

Chapter # 20

CLASS SINGING BY PRE-SERVICE GENERALISTS: INDIVIDUAL LEADING AND CO-TEACHING

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ABSTRACT

This study contributes to filling the gaps in how pre-service generalist teachers develop skills to lead class singing. In this chapter, I present the case study of two generalists who co-led class singing in their second-year internship while they taught individually in their first- and third-year internships. The comparison of the co-led lesson with the individual lessons shows significant differences in how the two generalists led the singing and managed the class. The focus of this study is on their use of audio devices and musical instruments. I filmed the internship lessons over the course of their three-year teacher training and analysed the moments when the trainees used audio devices and musical instruments. The analysis of the individual lessons shows changes in the in-situ practice of the two generalists using an audio device, guitar and body percussion. The analysis of the co-led lesson shows how the trainees collaborated on classroom management from a didactic and musical point of view.

Keywords: music education, class singing, song leading, co-teaching, pre-service teacher, teacher training.

1. INTRODUCTION

Generalist teachers play a key role in music education in pre-school and primary schools because they can include musical activities in their daily teaching, which contribute to the transmission of this cultural practice (King, 2018; Stadler Elmer, 2015). However, there is still little research on the in-situ practices of generalists, particularly during their training.

To our knowledge, no studies have focused longitudinally on the professional development of generalists in music education or on the co-leading of lessons. Several studies have reported difficulties and issues related to the training of generalists in music education (de Vries, 2013; Garvis, & Riek, 2010). Other studies have highlighted that the value generalists give to music education in preschool and primary schools represents a potential for change in their actions (de Vries, 2014; Collins, 2014). Some research on the professional development of undergraduate music students has also focused on initial field teaching experiences and peer-team teaching (Brenan, & Witte, 2003; Paul et al., 2001; Hicks, 1982).

Our research contributes to knowledge about music education delivered by generalists with a three-year longitudinal study of the development of teachers' knowledge and skills to lead class singing. Each member of our team was responsible for analysing specific skills.

In this paper, I present the case study of pre-service teachers Martha and Sarah, who taught individually in their first- and third-year internship classes and together in their second-year internship. This provides an example of co-led class singing. I focus on the development of their skills in using audio devices (AD) and musical instruments (MI), including body percussion. My analysis aims to describe how Martha and Sarah led the class

singing using playback, guitar, and body percussion when they taught separately and to examine how they shared the musico-didactic tasks in the co-led lesson.

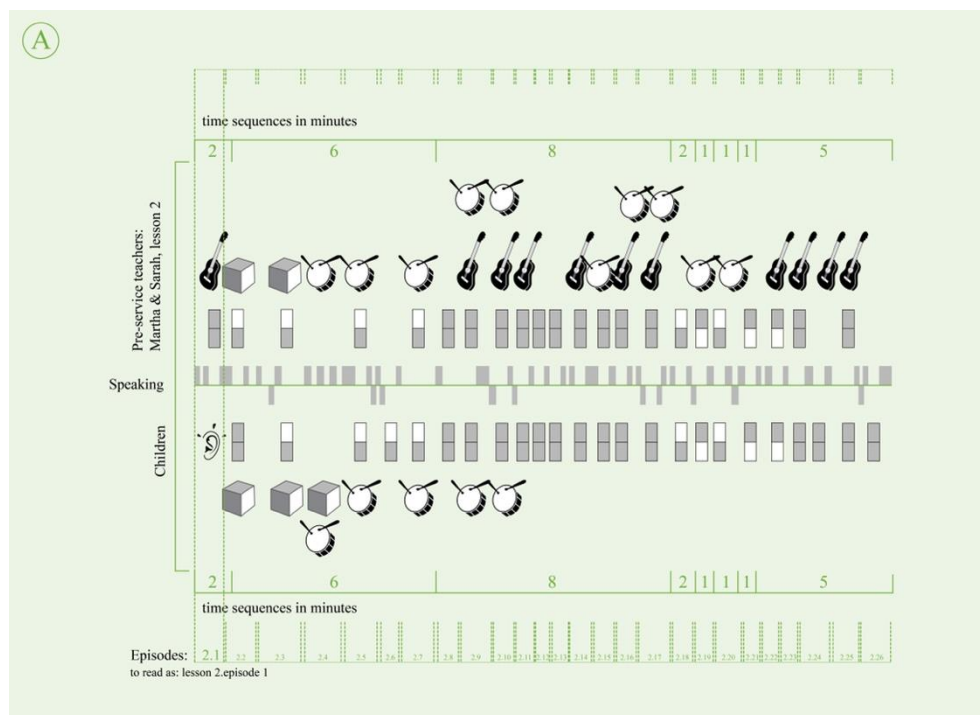
2. DESIGN AND METHOD

Martha and Sarah were attending the three-year training course as generalists when they joined our study according to European and national ethical requirements of consent to participate. During their internships, I recorded one lesson a year, requiring them to teach the children a new song. I attended the lessons in person and videotaped them. The data set of the two case studies consists of a total of five videotaped lessons: two individual lessons for both (first- and third-year training), and the video of the co-led lesson in the second year.

I transcribed the videotaped lessons using the Lesson Activities Map methodology (Savona, Stadler Elmer, Elisa, Joliat, & Cavasino, 2021). Lesson Activities Maps (LAMaps) provide an overview of the temporal organisation of lesson activities and enable the overall context to be considered when some moments are selected for in-depth analysis.

Figures 1, 3 and 4 show Martha and Sarah’s five lessons transcribed with the LAMap methodology. Table 1 shows the key to the symbols and icons to read the LAMaps. Figure 1 shows the lesson co-led by Martha and Sarah in their second-year internship. Figure 3 shows Martha’s first- and third-year individual lessons and Figure 4 shows Sarah’s individual lessons. In the LAMaps, simultaneous activities are displayed vertically. These are numbered progressively and termed “episodes” (abbreviated: Ep.) as shown in Figure 1.

*Figure 1.
Class singing lesson co-led by pre-service generalists Martha and Sarah
in their second-year internship.*



Class singing by pre-service generalists: individual leading and co-teaching

Table 1.
Key for reading the symbols and icons of the LAMap transcription methodology.















LAMap Key				
	Single verse	Verse(s) of the target song momentarily not in focus	 Movements	Movements not related to the semantic content of the lyrics (dancing, marching, etc.)
	Single verse, melody and lyrics	Singing with lyrics	 Material support	Use of realia such as pictures, tissue paper, puppets, etc.
	Single verse, melody only	Singing the melody without lyrics by producing single syllables, e.g. la-la-la	 Piano	Use of the instrument as song accompaniment or on its own
	Single verse, lyrics only	Lyrics recited, i.e. verse metre is implicitly present	 Guitar	Use of the instrument as song accompaniment or on its own
	Single verse, metric pulse or rhythm only	Metric pulse or rhythm without lyrics or melody, expressed by body percussion or vocal sound	 Audio devices	Song reproduced or voice accompanied by audio support, e.g. Mp3, CD-Room
	Listening	Instruction to listen attentively	 Percussion instruments or/and body percussion	Use of the instrument as song accompaniment or on its own, or metric sound production by body percussion
	Semantic gestures	Gestures related to the semantic content of the lyrics	 Sounds with voice and body	Sound production with the voice and/or the body without metre

Figure 2.
Class singing lessons led individually by pre-service generalist Martha in the first- and third-year internship.

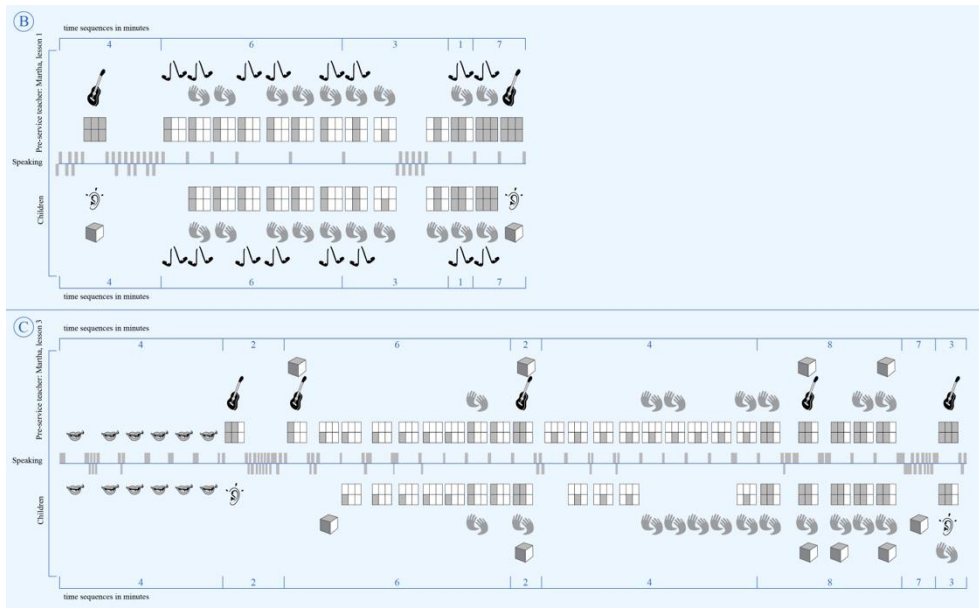
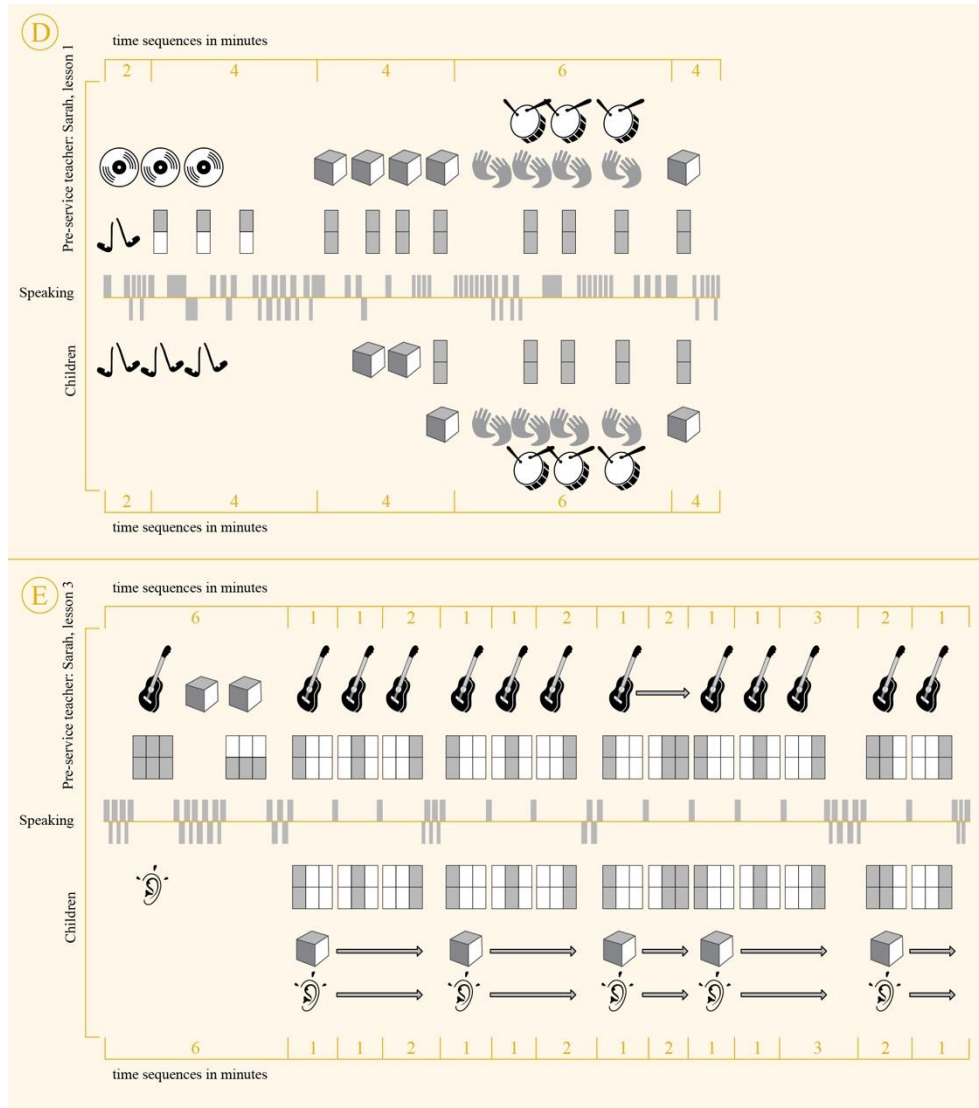


Figure 3.
Class singing lessons led individually by pre-service generalist Sarah in the first- and third-year internship.



Based on the epistemological interest of exploring the use of audio devices (AD) and musical instruments (MI) in individual and co-led song teaching, I selected lesson episodes in which Martha and Sarah used them and analysed them thoroughly from a musico-didactic perspective (Mayring, 2015, 2021; Huber, 2020; Tuma, Schnettler, & Knoblauch, 2013). In the next section I present the analysis of the lessons. I refer to Martha's and Sarah's lessons with the following labels, in which the numbers 1, 2 and 3 each indicate the year of training: Martha-1, Martha-2 and Martha-3, and Sarah-1, Sarah-2 and Sarah-3.

3. DATA ANALYSIS

In the co-taught lesson (Figure 1) Martha-2 and Sarah-2 used the guitar and body percussion. The LAMaps of the individual lessons (Figure 2 and Figure 3) show that Martha used the guitar in both lessons, while Sarah used an audio device (MP3) in the first-year lesson (Figure 3, Sarah-1) and the guitar in the third year (Figure 4, Sarah-3). The LAMap shows which tools Martha and Sarah used but does not show how this was done. Furthermore, it is not possible to reconstruct from the LAMap the repartition of tasks between Martha and Sarah in the co-teaching lesson. To explore in detail the use of AD and MI in individual and co-guided lessons, I present in Table 2 the results of the analysis of the three lessons in comparison.

Table 2.
Comparison of the use of audio device, body percussion and guitar in Martha and Sarah's individual and co-led class singing lessons.

First year: individual lesson		Second year: co-led lesson		Third year: individual lesson	
Martha; guitar		Martha & Sarah guitar and body percussion		Martha; guitar	
Episodes	Use	Episodes	Use	Episodes	Use
1.1	GI + GFA	2.1	GSP + GFA	3.1	GI + GFA
1.2	GI + GFA	2.4	BPW (C)	3.2	GI + GFA
Sarah; guitar		2.5	BPW (C)	3.4	GI + GFA
Episodes	Use	2.7	BPW (C)	3.5	GI + GFA
1.1	ABM	2.9	BPW (C) + GSP + GFA	3.6	GI + GFA
1.2	ABM	2.10	BPW (C) + GSP + GFA	3.7	GI + GFA
1.3	ABM	2.11	GSP + GFA	Sarah; guitar	
1.7	BPP (T and C)	2.14	GSP	Episodes	Use
1.8	BPP (T and C)	2.15	BPW (T)	3.1	GI + GFA
1.9	BPP (T and C)	2.16	GSP + BPW (T)	3.2	GI + GFA
		2.17	GSP + BPW (T) + GFA	3.3	GI + GFA
		2.18	<i>a cappella</i>	3.4	GI + GFA
		2.19	BPW (T)	3.5	GI + GFA
		2.20	BPW (T)	3.6	GI + GFA
		2.21	<i>a cappella</i>		
		2.22	<i>a cappella</i>		
		2.23	GSP + GFA		
		2.24	GSP + GFA		
		2.25	GSP + GFA		
		2.26	GSP + GFA		

Key:	GI	Guitar introduction	BPP	Body percussion part of song, (C = class) or (T = teacher)
	GFA	Guitar full accompaniment	BPW	Body percussion whole song, (C = class) or (T = teacher)
	GSP	Guitar starting pitch	ABM	Audio device for background music

The overview in Table 2 shows significant differences in the use of instruments between the individual and co-led lessons. It is relevant that the use of the guitar and body percussion is not only more frequent in the co-led lesson than in the individual lessons but most importantly much more varied and differentiated with various combinations. The analysis shows that in the individual lessons Martha always used the guitar to play the introduction and full accompaniment, while Sarah-1 used the audio device as background during other activities and Sarah-3 the guitar to play the introduction and continue with the full accompaniment. In the co-led lesson, the guitar was used to play the starting pitch only and/or the full accompaniment only, while body percussion was integrated both as a class activity with the active involvement of the children and as an action performed exclusively by Martha and Sarah.

In the following paragraphs, I present a detailed analysis of the actions of the co-led lesson and how Martha and Sarah distributed the tasks between them. Then, I describe their individual lessons to provide an overview of their professional development, with the focus on using AD and MI in leading class singing.

3.1. Martha and Sarah's co-led class singing lesson in their second-year internship

The LAMap in Figure 1 provides an overview of the organisation of the lesson activities and the interaction between the pre-service teachers and the class. However, the LAMap does not show in detail how Martha and Sarah shared the song teaching leading and the classroom management between them. I analysed each episode individually to identify the distribution of their tasks. Table 3 shows that I developed a system of definitions by which I was able to identify 15 specific actions carried out by Martha and Sarah during their co-led lesson.

Table 3.
Definitions developed for the actions identified in the class management and song leading in the lesson co-led by Martha and Sarah.

	Actions	Definitions
1	Announcing	Communicate to the class what they are going to do without (yet) giving instructions on what to do, or explaining how to do it.
2	Asking children for demonstration	Ask the class to show themselves what the teacher has explained or demonstrated previously, e.g. movements, singing or reciting the lyrics.
3	Collecting children's ideas	Ask the class to contribute their own ideas for the activity they are doing, e.g. a type of singing variation.
4	Counting	Count to let the class know when to start singing or reciting the lyrics, e.g. with "1, 2, 3".
5	Demonstrating	Give the class examples of how to do something, e.g. singing, reciting or showing.
6	Explaining	Tell the class how to do something without necessarily demonstrating it with an example, e.g. that they will sing the song by singing only part of it or with a variation.
7	Giving feedback	Give the class an evaluation immediately after an activity done together or alone, e.g. on the way they sang or tapped the puls.
8	Instructing	Tell the children what to do, without explaining or demonstrating how.
9	Listening	Focus only on listening to the class singing or reciting the lyrics autonomously.
10	Playing	Use musical instruments to produce the proper sound, e.g. play the starting pitch of the song, an introduction or the full accompaniment.
11	Signalling	Use non-verbal means to communicate something to the children, e.g. eye contact to signal when to start singing.
12	Singing	Singing the whole song or parts of it (single verses), alone or together with the children.
13	Tapping	Provide the children with a metric pulse while singing or reciting the lyrics of the song, alone or together, e.g. through body percussion.
14	Contextualising	Presenting and/or sharing something with the class by setting it in a real or imaginary context, e.g. a story.
15	Reciting	Saying the lyrics of the song without singing them.

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Below, Table 4 shows the distribution of the actions done by Martha and Sarah in each analysed lesson episode.

Table 4.
Overview of the distribution of song leading and class management in the lesson co-led by the generalists Martha and Sarah.

Martha and Sarah's co-led class singing lesson				
Episodes	Use of guitar and body percussion	Action Management		
		Martha only	Sarah only	Together
Ep. 2.1	GSP + GFA	Playing	Announcing lesson purpose Instructing to open and close eyes	Signalling song beginning with eye contact
Ep. 2.4	BPW (C)		Announcing to tap feet Demonstrating tapping feet	Tapping feet
Ep. 2.5	BPW (C)	Instructing to tap feet	Asking individual children to tap feet Demonstrating how to tap their feet	Tapping feet Reciting the lyrics of the song
Ep. 2.7	BPW (C)	Instructing to tap feet		Tapping feet Reciting the lyrics of the song
Ep. 2.9	BPW (C) + GSP + GFA	Playing Counting	Instructing to sing	Singing the song Tapping feet
Ep. 2.10	BPW (C) + GSP + GFA	Playing Counting	Instructing to sing	Singing the song
Ep. 2.11	GSP + GFA	Playing starting pitch Singing starting pitch Counting	Instructing to sing	Tapping feet Singing the song
Ep. 2.14	GSP	Playing starting pitch Announcing singing variation (humming, singing with closed lips)	Instructing to sing with closed lips Demonstrating how to sing with the closed lips	Singing with closed lips
Ep. 2.15	BPW (T)		Explaining singing variation (singing quickly)	Singing with closed lips
Ep. 2.17	GSP + BPW (T) + GFA	Playing	Collecting children's ideas (singing very loud) Signalling with the finger to be quiet	Tapping feet Signalling song beginning by counting Singing with variation
Ep. 2.18	<i>a cappella</i>		Explaining singing variation (very low, like a bear) Signalling song beginning by counting	Singing with variation
Ep. 2.19	BPW (T)	Signalling with the finger to be quiet	Instructing to repeat the variation (very low, like a bear) Giving feedback on the singing variation	Tapping feet Signalling song beginning by counting Singing with variation

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Episodes	Use of guitar and body percussion	Action Management		
		Martha only	Sarah only	Together
Ep. 2.20	BPW (T)		Collecting children's ideas (like a fish) Explaining singing variation (silent singing, only moving the lips) Demonstrating singing variation	Signalling with the finger to be quiet Tapping feet Signalling song beginning by showing 1, 2, 3 with their fingers
Ep. 2.21	<i>a cappella</i>		Collecting children's ideas (like a mouse) Signalling to be quiet Instructing Explaining singing variation (very high pitched, like a mouse)	Tapping feet Singing with variation
Ep. 2.22	<i>a cappella</i>	Explaining singing variation (syllables "mia-o", like a cat)	Collecting children's ideas Explaining singing variation	Signalling with the finger to be quiet Singing with variation
Ep. 2.23	GSP + GFA	Instructing Playing Singing starting pitch (first time)	Giving feedback	Singing starting pitch (second time after interruption) Signalling song beginning with eye contact Singing the song
Ep. 2.24	GSP + GFA	Playing Instructing Singing starting pitch	Instructing Signalling song beginning by counting Tapping feet Singing (whispering)	Listening to the children's singing
Ep. 2.25	GSP + GFA	Playing Instructing Singing starting pitch	Instructing Signalling song beginning by counting Tapping feet	Signalling song beginning by counting Singing the song
Ep. 2.26	GSP + GFA	Playing Instructing Singing starting pitch Announcing lesson end	Instructing Signalling song beginning by counting Tapping feet Singing (whispering)	Signalling song beginning by counting Listening to the children's singing

Table 4 shows that in this lesson, it was Martha who used the guitar, both to play the starting pitch and the full accompaniment. Thus, Martha set the key of the song and harmonically supported singing. It was then Martha who counted “1, 2, 3” to signal the beginning of the song in episodes 2.9, 2.10 and 2.11. Sarah, on the other hand, was mainly responsible for communicating the lesson’s goals to the children, introducing them to new activities, instructing them on what to do, and giving them some feedback.

In episodes 2.4 and 2.5, Sarah instructed the children to tap their feet alternately by demonstrating this. Then the children’s tapping slowly joined hers and Martha’s as well. Together, Martha and Sarah recited the lyrics of the song while continuing to tap their feet while the children did the same. In episode 2.11, Sarah instructed the children to sing simultaneously with the tapping of their feet while Martha played and sang the starting pitch.

Distributing the tasks in this way, Sarah set the metre and tempo of the song in advance with body percussion and Martha set the key by playing and singing the starting pitch.

Body percussion was intermittently present in this lesson, but, after episodes 2.4, 2.5 and 2.7, was no longer performed by the children, instead only by Martha and Sarah. In this way, they established the pulse of the song to ensure metric stability when working on the recited lyrics or some singing variations.

Table 4 shows that in episodes 2.18, 2.21, 2.22, Martha and Sarah used neither guitar nor body percussion. I considered these episodes for analysis because they were part of a series of singing variations that began in episode 2.14 and ended in episode 2.22. Table 5 displays the singing variations in detail. The “Singing variations” column shows how the singing was varied from time to time, some of which consisted of changes in dynamics, timbre and speed. The column “Use of guitar and body percussion” shows how Martha and Sarah used the guitar and body percussion in different ways and combinations, or did not use them at all. On the right, Table 5 shows how I grouped the use and non-use of guitar and body percussion according to their musical function during each variation.

Table 5.
Overview of singing variations and the use and non-use of the guitar and body percussion when performing them.

Martha & Sarah		
Lesson episodes	Singing variations	Use of guitar and body percussion
Ep. 2.14	Humming, singing with closed lips	GSP
Ep. 2.15	Singing fast	BPW (T)
Ep. 2.16	Singing very softly	GSP + BPW (T)
Ep. 2.17	Singing very loudly	GSP + BPW (T) + GFA
Ep. 2.18	Singing very low (like a bear)	a cappella
Ep. 2.19	Singing very low (like a bear)	BPW (T)
Ep. 2.20	Silent singing, only moving the lips	BPW (T)
Ep. 2.21	Very high-pitched (like a mouse)	a cappella
Ep. 2.22	Syllables 'me-ow' (like a cat)	a cappella

1.	Setting tonality with starting pitch on the guitar
2.	Setting tonality with starting pitch and supporting this and the metre with full accompaniment
3.	Setting tonality with starting pitch on the guitar and supporting metre with body percussion
4.	Supporting the metre with body percussion
5.	No setting or supporting tonality and metre: no guitar and no body percussion

Table 5 shows that some variations were performed with guitar and body percussion and others without. This is an interesting aspect of managing the use of MI. When and why did Martha and Sarah use guitar and body percussion and when and why did they not?

Analysis of the singing variations shows that, probably intuitively, Martha and Sarah did not accompany some of the variations with guitar and body percussion for two reasons. Firstly, these variations did not allow the melody and metre to be properly produced, and secondly, they were unusual and difficult to perform, especially singing very low or very high. Thus, the musical functions properly provided by guitar accompaniment and body percussion, i.e. harmonic and metric, were inhibited. In episodes 2.18 and 2.19 they sang the

variation “very low, like a bear”. Therefore, in both episodes, the melody of the song was distorted both by Martha and Sarah and by the children. Some of the children, for example, held their hands in front of their mouths to obtain the lowest and darkest sound possible. In episode 2.21, the variation consisted of singing “like a mouse” and replacing the lyrics with “squeak”. The melody sung by Martha and Sarah remained stable, while some children sang so high to imitate a mouse that the melody was distorted again. In episode 2.22, they sang “like a cat”, with the syllables “me-ow”. As in the variation with the mouse squeak, the children started to say “meow” very loudly without singing the melody properly.

Episode 2.20 highlights of the relevance of body percussion. Sarah had collected the children's suggestions for the new variation. She then explained and demonstrated to everyone the idea of singing by moving their lips without making a sound. Martha and Sarah started to tap the pulse with their feet, then they showed “1, 2, 3” with their fingers instead of counting aloud. All together they started to mime the lyrics of the song with their lips. By mimicking the text without making sounds, the song consisted of neither the lyrics nor the melody. What, then, remained of the song's structure? The only musical component present in this episode was the pulse of the song that Martha and Sarah established by tapping their feet. Body percussion was essential to provide a reference for the children as they mimicked the lyrics.

3.2. Martha and Sarah's individual lessons in their first-year and third-year internships

In this paragraph, I describe the class singing lessons that Martha and Sarah led individually in their first- and third-year internships.

3.2.1. Martha's first-year and third-year lessons

Martha played the guitar in both individual lessons, mostly to play the starting pitch, an introduction and/or the full accompaniment. Martha-1 used the guitar at the beginning and end of the lesson (LAMap in Figure 3(B)). Martha-1 played and sang the song by heart and was so confident that she could sing and play the guitar at the same time and flexibly switch focus from the instrument to the children. At the beginning of the lesson, Martha-1 and the children were sitting in a circle, in the middle of which was the closed case with the guitar inside. Martha-1 asked the children what it could contain and one child replied: “a guitar!”. Then Martha-1 invited the child to open the case. Next, she asked what they could do with this guitar and one child replied: “We can sing songs.”. Thus, Martha-1 asked the children to close their eyes and listen carefully, played the introduction with the guitar and then sang the song accompanying herself. Thereafter, Martha-1 continued the lesson by working on the content of the lyrics. At the end of the lesson, Martha-1 asked the children to close their eyes and “imagine all the parts of the song” without singing. Martha sang the song by playing the introduction and continuing with the full accompaniment.

The LAMap in Figure 3(C) shows that Martha-3 worked on the semantic content of the song with semantic gestures. Martha-3 played the introduction, continued with the full accompaniment and sang while the children had to put the pictures in the same order as the verses (Ep. 3.18 and 3.29). In this lesson, the singing with accompaniment was only interrupted in Ep. 3.16, 3.27, 3.29, 3.30 and 3.31 when Martha wanted to make semantic gestures with the children. There, for the first time in this lesson, she and the children sang *a cappella*. Here, Martha's singing was less stable than while singing with the accompaniment.

3.2.2. Sarah's first-year and third-year lessons

In the first-year lesson, Sarah-1 used an MP3 and body percussion, as well as singing *a cappella*. Sarah-1 used the MP3 as a background music for other activities (Table 2): when the children entered the classroom and took their seats (Ep. 1.1), and to let the children move freely like polar animals (Figure 3 (E), Ep. 1.2 and 1.3). The song playback was used as a background, so that Sarah-1 paused it when she wanted to finish the "main" activity without waiting for the song to end. The playback was the song Sarah-1 had selected to teach the children, played on the piano, without the voice. In this lesson, the MP3 replaced the full harmonic accompaniment that Sarah could have played on her own with a musical instrument and provided a stable melodic guidance. By using it as a background, Sarah-1 was preparing herself and the children to sing, as the pitch, tempo and metre of the song had been set. The lyrics were the only component of the song's linguistic-musical structure that the MP3 could not deliver, being a piano-only version.

In episodes 1.7, 1.8 and 1.9 (Figure 3 (E)) Sarah-1 invited the children to point to the corresponding pictures while she sang *a cappella*. Here, singing *a cappella* allowed Sarah to slow down or interrupt the flow when necessary to give the children time to identify the pictures. This would not have been possible if she had sung with MP3 accompaniment.

In episodes 1.11, 1.12 and 1.3 Sarah-1 partially integrated body percussion because she matched the metrics of the names of the three characters in the song to body percussion instead of semantic gestures as for the rest of the lyrics.

The LAMap of the third-year lesson (Figure 3 (E)), shows that Sarah-3 sang the whole song while accompanying herself with the guitar (Ep. 3.1), and that she combined singing with dramatising the content of the song, first with puppets (Ep. 3.4 to 3.9 and Ep. 3.10 to 3.14) and then with a sledge (Ep. 3.15 and 3.16). Both times, it was the children who used the objects to dramatise, as Sarah-3 always played the guitar (Table 1).

When Sarah-3 sang the song for the first time (Figure 3 (E), Ep. 3.1), she performed it in full, without interruptions. In this way, she presented it to the children semantically and structurally in its entirety. The analysis of the singing performance during the dramatisation showed how Sarah-3 segmented the song and then attempted to reunify it. To do this, Sarah-3 also made use of the guitar. In fact, at the beginning she stopped both the singing and the accompaniment altogether, to give the children feedback after each verse. Then, Sarah-3 continued playing the guitar accompaniment even while giving verbal feedback. In this way, she maintained the dynamic flow of the song, implicitly signalling to the children that they would immediately continue with the next verse.

The detailed description of Martha's and Sarah's individual lessons showed that the two pre-service generalists were very confident in leading class singing and in the skilled use of AD and MI during their lessons. Below, I discuss the results of the analysis.

4. DISCUSSION AND CONCLUSIONS

In this chapter, I presented the microanalysis of the development of the practice of leading class singing over a three-year timeframe. Yet, this is the first research of its kind to take a longitudinal approach to class singing led by pre-service teachers. Using the LAMap methodology, I shown the analysis of five individual and co-teaching class singing lessons in a highly visual method and analysed complex video data capturing the lessons in their entirety. This enabled me to observe and describe the mutable nature of skill development in song teaching.

In this section, I summarise what two pre-service generalist teachers, Martha and Sarah, did at different stages of their training in class singing lessons, four of which were conducted individually and one co-taught. My analysis focused on the use of AD and MI and the discussion addresses two points: (1) the individual development of the two generalist trainees during their three-year training; (2) the similarities and differences in the use of AD and MI between the individual lessons and the co-led lesson.

(1) Martha and Sarah used AD and MI in their individual lessons. Martha used a guitar in both lessons, while Sarah used an MP3 in the first-year lesson and the guitar in the third-year lesson. Analysis of Martha's lessons showed that she was already familiar with the guitar in the first-year lesson. In both lessons, Martha sang and played by heart. This allowed her to maintain eye contact with the children. The full guitar accompaniment was such a support for Martha that her singing was less stable only in the episodes when she sang *a cappella*, when she made semantic gestures with the children.

The fact that Sarah used an MP3 in her first year and accompanied her singing with the guitar in her third year should not necessarily be understood as a sign of the development of her skills in terms of "improvement" or the acquisition of new skills. The use of one or the other instrument could, for example, have been determined by the lesson goals set by Sarah. Since the analysis presented in this chapter is exclusively based on lesson observation, I cannot comment on Sarah's musical biography or the goals she had set for her teaching. However, the video analysis showed that Sarah used both MP3 and guitar in a useful way for the planned activities, demonstrating her ability to segment the song and adapt the activities to the children's learning time.

(2) I summarise and discuss the similarities and differences in the use of AD and MI between individual and co-leading lessons as follows:

a) Similarities. In both the individual and co-led lessons, Martha and Sarah used AD and MI to play full accompaniment (Sarah-1, MP3; Martha-1, Martha-3 and Sarah-3, guitar; Martha-2, guitar in the co-led lesson). Since the first-year lessons, the two trainees have been using AD and MI to support their singing skills to sing the melody in a stable way and enrich class singing in terms of both "acoustic contextualisation" and "socio-cultural contextualisation". By "acoustic contextualisation" I denote the function of AD and MI to provide metric and tonal "context" to the singing. The full accompaniment supported the singing in terms of tonality and supported the metric pulse of the song.

Although singing is possible through the human voice only as the primary and indispensable instrument, the use of AD and MI during singing emphasises the ritual nature of this cultural practice in two aspects: 1) Anthropologically, the use of instruments during singing represents an extension of the body to intensify the rhythmic impulse of movement (Sachs, 1914, 2006). The use of AD and MI during class singing enriched the collective experience both audibly and visually. Martha and Sarah did this in every lesson, even with body percussion on its own, as this intensified the metric pulse. As an example of good practice, body percussion, as well as other percussion instruments, is easily accessible to children and allows them to experience the ritual character of singing by synchronising not only their voices but also their own movements with those of others; 2) AD and MI are culture-specific artefacts (Reckwitz, 2002). Their use during class singing lessons provides children with a "socio-cultural contextualisation" of such artefacts in singing practice.

b) Differences. Martha and Sarah's second-year class singing lesson shows that the co-led practice provided the trainees with some advantages over the lessons they taught individually in the first and third year. In individual lessons, Martha and Sarah did not use AD and MI when they had to demonstrate or perform movements or gestures together with the children. By contrast, during the co-led lesson, Martha and Sarah did not have to leave out either the guitar or body percussion because they divided the tasks between them. Martha played the guitar and provided tonal and metric support, while Sarah had her hands free to instruct with gestures.

Only during some singing variations did Martha and Sarah not use the guitar or body percussion. Yet Martha and Sarah might have intuitively rejected guitar accompaniment and body percussion because they "interfered" with the characteristics of certain variations. This shows the in-situ accommodation of the two trainees' developing skills. In these variations, the melody and metre could not be properly performed and were unusual and difficult to sing because they sang very low or very high, or with an animal sound. The musical functions that should have been performed by the guitar accompaniment and body percussion, i.e. the tonal and metric functions, were inhibited and may have "prompted" Martha and Sarah to give up MI.

The analysis of the case study presented in this chapter provides an example of how the practice of intergenerational cultural transmission works in pedagogical institutions, in the context of individually led or co-led class singing by generalists. Focusing on the use of AD and MI in the lessons of two pre-service teachers, the study shows the centrality of this material aspect of singing practice from anthropological, musical and pedagogical perspectives. On the one hand, the use of one's body and instruments to intensify, coordinate and synchronise movements in group singing, as in a ritual. On the other hand, the support that the use of AD and MI provides for singing, and the challenges that their manipulation brings in classroom management. The way in which Martha and Sarah made decisions and compromises in the case of individual leading and the organisation and assignment of tasks in the case of co-leading show the changes in the development of their skills to lead class singing.

This research offers relevance on several levels beyond that of class singing. This includes 1) an innovative research methodology using LAMap; 2) a method for analysing the development of teaching skills and 3) the chance to provide teacher trainees with feedback during their training. The method of this study might be used in other fields of teacher education. This chapter offers an opportunity for other researchers and educators to consider how similar research methods could be applied to their understanding of practice.

REFERENCES

- Brenan, C., & Witte, R. (2003). Team Teaching in the Secondary Instrumental Music Classroom. *Music Educators Journal*, 89(3), 31–35. <https://doi.org/10.2307/3399855>
- Collins, A. (2014). Neuroscience, Music Education and the Pre-service Primary (Elementary) Generalist Teacher. *International Journal of Education & the Arts*, 15(5), 1–21.
- de Vries, P. (2013). Generalist teachers' self-efficacy in primary school music teaching. *Music Education Research*, 15(4), 375–391. <https://doi.org/10.1080/14613808.2013.829427>
- de Vries, P. A. (2014). Music without a music specialist: A primary school story. *International Journal of Music Education*, 33(2), 210–221. <https://doi.org/10.1177/0255761413515818>
- Garvis, S., & Riek, R. (2010). Improving Generalist Teacher Education in the Arts. *The International Journal of the Arts in Society: Annual Review*, 5(3), 159–168. <https://doi.org/10.18848/1833-1866/cgp/v05i03/35851>

- Hicks, C. E. (1982). Team Teaching: Sharing the wealth (of talent). *Music Educators Journal*, 69(3), 42–43. <https://doi.org/10.2307/3396021>
- Huber, M. (2020). Video-based content analysis. In M. Huber & D. E. Froehlich (Eds.), *Analyzing Group Interactions* (1st ed., pp. 37–48). Routledge.
- King, F. (2018). Music Activities Delivered by Primary School Generalist Teachers in Victoria: Informing Teaching Practice. *Australian Journal of Teacher Education*, 43(5), 48–59. <https://doi.org/10.14221/ajte.2018v43n5.4>
- Mayring, P. (2015). *Qualitative Inhaltsanalyse: Grundlagen und Techniken*. Beltz GmbH, Julius. <https://www.beltz.de>
- Mayring, P. (2021). *Qualitative Content Analysis*. Sage Publications Ltd.
- Paul, S. J., Teachout, D. J., Sullivan, J. M., Kelly, S. N., Bauer, W. I., & Raiber, M. A. (2001). Authentic-Context Learning Activities in Instrumental Music Teacher Education. *Journal of Research in Music Education*, 49(2), 136–145. <https://doi.org/10.2307/3345865>
- Reckwitz, A. (2002). The Status of the “Material” in Theories of Culture: From “Social Structure” to “Artefacts.” *Journal for the Theory of Social Behaviour*, 32(2), 195–217. <https://doi.org/10.1111/1468-5914.00183>
- Sachs, C. (1914). Die Hornbostel-Sachs’sche Klassifikation der Musikinstrumente. [The Hornbostel-Sachs Classification of Musical Instruments]. *Die Naturwissenschaften*, 2(51), 1056–1059. <https://doi.org/10.1007/bf01495319>
- Sachs, C. (2006). *The History of Musical Instruments (Dover Books on Music)* (Illustrated). Dover Publications.
- Savona, A., Stadler Elmer, S., Elisa, A., Joliat, F., & Cavasino, G. (2021). The Lesson Activities Map: A Domain-Specific Lesson Transcription Methodology. *European Journal of Educational Research*, 10(2), 705–717. <https://doi.org/10.12973/eu-jer.10.2.705>
- Stadler Elmer, S. (2015). *Kind und Musik: Das Entwicklungspotenzial erkennen und verstehen*. [Child and music: recognising and understanding the developmental potential]. Springer.
- Tuma, R., Schnettler, B., & Knoblauch, H. (2013). *Videographie: Einführung in die interpretative Videoanalyse sozialer Situationen*. Springer VS.

ADDITIONAL READING

- Hürlimann, A., & Savona, A. (2022). Generalist Teachers’ Development in Teaching Songs in Class. In T. Buchborn, T. De Baets, G. Brunner, & S. Schmid (Eds.), *Music is What People Do – Perspectives on Music (Education) as a Praxis*. *European Perspectives on Music Education* (pp. 87–108). Helbling.
- Liao, M. Y., & Campbell, P. S. (2014). An analysis of song-leading by kindergarten teachers in Taiwan and the USA. *Music Education Research*, 16(2), 144–161. <https://doi.org/10.1080/14613808.2013.851661>
- Liao, M. Y., & Campbell, P. S. (2015). Teaching children’s songs: a Taiwan–US comparison of approaches by kindergarten teachers. *Music Education Research*, 18(1), 20–38. <https://doi.org/10.1080/14613808.2015.1049256>
- Stadler Elmer, S. (2021b). Song Transmission as a Formal Cultural Practice. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.654282>
- Stadler Elmer, S. (2022). How a young child sings a well-known song before she can speak. *British Journal of Music Education*, 39(3), 292–301. doi:10.1017/S0265051722000304

Class singing by pre-service generalists: individual leading and co-teaching

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