Improvisation in music education: empirical evidence, classroom practice, and teacher preparation

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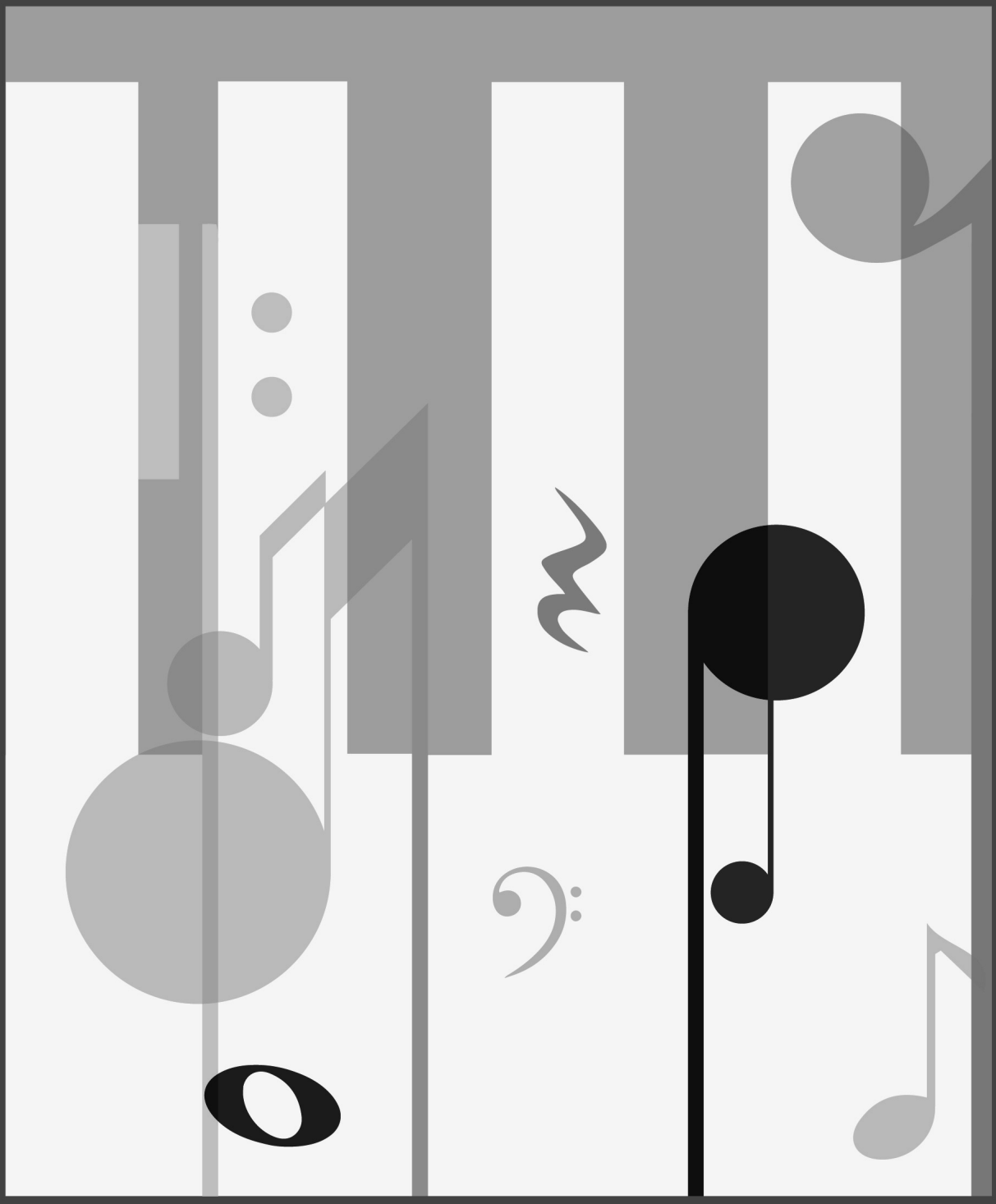

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3. Unpacking musical improvisation: Implementation and evaluation by primary music teachers in the Netherlands

Abstract

Improvisation is widely recognised as a musical creative activity, yet it remains infrequently used in classroom practice. This qualitative study examines how eight Dutch primary music teachers understand, implement, and evaluate improvisation. Drawing on semi-structured interviews, classroom observations, and field notes, two themes emerged: **implementation**, including commonly used improvisation activities, perceived effectiveness of improvisation activities, and feedback, and **evaluation**, including perceived benefits, challenges, and reflections for improvement. Findings show teachers value improvisation for fostering creativity and confidence but face considerable challenges, including managing classroom dynamics and limited pedagogical training, suggesting that teachers' engagement with improvisation is shaped by both pedagogical beliefs and contextual constraints.

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3.1. Introduction

Music is an essential subject in the primary education curriculum, and improvisation has been lauded by both educators and researchers as a core musical activity. A musical improvisation is an act of creation without prior agreement or planning, also described as a spontaneous musical endeavour (Whitcomb, 2013). Improvisation has a significant impact on the development of creativity, higher-order thinking skills, cognition, and confidence (Chandler, 2018; Navarro Ramón & Chacón-López, 2021; Siljamäki & Kanellopoulos, 2020; Wing et al., 2014).

Using an ethnographic research design, Burnard (2002) examined the meaning of improvisation among 18 twelve-year-old children through observations, interviews, and analysis of recorded improvisations, and found that group improvisation supported creativity, social engagement, and the development of musical identity. Drawing on questionnaire data from 3,820 Swedish adults, Theorell et al. (2015) examined the long-term effects of childhood music education and found that engagement in activities such as improvisation was a significant determinant of whether individuals continued to sing or play an instrument in adulthood. Using Webster's Measure of Creative Thinking in Music (MCTM II) (Webster, 1987, 1994), Navarro Ramón and Chacón-López (2021) examined the effectiveness of an improvisation workshop with 17 children aged 8–11 and reported improvements in students' musical creativity. The authors show the impact of improvisation on the development of creative thinking of children in music. Furthermore, improvisation has been added to the national recommendations as part of the music education curricula, such as in the US (Whitcomb, 2013); the UK (Koutsoupidou, 2005); China (Ministry of Education of the People's Republic of China, 2011); and many European countries (Larsson & Georgii-Hemming, 2019).

Nonetheless, a lack of improvisation in musical classrooms has been reported. There are three main reasons for this situation. First, music teachers have reported a lack of knowledge about teaching improvisation. This relates to teachers' professional training, as the absence of improvisation in music teacher education has been shown to influence pre-service teachers' (i.e., teachers in training who have not yet started in a formal teaching position) confidence in incorporating improvisation activities into their teaching (Piazza & Talbot, 2021). Additionally, Koutsoupidou (2005) found that teachers who use

improvisation tend to be older, have more teaching experience, and have specialist music qualifications, which indicates that younger or inexperienced teachers, especially those who have not received professional music training, may feel less equipped to teach improvisation. Furthermore, limited time, classroom space, and inadequate instruments hinder the use of improvisation activities by music teachers (Bogojević & Pance, 2022; Makris et al., 2021).

A systematic review by Larsson and Georgii-Hemming (2019) examined the literature about improvisation in general music education published between 2000 and 2015. They argued that "*improvisation is an underdeveloped field*" (p. 49). Of the studies identified, only 20 empirical studies met their inclusion criteria, focusing on improvisation in primary or secondary general music classrooms and drawing on methods such as classroom observations, interviews, or case studies. Among these studies, most of the authors involved students' learning of improvisation, while others examined the relationship between musical development and age. They also highlighted the limited number of studies focusing on teachers' perspectives and experiences of improvisation in classroom practice.

3.2. Aim of this study

In summary, although the literature has explored the benefits of improvisation to children's musical and cognitive development, curriculum integration across different countries, and barriers to implementation in classrooms, there remains a lack of research examining teachers' actual experiences and pedagogical approaches when teaching improvisation in primary music education. In this study, we collected in-depth data through semi-structured interviews, classroom observations, and field notes to provide evidence-based insights into improvisation activities in class and teachers' perspectives on improvisation in Dutch primary education. Only when we understand music teachers' perspectives on improvisation can we develop activities to foster teachers' use of improvisation activities in class and foster students' learning (Sawyer, 2004). The following two research questions (RQs) are addressed:

RQ1: How do teachers implement improvisation activities in class?

RQ2: How do teachers evaluate the improvisation activities in class?

3.3. Method

3.3.1. Research context and participant

In the Netherlands, schools follow a set of national 'core objectives' – goals that indicate what primary schools should focus on in the development of their pupils. Schools are allowed to decide for themselves how to achieve these core objectives.

To study improvisation in primary music classrooms, this study involved eight Dutch primary school teachers (labelled T1 to T8), consisting of seven females and one male. They were recruited based on the combination of the following criteria: (1) teaching music lessons in primary school and (2) having professional music backgrounds. Gender identity was not deemed a relevant factor for teachers' use of improvisation activities in class, and therefore, in this study, all references to participating teachers are using feminine pronouns. Their average teaching experience was 15.38 years (SD=8.23). The schools were in both urban and suburban areas, providing a diverse range of educational environments. Table 3.1 shows the characteristics of participating teachers, including their education, the type of schools where they teach, the age group of their current teaching, the frequency and duration of the music lesson, and their teaching domain and teaching experience.

The teachers had different types of music education backgrounds from higher education in different countries. Besides undergraduate and graduate education, six participated in music teacher education programs. The teachers taught in three types of schools: Montessori schools, international schools, and general schools. While most teachers only taught music, Teacher 2 was a general teacher who taught all subjects, including music, to a single class with a cohort of 30 students. In contrast, the other teachers taught multiple grades.

3.3.2. Data collection

Qualitative methods were adopted to explore teachers' self-perceptions and classroom practices related to musical improvisation. A multi-source inductive design was used, drawing on semi-structured interviews, classroom observations, and field notes. This combination allowed us to examine how teachers implemented improvisation in practice, and how they interpreted its pedagogical value. To ensure validity, the observation and field-note data were triangulated with the interview data.

Ethical approval for this study was obtained through the internal review procedures of the first author's institution. All teachers were informed about the purpose of the study and provided informed consent. The involvement was entirely voluntary, and anonymity was guaranteed as a condition of participation consent.

3.3.2.1. Classroom observation and field notes

Classroom observations provided in-depth descriptions of how improvisation was enacted during primary music lessons, including teachers' repertoire of improvisation activities and how they valued student learning during these activities. During all observations, detailed field notes were taken to capture instructional sequences, students' responses, and contextual features of the lessons. Voice recordings and photographs of the classroom setting (e.g., instrument and space) were also collected with consent. Observation length varied depending on teachers' schedules. Seven teachers were observed for three to six lessons (90–150 minutes for each participant), and one generalist teacher was observed for a single 45-minute lesson.

3.3.2.2. Semi-structured interviews

Prior to the formal data collection, two pilot interviews with Dutch primary teachers were conducted to refine the interview protocol and ensure the clarity and relevance of the questions. During the data collection, seven interviews were conducted directly after the classroom observation in the school building, and one interview was conducted online due to a schedule conflict. All interviews were audio-recorded with consent and conducted in English.

The interviews explored teachers' interpretations and classroom use of improvisation (e.g., creative activities used, perceived benefits and challenges, strategies for implementation, and approaches to evaluating students' improvisation). These topics are aligned to understand how teachers implement and make sense of improvisation in their teaching. A full interview guide is provided in Appendix C.

Table 3.1 Characteristics of participating teachers.

Teacher	Background	School Type	Age Group	Music Lessons per Week and Duration for (Each) Group	Group Size	Teaching domain	Teaching Experience (Years)
1	PABO & Classical saxophonist	Montessori school	4 -12	Once a week – 30 minutes	6 to 14 students	Music	20
2	Bachelor and Master in music education & PABO	Montessori school	6 - 8	Two to three times a week – 45 minutes	30 students	All subjects	9
3	Bachelor in viola & Master in Music Education & PABO	Montessori school	4 - 12	Once a week – 30 minutes	10 to 20 students	Music	7
4	Bachelor in flute and music education & Master in art education and child development	International school	4 - 6	Every other day – 30 minutes	10 to 20 students	Music	4
5	Bachelor in music education & Master in education (curriculum and instruction)	International school	7 - 9	Two to three times a week (two general music lessons and one ensemble lesson) – 45 minutes	20 to 22 students	Music	29
6	Bachelor in classical singing & Choir conductor	General school	4 - 12	Once a week – 30 minutes	20 to 24 students	Music	25
7	Bachelor in violin (world music)	International school	4 - 12	Two music lessons & Four Dutch lessons per week – 45 minutes	12 to 24 students	Dutch & Music	14
8	Bachelor in music education	Montessori school	4 - 12	Only one lesson in two weeks for grades 7&8 – 30 minutes	12 to 24 students	Music	15

1. PABO is a teacher training program in the Netherlands. It is a bachelor-level program that equips students with the knowledge and abilities necessary to teach all primary school subjects.
2. Montessori is a common school in the Netherlands that follows the educational philosophy of Maria Montessori (1870–1952), an Italian educationalist. Mixed-age classrooms are an identifying characteristic of this school, where students of various ages learn together and from each other.

3.3.3. Coding procedures and analysis

To answer the research questions, we applied coding and analysis to guide the inductive thematic analysis for the eight interviews (Braun & Clarke, 2006). After the recorded interviews were transcribed verbatim and anonymized, we carefully examined the transcribed text, first reading it in-depth to become acquainted with the material. Next, the data analysis was conducted using NVivo 12. The initial stage of analysis was to identify relevant text fragments and label those with identifiable codes. Following the initial labelling, the labels were merged based on considering the thematic similarities of the common concerns. For instance, labels such as 'improve creativity', 'more expressive', and 'build confidence' all underpin the category 'personal development'. Several rounds of re-reading and discussion were necessary until no new labels were found and the subcategories were confirmed. Finally, 21 subcategories emerged from the data through the systematic analysis.

Meanwhile, observations and field notes were analyzed based on the framework of Gruenhagen and Whitcomb (2014), accompanied by improvisation activities mentioned by teachers during the interview. The activities were grouped into three subcategories: vocal activity, instrument activity, and other activity. To ensure validity, observational data and field notes were triangulated with interview responses to provide a comprehensive understanding of the situation of improvisation in the classroom. Likewise, the observation and field notes provided resources to interpret the improvisation activities in class and to converse about them with participating teachers during interviews.

The subcategories, grouped into six main categories, describe the aspects of implementation and evaluation of improvisation activities in class perceived by primary music teachers. The main categories were distinguished and clustered into the two main themes to answer the two research questions: **implementation**: (1) forms of improvisation activity, (2) perceived effectiveness of improvisation activity, and (3) feedback; **evaluation**: (4) benefit, (5) challenge, and (6) reflection (Tables 3.2 and 3.3).

3.4. Findings

In Table 3.2, we present teachers' perspectives on the implementation of improvisation to address RQ1; in Table 3.3, we summarize teachers' perspectives on the evaluation of improvisation are summarized to address RQ2.

Table 3.2 Teachers' perspectives on the implementation of improvisation activities.

Main Category	Subcategory	Label
Forms of improvisation activity	Vocal activity	Call-and-response singing
		Improvising vocal sounds to accompany a story or poem
		Improvising words and melodies as sung conversation
		Improvising descants over a melody
		Improvising short melodic phrases or motives
		Scat singing (explore own voice – younger groups)
		Improvising melodies to a given set of lyrics
	Instrumental activity	Improvising on unpitched and pitched percussion instruments
		Improvising rhythmic patterns using instruments
		Call-and-response/question-and-answer using instruments
		Improvising sound accompaniments to a story or poem
		Improvising with the recorder
	Other activities	Individual students improvising (jazz melody)
		Improvising using body percussion (on rhythm and melody)
		Improvising a melody to correspond with words or lyrics
		Group/collaborative improvising (first led by the teacher, then students)
		Using a recording as a model for improvising in a specific style
Perceived factors of effective improvisation activity	Supportive and safe environment	Give compliments
		Group improvisation
		Do everything in a non-judgmental way
	Structuredness of activity	More organized and structured activity
		Clear steps for students to follow
		Guide improvisation with clues
	Student-centred activity	Activities connect students' interest
Feedback	Self-reflect	Ask if the student likes it or not
		Feedback in small questions to prompt students to keep thinking
	Peer feedback	Encourage feedback from classmates
	Feedback without pressure	Short compliments
		Without student noticing
	Feedback depends	Directly after each improvisation product
		Only positive feedback for younger groups
		More technical suggestions for older groups
		Only give feedback to older students

3.4.1. Implementation of improvisation activity

The teachers in this study reported including improvisation activities in their music classes to varying extents. Some teachers had only recently begun to engage with improvisation in their own musical practice or had used improvisation activities in class only occasionally, while others had used them frequently. One teacher reported that she seldom applied improvisation activities in her lessons due to a lack of suitable improvisation repertoire, explaining that she was still developing confidence with improvisation herself. She said, "*I have to learn it for myself before I feel free to do it [improvisation] with my students*" (T1). Three other teachers explained that they were early-career teachers or had limited time to apply improvisation activities. Other teachers had more experience and were, therefore, more fluent with improvisation activities. For example, one teacher mentioned using self-written poetry as a starting point for musical improvisation, helping students to enter a shared narrative context and understand improvisation as a process of freely generating ideas before moving into singing or sound-making, within a non-judgmental classroom setting.

3.4.1.1. Forms of improvisation activity

The analysis of all data sources provided a full understanding of the breadth of improvisation activities that participants applied in their lessons. Teachers described specific and detailed improvisational activities, including their plan and goal to include these activities. All teachers adapted singing for improvisation activities as they considered it readily accessible and natural. All teachers conducted the call-and-response singing during our observations as a learning technique. Some teachers did this at the beginning of the lesson for greetings and name-singing, while others used it to practice rhythm patterns.

Four teachers (T3, 4, 7, and 8) instructed students (especially lower grades) to engage in scatting improvisation according to predefined themes, such as weather and animals. Scatting or scat singing is a vocal improvisation of singing spontaneous melodies and rhythms with nonsense syllables and noises (Edwards, 2002, p. 622). Some teachers added variations that were conducted by the teacher and selected students. One teacher explained, "*I often use improvisation with the voice. They (the students) can try all kinds of stuff and explore their voice and what to do* (T8)". Another commonly used activity was to

improvise based on a four-bar familiar song or melody. Teacher 3 and Teacher 6 used this activity during the observations. In this activity, students improvise one bar while others sing the other three fixed bars.

Teacher 5 introduced her frequent use of improvisation activities, including (1) asking students to improvise vocally based on given pitches when learning a tonality; (2) vocal improvisation based on a familiar song and end on a specific note (e.g., "do or la"), which provides a framework for exploring different tonalities and musical keys; (3) introducing Orff instruments and asking students to choose an instrument and improvising based on a given story. During observation, Teacher 5 briefed the students on the instruments and then encouraged students to actively participate by choosing their own instruments and exploring the instruments. In addition, the teacher prompted them to perform and utilize iPads to record their improvisations in pairs. This interactive session allowed both teachers and parents to review or assess the improvisation afterwards. This was the only application of learning technology in class during the improvisation activity observed.

From observations, six teachers incorporated instruments into their improvisation activities, including both pitched and unpitched instruments, such as guitar, xylophone, djembe, and other handheld rhythm instruments. Three teachers, however, faced a dilemma as students were fascinated by the sounds of the instruments, but the noise disturbance became problematic in the classroom. Additionally, some schools had limited access to instruments: "*Children want to play the real instruments, but it's hard in primary school because schools are too small and don't have instruments"* (T6). During observation, Teacher 7 introduced the xylophone to students. After a brief explanation, she asked students to improvise on a few notes, mentioning that improvisation is also an excellent way to encourage students' exploration. Another teacher expressed the belief that improvising on instruments would be less intimidating for students: *"Vocal improvisation is complicated for little kids, and it's so personal. It's less personal to play it on an instrument. […] It makes risk-taking a little easier."* (T5)

One teacher often used different instruments to create diverse possibilities and variations to attract students' attention and make them more focused in class, however, "*changing instruments can also lead to noise, chaos, and disappointments*" (T2). Besides

singing and instrument playing, movement or dancing is a regularly used activity for improvisation. Seven teachers mentioned they improvise on movement, some of them combined with rhythm, such as body percussion in a group setting. Movement makes students less reluctant to improvise when performing: "*I set them in groups, and they can make a movement on music with the group and then show it to the class. […] I improvise with movements a lot because they [students] don't find that so scary." (T3)*

According to the teachers, movement improvisation appeared more accessible for students, as it allowed the whole class to improvise simultaneously without producing sound, suggesting that success in a silent, low-risk context may build confidence for more challenging musical improvisation later. One teacher led "*Stop Dance*" in her five music lessons, and students in all classes were very engaged during this activity as we observed. In this activity, students perform movements while listening to the music. When the music stops, students stop dancing and show their movements to their classmates*:* "*They feel the music while they dance, so they feel the flow of the music. […] I think that's also easier because it doesn't make noise. […] The chaos is okay because every child can, at the same time, do their own improvisation."* (T8)

3.4.1.2. Perceived factors of effective improvisation activity

The teachers mentioned three factors that contribute to the effective implementation of improvisation activity in class: a supportive and safe environment, scaffolding, and student-centred activity. Teachers emphasized creating a supportive environment and giving compliments, which is effective when implementing improvisation activities. Teachers believed that a secure environment is the foundation of any improvisation activity. To make students feel uninhibited to improvise, a teacher tried to do "*everything in a non-judgmental way*" (T6), while another teacher always "*gives a lot of compliments*" (T1) to encourage students. Two teachers found it compelling to improvise in groups to reduce students' reluctance, for instance: *"'Let's sing on 'Hm' so the other children can hear it!'. They cannot hear who is singing what, so they are not scared. Then, as a class, they created a beautiful harmony together, and I love that, it stands out as something they also like."* (T3)

Half of the teachers identified the importance of scaffolding structured activities with clear steps as the most effective, as they found them helpful in improvisation. Providing clues and guidance to students, rather than leaving them to free improvisation, made the activities more accessible to accept: "*I scaffolded them correctly, so when I made sure that the steps were there for them to be successful, I checked them step by step to see if there were problems fixing them along the way*." (T5)

However, finding the balance between structure and freedom in improvisation is challenging for teachers. Some teachers described a developmental progress, starting with structured activities (as discussed in 3.4.2.2) and gradually allowing greater freedom over time. Others emphasized incorporating stress-free improvisation activities to encourage independent exploration while reducing direct instruction by teachers. Teachers lauded the nature of improvisation and provided more space to foster creative retention and self-directed learning. For instance, Teacher 8 mentioned that "*every human is born with the capability to improvise or create something, and so they do this all the time*."

Moreover, the importance of choosing student-centred activities or materials was emphasized, as this attracts their attention and focus, which ensures that students remain engaged and motivated throughout the learning process: "*First grade is very interested in a story they're creating right now. So, that gives me a little bit of room to be [creative]. Then, the characters' names can become rhythmic pieces that they can do, like chants. And I know they will be interested in it because they're interested in the story. So, anything that is connected to their lives.*" (T4)

3.4.1.3. Feedback

All the teachers mentioned that they give feedback to students during improvisation activities, and the way they give feedback varies. For example, Teacher 7 noted that she always provided feedback directly after each improvisation session. While teacher 1 only gave feedback to older groups, Teacher 8 only gave positive feedback to younger groups and more technical suggestions for older groups. Positive and constructive feedback, such as compliments, helps students build confidence. Knowing their efforts are recognized and valued, encouraged them to take risks and explore their creativity further. To create a safe and supportive environment, Teacher 7 always gave feedback carefully, without students

noticing. This approach prevented the improvisation from becoming a "*fixed thing*" due to direct feedback. As Teacher 7 noted, "*When you feel judged, you cannot be creative.*" At the same time, students also get bored with structures. However, it is essential to avoid making the structure too rigid, as students can get bored with repetitive patterns.

Feedback guides students in exploring improvisation, offering them direction to improve specific aspects. It enables students to improve their skills and enhance their musical abilities more efficiently. The following teacher believed that students need to experience feedback to improve: "*Students don't get better without feedback. It's not free for all. […] Experiences are great, but you can have experiences with feedback and concrete concepts or goals you're working towards."* (T5)

In addition to feedback from educators, four teachers welcomed input from students, both from self-reflection and feedback from their classmates. It facilitated further improvement, increased class engagement, and fostered a supportive learning environment. A teacher mentioned giving feedback in the form of questions to encourage students to think: "*I think kids who are sitting around listening should also provide feedback. I often do it like, 'Did you hear this? Did you hear that?' And as the kids get more advanced, it's like, 'Are we using steps? Are we not? Are we taking too many leaps? What makes a good melody? Why don't we like that sound? What makes it good?"* (T5)

Self-reflection is an essential part of the learning process, as it allows students to integrate feedback, identify their strengths and imperfections, and think critically about their music-making. Teacher 4 mostly gave feedback right after the improvisation product: "*When a pattern has come out nicely, I like to use it as an example for others and to self-reflect about their actions. […] I like to give them some hints that can help them when they return to the activity to make it better."* (T4)

Although all teachers have provided feedback on improvisation activities, their methods differ in three key dimensions. First, the nature of feedback varies with the age of students. Teachers always focus on active reinforcement for young students (4–7 years old), while older students (8–12 years old) receive more technical and critical guidance. Secondly, the timing and clarity of feedback vary depending on the teaching concept. Some teachers gave direct feedback immediately after each performance, while others more subtly integrated feedback into the whole process of the activity to maintain improvisation and

avoid students' sense of being judged. Third, there are differences in feedback sources. Half of the teachers actively introduced peer feedback and student self-reflection through questioning techniques, while others mainly provided teacher-led feedback. No common assessment criteria emerged across teachers. Instead, each teacher used their evaluation method based on the specific situation, student characteristics, and learning objectives of each improvisation activity.

3.4.2. Evaluation of improvisation activity

3.4.2.1. Benefit

All teachers mentioned that improvisation activities make music less exclusive, vary familiar repertoires, and make students think and create musically. For personal improvement, all teacher participants confirmed the validity of improvisation in fostering creativity. Two teachers believed that humans are born with creativity, and teachers simply need to facilitate it in a non-judgmental way and provide more space for students to explore it: "*Improvisation can improve children's creativity, but I think it's more about giving them the space, and they can already do it. It's more important to inspire them and say, 'This is cool what you're doing,' and 'It's nice, try again or try something else.'"* (T8)

To assist children in discovering ways to express themselves, two teachers suggested expanding improvisation beyond music and incorporating other forms of expression, such as drawing. Improvisation also empowers students by giving them ownership over their musical creations, encouraging them to become more expressive. Teacher 5 highlighted this by saying, "*I think it is a nice way for kids to be able to express themselves and take ownership of what they do, and they shouldn't just be little robots.*" This statement underscores the need to foster individuality and creativity in students. Through improvisation, students are not simply following instructions but actively engaging in the creative process, which allows them to express their unique ideas and emotions, as reflected in Teacher 5's emphasis on ownership and individual expression. This approach improves their musical skills and promotes personal development and confidence (Wright & Kanellopoulos, 2010), helping them develop a sense of agency and self-worth in their learning journey.

Table 3.3 Teachers' perspective on the evaluation of improvisation activity.

Main Category	Subcategory	Label
Benefit	Musical development	Make music less serious and exclusive
		Improve music making and originality
		Vary familiar repertoire
		Thinking and creating musically
		Opportunity to create
	Personal development	Improve creativity
		More expressive
		Ownership
		Build confidence
	Classroom development	Class management
		Get teachers informed
Challenge	Chaos	Controlling excitement
		Not structured
		Mess and noise
		Keep students' attention
		Students not listening to each other
	Choose repertoire	Match material for mixed-level groups
		Scaffold the activity correctly
		Make a balance
		Structured activity
	Reluctance of students	Intimidate
		Scared to improvise
	Limitation	Big group
		Limited time
		Classroom space
Reflection	Create a safe and inclusive learning environment	Provide instructions when required
		Encourage peer learning
		Lead the natural
	Start improvising early and in groups	Easier
		Less scary
		Reduce nervous feeling
	Teaching aim	Not too focused on technical things
		Enjoy music
		Improvisation as a tool instead of a goal
	Teachers' background	Preparation and practice of teachers

While improvisation can offer many benefits, one teacher observed some challenges. Improvisation led some students to feel intimidated and scared during the activity. The

solution to this problem was to try improvisation at early ages, to combine both solo and group settings, to start with movement and easy singing sessions, and to build up the improvisation progression slowly: "*Children can be intimidated by improvisation or get scared to do it, and I think it has the opposite effect. And it doesn't make them feel free, but it makes them feel scared to perform. So, I often combine it with small parts of solo singing."* (T3).

According to some teachers, improvisation can enhance the creation of conducive learning environments and be a tool to assess students' musicianship, aural skills, and cognitive development. It fosters a positive group environment. *"They are very effective for class management, and for the environment in the group, they all accept each other more easily. They're used to listening to each other.* (T2)*".* Furthermore, teachers mentioned that improvisation offers students opportunities for self-expression, providing teachers with insights into their developmental stages: *It can give a lot of opportunities just to express what's inside of you, and it also can inform you about where that student is developmentally. […] When you see an improvisation activity, you can see where this student is musically or where the student is in terms of body awareness.* (T4)

3.4.2.2. Challenge

While many participating teachers had positive attitudes toward improvisation, we noticed some teachers struggled to maintain order in the classroom during improvisation activities. Seven teachers specifically noted difficulties in controlling students' excitement, as well as their tendency to become distracted during individual improvisations. This often resulted in a loss of focus and a chaotic classroom environment. Thus, improvisation activities were seen as both a potential enhancement and a burden to classroom management, depending on the dynamics of the group. For instance, "*If we tried to improvise all at the same time, it doesn't work. You can only let one child improvise, and that means that the others must wait"* (T8). The cause of the chaos problem related to the limited time of music lessons also appeared to be a challenge, especially because of the limited chance for instrumental playing: "*They are so excited when they play instruments because they have limited time to do that. […] And I must lead them. That's very challenging, and I must learn that they don't only make noise, but they make music."* (T1)

Nevertheless, several teachers demonstrated effective strategies to address these challenges through structured improvisation approaches. Teacher 5 started with limited pitch materials: "*I take all the bars off and give them two notes*," and gradually expanded the tonal materials when students gained confidence. She also set melodic improvisation on rhythmic frameworks: "*A lot of melodic improvisation will be based on a rhythm. I take a poem or some sort of rhyme that they can use to sort of hang their melody on*." Furthermore, she proposed connecting improvisation to newly learned music concepts: "*When we're learning, for example, a tone set...one of the activities we'll do is improvisation where 'do' is one of the notes they can use*," ensuring that improvisation activities serve the concept development rather than a disorderly exploration. Other teachers also provided complementary strategies, including providing harmonic or rhythmic ostinatos (T6), turn-taking improvisation instead of simultaneous improvisation (T3, T8), and using movement improvisation (T8). As Teacher 4 noted, "*The structure must be clear […] you can improvise within that form*." These findings suggest that chaos relates to unstructured rather than structured improvisation.

Three teachers mentioned it was hard for them to find materials or activities that suited all the levels of students. Teacher 3 taught students in mixed age groups at school: "*I have three levels together in the class […], and that makes it difficult because, for example, group three is not as far in improvisation as group five."* The teachers at the international school were facing a similar challenge. One teacher mentioned that it is important to maintain a balance in finding the right activity to suit the personalities of different students. Another teacher noted that if she scaffolds the activities well by finding a suitable difficulty level, her students are more likely to be successful in those activities: "*For example, a lot of melodic improvisation you do will be based on a rhythm. I take a poem or some sort of rhyme that they can use to sort of hang their melody on. Then, we just work on the aspects of melodic improvisation. The challenges arise oftentimes if I've made the activity too difficult for them."* (T5)

Two teachers mentioned that their students are scared to improvise. For instance, "*Some students are just scared to do it. So, we need to do it in a non-judgmental way*" (T7). One reason is that "*they get insecure over what they're doing, which is logical*" (T3). This teacher tries to make her students dare to make mistakes by framing that "*mistakes are*

non-existent in improvisation." Moreover, limited time was another challenge mentioned by half of the teachers, which made them have no time to focus on just one concept or activity. When implementing improvisation activities, one teacher found maintaining good classroom discipline was time-consuming.

3.4.2.3. Reflection

Six teachers advocated to invest in a safe and supportive classroom environment. There were some comments on starting improvisation activities at an early age to reduce nervous feelings, especially by improvising with smaller numbers of students and implementing group improvisation. A teacher explicitly stated that experience with improvisation herself was necessary before using improvisation activities in the classroom with students. Despite pursuing perfection, a teacher prioritized creativity over perfection when doing improvisation activities, even though it came up messy and time-consuming. It is about individual preferences and priorities: "*If you want something that is just super structured, it takes a lot of time […] Then everybody does this until it is perfect. […] And I give up that part of perfectionism for more creativity. But maybe for other teachers, it is more important that they have their [students] completely professional in one piece and that they sing it with the clearest head voice. It's just like, where would you want your priority to be?"* (T4)

Half of the teachers reported that they could not cover all the musical concepts during time-limited music lessons in primary schools. Improvisation was incorporated by making students enjoy the music rather than prioritizing improvisation itself. In other words, improvisation was used as a tool to enhance musical enjoyment, not as the primary objective of the lessons. The main goal was always to enable students to enjoy the music: "*Keep the interest level high for kids, and ensure they're engaged and enjoying what they're doing because it doesn't matter how good they are."* (T5)

3.5. Discussion

This study aimed to provide evidence-based insights into the current situation and teachers' implementation and evaluation of improvisation activities in Dutch primary school settings. We collected in-depth data through semi-structured interviews, classroom

observations, and field notes to answer the research questions on teachers' perspectives on improvisation activities. This section will address the theoretical and practical implications of our findings.

3.5.1. Implementation of improvisation activity

The first research question sought to characterize how music teachers apply improvisation activities in class and their intentions. The result indicates that all the teachers in this study mentioned they were applying improvisation in their music lessons for various reasons.

The results from the study clarified the understanding of music teachers' utilization of musical improvisation in primary schools. It indicated that music teachers are convinced of the importance of improvisation, similar to the advocacy of improvisation by researchers and educators in the past decades. All the teachers in this study shared how they implement creative activities, although some of them were still learning to use improvisation in class or had limited time to do so. Previous studies have revealed that improvisation is a tool to develop both musical and non-musical skills in various forms, such as vocal, instrumental, rhythm, or adherence to pulse (Gruenhagen & Whitcomb, 2014; Larsson & Georgii-Hemming, 2019; Whitcomb, 2013). Our findings confirmed that these are the commonly used forms of improvisation activities in primary music classrooms, aligning with the findings from (Gruenhagen & Whitcomb, 2014), who found that call-and-response singing, improvising on percussion instruments, and improvising rhythmic patterns are the most commonly used activities. Many teachers use call-and-response singing activities in their classrooms.

When conducting improvisation activities in the classroom, teachers stated that providing a safe and supportive environment and scaffolding structured, suitable activities were important factors of effective improvisation activity. The importance of a safe environment to reduce students' reluctance and fear has been indicated in previous studies (Gruenhagen & Whitcomb, 2014; Hickey, 2015; Koutsoupidou, 2005; Whitcomb, 2013). Furthermore, a safe environment is crucial in improvisation and other forms of creative activities, such as composition (Devaney, 2023).

Teachers emphasized that scaffolding structured activities aligns with the developmental approach to teaching improvisation proposed by Kratus (1991, 1995), who advocates that gradually providing structured parameters and sequencing introduction before expecting students to engage in free improvisation. Our research further presents that teachers often face challenges in balancing structure with creative freedom. As mentioned by Kratus (1991), "*growing with improvisation*", where the degree of guidance is gradually adjusted as learners develop.

Many teachers mentioned that choosing structured and suitable improvisation activities can lead to more success in their teaching when they follow this approach. Furthermore, we conclude that teachers could employ more student-centred activities, such as those activities that connect students' interests and daily lives, to stimulate improvisation and make it more accessible, which aligns with the conclusions of Silseth and Erstad (2022), who argued the validity of taking leisure activities as a resource to make students concentrate on the lessons.

Feedback is an essential part of the improvisation activity. This study supports evidence from previous observations (e.g., Gruenhagen & Whitcomb, 2014; Rozman, 2009), such as teachers giving feedback after their students' improvisation. Most teachers gave feedback directly after their students improvised. Some teachers gave short compliments, while others only gave feedback to older groups. Feedback from peers and self-reflection by students were encouraged. This finding is consistent with that of (Beegle, 2010, p. 225), who argued that those kinds of feedback allow students to "*verbally communicate their ideas to the group, reflect and evaluate, and make musical choices*." Giving feedback in the form of questions can also stimulate students' thinking and help with the improvement of the improvisation product.

3.5.2. Evaluation of improvisation activity

In the current study, the evaluation of improvisation activities is related to benefit, challenge, and reflection. Teachers emphasized the benefits of improvisation for musical skills development, personal growth, and creation of conducive learning environments. For instance, improvisation allows for thinking and creating musically and makes music feel less severe and exclusive. The finding echoes Wright and Kanellopoulos (2010), who encouraged

students to create music in their own way and have a more personal relationship between students and music. All teachers from the current study described that improvisation could foster creativity, findings supported by previous work (e.g., Koutsoupidou & Hargreaves, 2009; Navarra Ramón & Chacón-López, 2021).

Moreover, teachers believed improvisation brings more expression and ownership and builds confidence. While some teachers indicated that improvisation activities can create chaos, an interesting finding is that these activities can also improve group dynamics and provide valuable insights for teachers. These results align with (Azzara, 1999), who found that improvisation can be a tool to "*measure and evaluate students' musicianship and aural skills*."

Despite improvisation's benefits, teachers face challenges when applying improvisation to music education in their classrooms. Chaos is likely the most significantly impacted aspect among difficulties in choosing appropriate repertoire, dealing with student reluctance, and managing time limitations, group size, and classroom space. It can be challenging to maintain the attention of all students during solo improvisation by one student, particularly in more extensive group settings. Additionally, some schools may have limited time and instruments, and students may quickly become excited when playing instruments, making it difficult for teachers to maintain classroom discipline. Due to limited teaching tools, like systematic guidance on improvisation activities, teachers may struggle to find a suitable repertoire to scaffold the activity, especially when teaching mixed-level groups.

Furthermore, some students may be timid or reluctant to improvise in front of their classmates. The study also identified limitations in terms of timing, group size, and classroom space. These limitations add to findings obtained in earlier studies, such as Devaney (2023), who also reported the limited time of composition. Similar results were reported by Bogojević and Pance (2022), who surveyed teachers in Slovenian and Montenegrin primary schools and found that the limitation of time, instruments, and creative pedagogy significantly impacted the completion of creative musical tasks.

Our findings indicate that teachers need to create a safe and supportive learning environment when students improvise and provide feedback when required. Moreover, during the process, teachers should achieve a delicate balance between allowing freedom

and setting limits to prevent the constraint of students' creativity (Lage-Gómez & Cremades-Andreu, 2019). This result is consistent with Beegle (2010), who also confirmed that teachers need to find a balance between autonomy and structure when leading improvisation activities. Similar findings were also reported by Coulson and Burke (2013), who suggested that teachers need to be aware of their modelling of improvisation, as they found that students are more likely to take risks when they have confidence in improvising. Furthermore, we found that students can also learn from improvisation products created by their peers.

A finding of this study shows that some teachers' belief that it is better to start improvisation with younger age groups and in group settings to reduce students' anxiety when improvising. This result is consistent with a literature review (Chandler, 2018), which described that students' improvisation skills increase with age. Teachers indicated that, rather than making improvisation a primary goal, they use it as a tool to stimulate more possibilities in music learning (Hickey, 2009, 2015). In this process, teachers would prefer to allow students to create and give them ownership to let them enjoy music instead of focusing on technical things. Furthermore, teachers who had just started to lead improvisation activities in their classrooms had just begun to learn to improvise themselves. This finding confirms that teaching content is associated with teachers' experience (Gruenhagen & Whitcomb, 2014; Koutsoupidou, 2005).

3.5.3. Limitations and future research

The small sample (N=8) of music teachers provides an in-depth insight into teachers' perspectives on improvisation in classroom practice but potentially limits the breadth of applicability of the conclusions for other contexts. In future research, a combination of qualitative and quantitative research with teachers working in diverse contexts and with a variety of students could be conducted to further examine the teachers' perspectives on implications and evaluation of improvisation activities. In this study, we purposefully focused on teachers' perspectives of improvisation in class in primary education. Additional investigations could extend this focus by examining students' reactions to and experiences with improvisation activities by, for example, exploring how students perceive, engage with, and respond to improvisation in classroom settings. Future studies could also investigate

whether teachers' perceptions of improvisation are consistent with the perceptions of their students. Furthermore, later works could examine the relationship between specific teaching methods and quantifiable changes in students' improvisation skills.

Additionally, conducting similar research in higher education would be valuable, as primary music teachers are graduates from higher education, such as conservatories or music teacher education programs. Similarly, studying improvisation activities in secondary education schools will also provide insight into the teaching and learning of students of a different age group. Both this study and previous work indicate that there is a relationship between teachers' experience with improvisation and their teaching approach to improvisation activities in their classrooms. The improvisation expertise developed in their higher education programs can help teachers to be better prepared for leading improvisation activities later in their careers.

3.5.4. Practical implications

The findings provide practical insights derived from the practical experience of teachers in implementing improvisation in primary music classes. The findings of this research have implications for future teaching practice. First, despite the primary focus of this study on improvisation, similarities have been found in previous studies that focus on creative activity and composition (e.g., Devaney, 2023; Rozman, 2009). Similar findings highlight improvisation and composition as under-practiced activities in the primary and secondary schools' music curriculum. Fortunately, this is an emerging field with a growing body of literature. It is worth noting that teachers and researchers seeking knowledge about improvisation can also refer to literature on creative activity and composition.

Creating a supportive and safe environment for students when improvising can make teaching improvisation activities more successful. Teachers who model improvisation more frequently can positively affect students' creation process, making them feel more confident, and encouraging them to take risks in their improvisations. To alleviate any fear or apprehension among students, teachers can start with improvisation activities in a group setting, beginning with early age groups. It is essential, however, to keep the group size manageable, as larger groups can lead to decreased attention and difficulty in listening to each other, potentially resulting in chaos.

Concerning the reported lack of improvisation training, some earlier studies have provided practical guidance for teachers who want to conduct improvisation activities in their lessons (e.g., Beegle, 2010; Monk, 2013; Whitcomb, 2013). Feedback during the process of improvisation is essential. Moreover, feedback can be provided in the form of questions on the level of self-regulation to encourage students to keep thinking and reflecting on the improvisation process. Group feedback and guided peer reviews from classmates, rather than plain instruction by the teacher, can further promote self-reflection of students on their improvisation activities. For teachers, improvisation can also serve as a tool to assess and evaluate students' musicianship and aural skills. For schools and curriculum designers, we argue for allocating adequate time in the curriculum for students and teachers to explore and develop their musical ideas to foster creativity and improve musical skills.

3.6. Concluding remarks

This paper contributes to the understanding of the value of improvisation in primary music education, exploring teachers' implementation and evaluation of improvisation activities. Through the systematic analysis of interview transcripts and classroom observations, we investigated teachers' perspectives on improvisation activity in the classroom. In general, the amount of time spent on improvisation in class depends on teachers' musical background, experience with improvisation, time constraints, classroom space, and student group size. Improvisation on voice and instruments is likely the most used activity in the classroom. Also, the combination of movement, lyrics, and other art forms is identified in this study. All teachers confirmed the positive effects of improvisation, such as improving creativity, taking ownership, building confidence, and making music less serious and exclusive. Furthermore, teachers noted that their students would enjoy the improvisation activity more when teachers create a supportive and safe environment, scaffold clear steps for students to follow, and use components that connect to students' interests.