICENTE NICOLÁS, G. (2010b). Las actividades de movimiento en el aula de música: una aproximación a través de los libros de texto [Movement activities in the music room: an approach through textbooks]. *Educatio Siglo XXI*, **28**(1), 209–226.
- WILLEMS, E. (1963). *Las bases psicológicas de la educación musical* [Psychological foundations of music education]. Universitaria.