



The impact of music making outdoors on primary school aged pupils (aged 7–10 years) in the soundscape of nature from the perspective of their primary school teachers

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Abstract

The benefits of taking pupils' learning outdoors have been widely reported around the world. However, it is argued the simple act of stepping outside the classroom does not inevitably bring rewards. This study examines teachers' perceptions of the impact of primary school pupils' music-making in various outdoor rural locations. It analyses qualitative data from semi-structured interviews with seven teachers from six different primary school classes, who observed their classes as they took part in the music-making. The validity of the teachers' perceptions is triangulated with evidence from semi-structured interviews with six groups of children from the six different classes. The analyses show the teachers perceived that the space, the new soundscape and the close contact with nature afforded by the different locations engendered enhanced experimentation and expressiveness. The teachers suggested that, as a result, the children became immersed in, and focussed on, their music-making. The study suggests teachers identify potential benefits for children aged 7–10 years in making music in outdoor locations. We conclude greater phenomenological, body-focussed understandings in education and an increased awareness of somaesthetic perspectives may be beneficial for teachers to explore in pupils' music-making and in other creative areas of the curriculum.

Keywords Music making · Outdoors · Primary · Behaviour · Soundscape

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Introduction

There is a variety of research that suggests noise pollution in primary schools is having a detrimental effect on children's learning (Bulunuz et al. 2017; Stansfeld and Clark 2015; Stansfeld et al. 2009). These fears are not new as Schafer (1977) warned over 40 years ago that "noise pollution is now a world problem" (p.3). Papanikolaou et al. (2015) state it is now generally accepted "that all types of noise exposure at school affect children's learning and academic performance" (p.25) and that more consideration is needed to combat the effects of noise pollution. As Schafer (1994) succinctly pointed out, "there are no ear-lids" (p.13). Schafer (1994) described outdoor rural environments as having a "hi-fi soundscape" as they possess a favourable "signal to noise ratio". This means that individual sounds can be "heard clearly because of the low ambient noise level" (p.43). In contrast, environments that contain large amounts of noise pollution have a 'lo-fi' soundscape as acoustic sounds are drowned out by noise. Before the industrial revolution people would be familiar with, and interact with, the soundscapes of the natural environment (Schafer 1994). The soundscapes of spaces therefore not only affect sound-making because of the physical acoustics, but can have a creative and aesthetic impact if we tune in to or participate with the soundscapes of the natural world (Schafer 1994). This idea has particular relevance for this study because the different groups of children all made music in rural outdoor environments where the natural soundscape could be heard clearly.

Of course, not all sounds heard in green spaces are pleasant. Shepherd (2008) highlights that outdoor sounds from nature can be full of turmoil and warnings, but that ultimately their "elemental savagery...exhilarates rather than destroys" (p.97). In nature spaces we can experience "each sense heightened to its most exquisite awareness", but unfortunately this is "the innocence we have lost, living in one sense at a time" (Shepherd 2008, p.105). Additionally, MacFarlane (2011) warns:

We have come increasingly to forget that our minds are shaped by the bodily experience of being in the world - its spaces, textures, sounds, smells and habits - as well as by genetic traits we inherit and ideologies we absorb. We are literally losing touch, becoming disembodied, more than in any previous historical period (p.xxxi).

This research project involved primary school children moving away from the school environment to make music in outdoor rural locations. Situating the research in outdoor rural environments was not merely changing the scenery of the pupils' music-making. It was deliberately exploring the significance of the environment on the pupils' music-making, allowing exploration of the idea that music is an "embodied activity-experience and is meaningful in terms of its enmeshed and evolving relationship to the environments in which it functions" (van der Schyff 2013, p. 51).

The outdoor "rural" locations chosen were beaches, woodlands and fields. Even though they were sometimes close to houses and roads, all the locations occupied relatively quiet areas, free from urban noise pollution. This was important because analysis of the data from the first group of children showed that it was the sonic environment created by the physical location of the music-making that appeared to have had the greatest impact on the pupils' musical experience. Therefore, it was

important to maintain consistency in terms of the rurality of the place where the children made their music in order to explore whether any patterns would emerge in their experiences.

Benefits of outdoor learning

In recent years there has been increasing international interest in the potential benefits of the outdoor environment on child development (Becker et al. 2017; Gray and Martin 2012; Norðdahl and Einarsdóttir 2015; Wistoft 2013). This trend has been mirrored in the United Kingdom (Maynard and Waters 2007; Quibell et al. 2017; Waite 2017; Scrutton 2015; Dolan 2016) where the curricula for young children in Wales, England, Scotland and Northern Ireland include a statutory requirement for outdoor learning. Humberstone and Stan (2009), Sefton-Green (2006) and Waite (2017), however, warn that the potential value of outdoor learning is misunderstood, because the same pedagogical conventions of the classroom are merely being replicated outside. Humberstone and Stan (2009) call on educators to “engage with notions of power and control and how they are used” (p.30). The aim is not to simply transfer the classroom outside; “we want them to learn to behave in ways that are different to classroom behaviour” (Waite 2017, p.18). Nevertheless, much of the research appears to show the value of agency for the learner and creative freedom provided by outdoor learning (Flannigan and Dietze 2017; Gustafson & van der Burgt 2015; Maynard et al. 2013; Sefton-Green 2006). Research also highlights the apparent cognitive benefits of the outdoor environment (Ampuero et al. 2015; Dillon et al. 2005; Ulset et al. 2017; Wyver 2017) and the beneficial results to one’s wellbeing when in contact with nature (Adams and Beauchamp 2020; Capaldi et al. 2015; Mayer et al. 2009; Pritchard et al. 2019; Sharma-Brymer et al. 2018). Despite these research findings, it has been argued that children are not being given enough opportunities to learn outdoors (Waite 2017). As Humberstone and Stan (2011) highlight, “the outdoors is purported to be significant and beneficial yet [is] an under-utilised context for learning for primary children in the UK” (p.530).

Space

Doddington (2014) highlights how the increased space of the outdoors can impact on learning. Doddington argues for “learning in the open” because “being outside offers the opportunity to move through space and to move in qualitatively different ways.” (p.51). Drawing on Shusterman’s (2006) theory of somaesthetics, Doddington (2014) highlights the need to be more bodily attentive and aesthetically aware in order to create lasting educational experiences. Doddington (2014) further asserts that stepping outside has an immediate effect on children because they are closely attuned to environmental changes and bodily experiences. Moreover, outdoor environments not only offer greater freedom of movement than a classroom environment, but also allow for “less constraint to habitual ways of behaving and thinking” (Doddington 2014, p.42). Therefore, the outdoors is open to richer experiences because of its increased space and the augmented aesthetic and creative possibilities it presents. This somaesthetic perspective has significant implications for pedagogical approaches in schools where the body has been traditionally viewed as merely housing the mind (Bonnett 2010).

Bonnett claims there has been “an indifference to those ways of being in the world and of sense-making that spring from pupils’ own enmeshed experiences” (Bonnett 2010, p.34). This is perhaps particularly pertinent to music making as our bodies are felt as the “primary instruments” for appreciating and making music (Shusterman 2008, p.126).

Phenomenological bodily knowing

There is a growing body of literature that links phenomenology with the pedagogies of outdoor learning (Brown and Heaton 2015; Humberstone 2015; Waller et al. 2017). van Manen explains how phenomenology is the study of the world as we immediately experience it “pre-reflectively rather than as we conceptualize, categorize, or reflect on it” (2016, p.9). These links are perhaps not surprising, as Foran and Olson (2012, p.193) remind us of “the simple connection that we as humans have to our world which is primordial and existed before social conventions imposed their ways of being on our lives.” Gibson (1986) posits that we understand this as children, but as we become adults we forget. When we become civilised adults, “we often lose the feeling of being surrounded by the environment” (p.203). In contrast, “children pay attention to their surroundings when allowed to do so” (Gibson 1986, p.203). Drawing on phenomenological perspectives, Abram (2010) explains that our bodily intelligence extends beyond the edges of our skin as we cannot experience the body independent of its environmental context. Our experience of the environment is sensorial, but also participatory. We are part of the living environment as the body is “not a solid object, but a terrain through which things pass” (Abram 2010, p.230). Consequently, this perspective foregrounds not only the importance of considering the body in educational experiences, but also the significance of the environment in which the body is located. Positioning the body and the environment at the nexus of experience has important implications for music-making in primary education. If both have a vital role to play in experiences then they need to be brought centre stage in music education.

The cathartic benefits of making music

Music-making has a chorus of voices singing of its association with increased wellbeing (DeNora 2016; MacDonald 2013). This study draws on Vygotsky’s (1971) theory of the cathartic benefits of music as the responses from the children and teachers seem to show that the music-making had been emotionally beneficial for the participating children. Vygotsky (1971, p.249) described artistic expression as the “social technique of emotion, a tool of society”. He declared that art releases passions that cannot find expression in normal everyday life and that its cathartic nature is the biological basis of art (Vygotsky 1971). Thus acknowledging the power that music has not only to transform our emotional state, but to also improve our existential state of being. He stated that through art man can “imagine what he has not seen, can conceptualize...what he himself has never directly experienced” (p.17). Music not only “clears our psyche” and has “coercive power”, but also gives us an augmented sense of perspective (Vygotsky 1971, p.252). He argued that art improves understanding as it shows us “more life phenomena than we actually experience” (Vygotsky 1971, p.249). Art is not only a “method for finding equilibrium between man and his world”, but also

“without new art there can be no new man” (Vygotsky 1971, p.259). Therefore, the cathartic possibilities of music-making in schools could not only involve the ability to improve emotional states, but also allow for augmented understanding and growth.

Methodology

Bryant states the “grounded theory starts with a bounded context, where we are looking at a few seed concepts” (2017, p.131). The initial seed concept was to focus the data collection on the music-making of pupils from one school in a field containing a prehistoric monument. However, after initially collecting and analysing the data, it became clear that the outdoor rural environment seemed to be having a significant effect on the pupils’ music-making. It is important to note that the deliberately open-ended nature of the musical task, with no preconceived targets or outcomes, worked well with the grounded theory approach, as the same basic task could be set in different environments and with different groups of pupils. In this sense, the phenomenological emphasis on exploring their experience in outdoor rural environments allowed for freedom of outcome and growth in new directions.

As the theory emerged about the impact of being surrounded by nature, additional schools were selected in order to further test the theory. At this stage the “sampling [was] for developing...the emerging categories” (Charmaz 2014, p.181). We began to “construct tentative ideas about the data” and proceeded to examine these ideas “through further empirical enquiry” (Charmaz 2014, p.199). with subsequent schools. This type of theoretical sampling allowed us to select the participants and locations for the music-making in order to examine and develop the emerging theory (Edwards and Holland 2013) The data gathering and analysis was a bottom-up, rather than a top-down procedure. Rather than having a theory to deduce, it instead prioritised gathering data and “examining potential patterns amongst the data produced” (Greig et al. 2007, p.50). The aim was to produce data of high quality, rather than high quantity. This high-quality data, or “thick description” (Geertz 1973) is valuable as “what we call our data are really our own constructions of other people’s constructions of what they and their compatriots are up to” (p.10). As qualitative researchers we were therefore required to delve deep into the data in order to interpret the teachers’ perceptions. This involved sifting through the data in order to find relevant patterns and probing at these connections to reveal: what they mean, where they come from, how they relate to each other and how they relate to relevant academic theory (Waring 2017).

Method

One of the research team facilitated the music-making for pupils from six schools in the outdoor rural environments. This member of the research team had worked on previous projects at the participating schools, which alleviated any potential novelty factor of the researcher’s presence. This facilitation, however, only involved outlining the open-ended musical task to the pupils. They then had autonomy to choose their own groups and complete the task.

The pupils were accustomed to having the freedom and autonomy to compose their own music both with their class teacher and with visiting music specialists. The children in each class had also taken part in previous school learning activities at the outdoor rural sites and so visiting the environments was not a new experience. What was new was making music in these environments.

After outlining the task, the researcher present then became an observer, deliberately not interfering with the pupils' creative processes in order to be "sensitive to the effects one might be having on the situation and accounting for these effects" (Merriam 1988, p.96) and to limit bias through self-awareness (Drisko 1997). To further monitor and consider (Patton 1980) any potential effect of the presence of one of the research team, another member of the research team was not involved in the music making and ensured externality in the later data analysis.

After informed ethical consent was obtained from all the participants in line with university protocols, the research with each school used the following procedure:

Day 1 - The children created and performed musical ceremonies in the outdoor rural locations. This activity was instigated by one of the research team, who then withdrew to avoid influencing events. The teachers observed and did not intervene in the music making.

Day 2 – Groups of the children, and their teachers individually, were interviewed about their experiences.

The participating children all undertook the same task, namely to create a musical ceremony in a rural location using the same resources. The rural locations were either fields, woods or beaches and common themes were generated (Braun et al. 2019) from all locations. All of the participating pupils ($n = 187$) were between the ages of 7 and 10 years old. All of the teachers ($n = 7$) and a representative, random sample of the pupils ($n = 33$) were chosen to be interviewed for the conceptual and theoretical development of the analysis; "it was not about representing or increasing the statistical generalizability of the results" (Charmaz 2014, p.198). This paper focuses primarily on the teachers' perceptions of the effect that the outdoor location and music making had on the children, but this is triangulated by data from the pupil interviews as the inductive thematic analysis revealed a number of common themes in their responses.

Sample

All the schools selected ($n = 6$) had nearby access to outdoor rural locations in which they could make music. The schools also represented a range of rural locations and were in catchment areas of differing socio-economic status. The complete sample is described in Table 1. These differing contexts and environments became desirable in response to the theory that emerged from each data analysis. However, no significant differences between the schools emerged in the data analysis, suggesting that it was making music being surrounded by nature that was important, rather than the pupils' socio-economic background. As a result, the results are presented for the whole sample, rather than by individual school. As themes were generated from successive schools about the impact of being surrounded by nature, the next sample chosen was selected in order to further test the emerging theory.

Table 1 Sample of teachers and pupils

	School 1	School 2	School 3	School 4	School 5	School 6
Sample	30	25	48	28	28	28
Age	9–10	9–10	7–9	7–8	8–9	9–10
Number of Pupils	5	5	5	6	6	6
Number of Teachers	1	1	2	1	1	1
Location	Field	Beach	Beach	Wood	Wood	Field

Analysis process

Initial coding produced points of interest that led to the identification of a pattern that was then labelled. This pattern was then searched for throughout the data and given the appropriate label or code. The coding process was cyclical because rarely is the first cycle of coding data perfectly attempted and this causes the researcher to go back and forth between pattern labelling and pattern hunting in the data. Coding is therefore not a straightforward linear process (Sipe and Ghiso 2004) and this subjectivity involves “our personalities, our predispositions, our quirks” (pp.482–483). Others also highlight how coding can involve “fuzzy sets” (Bazeley 2013, p.351), because its interpretive nature means that categories sometimes overlap, and alternative coding could produce alternative boundaries. Both researchers met regularly to discuss the codes and analysis. The codes and developing model were discussed and agreed by both researchers at each stage of the analysis.

Results and discussion

The analysis revealed six main themes, which will be explored in turn:

- Improved behaviour
- Use of space
- Soundscape
- Impact of the natural environment on music-making / creativity
- More experimental and expressive
- Immersion and improved focus

Positive impact on behaviour

The responses from the teachers consistently praised the pupils’ behaviour when making music outdoors. A common theme expressed was that the teachers expected the pupils’ behaviour to be more problematic outdoors, but that the outdoor environment coupled with the pupils’ collaborative music-making had positively affected their behaviour. For example, Teacher 1 (T1) from School 5 (S5) [T1S5] said:

It was phenomenal because they're known ... to be not very good when it comes to group work simply because there are so many dominant pupils. ... I thought, absolutely, no way will that group come up with anything. All they're going to do is argue. ... I couldn't believe how well they all worked together.

T1S6 similarly said:

In their groups, they listened to each other. They listened to ideas and were compromising. They'd adopt one or they'd adopt a bit of the others. They didn't seem to argue as much as when they do it inside. It was like they accepted each other's ideas more. they just seemed to get into playing the music and went with it.

T2S3 even believed that the positive impact on behaviour had continued when they came "back to school", asserting that

There would normally have been lots and lots of people who would've had arguments, and they wouldn't have achieved anything. But I couldn't believe it; it was brilliant. I don't know why that is, but it was brilliant. They worked so well together, and they really united from it. That continued when we came back to school.

This view about improved behaviour was reinforced by responses from the children. For example, this extract from the interview with children from School 5:

Pupil 1 (P1): When we first started, before we got into the warrior mode, we were arguing, but when played our music we calmed down and went right into warriors.

Pupil 3 (P3): Yeah, we all started playing. I started playing, everyone else started playing. You just got into it. You make some music and you just get into it.

P1: That was the only time we argued in the whole time that we worked together.

P3: You could just say, "Right, get in your groups," and no arguments would happen.

Consistently the teachers and children reported that the rural environment had provided an experience that was qualitatively different to what would have been experienced in school, in the classroom or in a school hall. This is expressed by T1S4 who said: "I've been doing the job for a long time, and that's the hardest year because how difficult some of the children are, but when they were playing their music some of them were transformed. Their behaviour was so much better than expected." In the same interview, the teacher was asked whether the same results could have been achieved indoors. The teacher said no and gave the example of one child, who was particularly challenging because of the child's emotional and behavioural difficulties:

You can be rest assured with the one individual that we were on about, his space would've been sacrosanct to him, and yet it wasn't a problem when

he was playing the music. There's natural delineation between the areas where the different groups were, but there was one tree that was part of both performances. That wouldn't have happened. In rehearsals and their experimentation and their playing with the sounds that they could make, there was none of that irritation with other people from him.

The idea that the pupils' behaviour towards each other had improved was consistently reported in the data and that their use of space was an important factor.

Use of space

The teachers stated that one of the positive qualities of the environment was not only the increased amount of space, but the pupils' use and appreciation of space. T1S3 said: "The children were very creative in their approach, thinking about where on the beach they wanted their ceremony to take place. There was a sense that the larger space gave them more freedom to think and to literally move about." This is supported by T1S6 who compared the experience with a performance in the school hall: "Outside, you get more ideas for that, and then you can use the space and be more creative. In the hall, there was just one stage and that's where they were performing."

This is further reinforced by T1S2 who said: "It just wouldn't be the same in the classroom. For starters, there's the space, there's so much more of it down the beach. You could see that the children felt freer and I'm sure this helped their music making."

For example, T1S5 explained:

It wasn't just the way, the things they used; it was the way they positioned themselves on the trees and things like that. If it had been on the field or playground or in a classroom, they would've just sat in a circle. And they were on different levels and distances between them that created a different atmosphere... I reckon that really helped.

This view was reinforced in the pupils' responses. For example, P5S5 said:

When I was playing in the woods, as I said before, it felt very different from when I'd be playing here [in school]. Here, you'd be talking about probably school and things, whereas, when we were there, it was all about that. Here (pointing out the window)... it hasn't really got the canopy around you with the trees, and there it would be lighter outside, whereas in the woods, it was quite dark and you had a nice canopy. And you had space.

Soundscape

All of the teachers consistently reported that the sound world of the environment, the "soundscape" (Schafer 1977), had a positive impact on the pupils' behaviour and their music making. For example, T1S5 said:

Because they were listening properly, I felt they started using their voices, and it was a lot more animalistic, sort of, I don't know, raw. It was really clever and they were being much more creative. Maybe because the acoustics were different and because they were in this sheltered forest place, they could hear it sort of bouncing back and things like that. I think they were experimenting more. It was more enclosed, more immersive.

This is supported by T1S2 who stated:

It's something they can't experience in the classroom, the sounds are completely different ...you can hear the music, the sounds of the sea, there's less noise distraction, they can hear their sounds more clearly, even the acoustics are different. In a confined space the instruments sound so different than in an outdoor environment.

And T1S1 who said:

You could see they could feel the sounds in their bodies. And the sights, just being outside. I don't know if it was just the field. I think it was because they could feel the sounds and hear the sounds of nature, you could see the sounds of nature. I don't know, they just felt it, you could see them getting into it. It made them behave in a different way.

This supports Schafer's (1994) theory that a "hi-fi soundscape" allows sounds and their reverberations to be heard and felt clearly, as if nature is listening and responding sympathetically. He argued "where the reciprocity between music and the soundscape is effectively intuited, the interaction can be like that of text and subtext" as when "birdsong inspires the flutist" (Schafer 1994, p.122). It also resonates with the concept of an "eco-literate pedagogy of music", advocated by Shevock (2018). Shevock calls for "an ecocentric position" that values "musics beyond the anthropocentric" (2018, p.5). The data analysis showed that the teachers and children echoed this perspective. For example, P2S6 said:

It almost feels like we're including the nature and the wildlife sounds, it almost feels like they, as we talk now, they can speak in their language, in the animals' language, just the nature language because they almost combined with us and just combined with each other. They're like singing.

Shevock calls on educators to allow children to be "inspired by the musics of non-human life to create musics for performance" (2018, p. 11). This view echoes others, such as Schafer (1977) and Coleman (1939), who claimed that music making is not something that is exclusive to humans and that paying attention to the sounds of nature has ecological, existential and creative benefits for people. Schafer (1994) describes this as a "musical consciousness" that allows "the beauty of sound to expand and permeate the whole of life" (Schafer 1994, p.127).

This recalibration is needed because we have "become human havings rather than human beings" and that as human havings we "degrade the environment"

(Shevock 2018, p.91). The responses from the teachers and the children consistently expressed that they were far more aware of the natural environment. This finds harmony with the ethos of somaesthetics as it is claimed that a lowering of sensorial intensity “can paradoxically lead to more attentive and acute somatic consciousness, enabling feelings of more rewarding and even more intense pleasure” (Shusterman 2008, p.38).

Impact of the natural environment on music making / creativity

The teachers’ responses showed that they felt the features of the natural environment had impacted positively on the pupils’ music making and their overall creative experience. T1S1 said: “The environment made them more creative. They were more excited, more stimulated and this seemed to help their ideas.” Similarly, T1S2 explained: “I think they were far less inhibited than they would be in a classroom situation. There was far more of a sense of unity between the children and their environment. It made them more creative.”

The idea that the natural environment had enhanced the pupils’ creativity in comparison to the classroom was repeatedly expressed in the teachers’ responses. For example, T2S3 said: “The environment acted as an amazing stimulus allowing creativity and removing the constraints of the classroom.” T1S6 also reinforces these views: “It makes them more creative. ... When they hear the wind in the trees and the birds, it focuses their minds and they get more adventurous as well.”

As well as the belief that the natural environment helped the children get into a creative mind state, the teachers also stated that the pupils’ music-making was heightened because they were able to incorporate sounds from nature into their music-making. T1S6 said:

When you’re outdoors, you’ve got nature around you, whether it’s the wind or the birds or the sounds they’re making, and you can almost incorporate that into your music routines and get one with nature. You can use the wind or the birds as a background rhythm, whereas in the class, you’ve got nothing.

T1S5 said: “I think the environment certainly helped... it helped them to use nature and making their own sounds. Equally, they used leaves and twigs and things like that to help them be part of the whole piece they created.”

This is supported by T1S4 who said:

One of the things that it encouraged was the children making their own music using found things. There was a lad who had a half-curve, a half pipe of bark and then wood chippings in the area where we were doing it, he was sliding them down the bark. It was a very quiet, delicate, subtle sound, really interesting and different.

Later the same teacher explained further stating that “They were stroking the branches down, and it made it real for them. Definitely made it more real”.

These perspectives were repeated in the pupils’ responses. For example, P3S2 said:

You've got the sound of the waves; and wind, and the sea, and the echo off the cliffs...and I just thought that... that was part of the music and the echo and like the sea and the birds really helped because we heard what they sounded like, and we put it... in our own sounds... and it sounded like we're in the music.

The idea that the environment becomes a crucial part of the experience chimes with Schafer's (1975; 1994) theories and with the philosophy of somaesthetics (Shusterman 2008). It also reverberates with Bonnett's claim that a phenomenological approach can involve a communion with nature where "our being can be enlivened and enlarged, our senses awakened and refreshed, our bodies resonating with what lies before us. The being of the dell becomes our being" (2017, p. 83).

More experimental and expressive

Teachers also perceived that in making music outdoors the children had been more expressive and experimental outdoors in the rural environments. T1S5 highlights these ideas:

I don't want to act like they're not able to express themselves or let go in a school environment because they are, but I felt they were able to be much more expressive. ... When I was watching them, I was thinking, would they have let themselves go this much in a classroom environment or within the school grounds?... No, I think they would've felt quite stressed...

Similarly, T1S2 stated: "The outdoor environment and being away from school seemed to make them more experimental with their music making, definitely. They were making all sorts of sounds, using trial and error to construct their ceremonies. I don't think they could have been that loud or experimental in school."

Analysis showed that the teachers felt that the environment and the music making combined had allowed the children to focus on their music making and that this focus had allowed them to be more expressive and experimental. For example, T1S5 said: "What I was really impressed with - I was sure it was to do with the setting they were in, as well, with how well they responded to the task and how quickly they got into the mind-set of making music for that occasion."

Immersion and improved focus

The teachers all reported that the pupils' focus had benefitted from a sense of immersion both in the sensory environment and in their music-making. This example, from T1S5, was typical:

I think because they're a class that get really easily distracted, so because we were completely away from anything, they could just get absorbed in it. They could probably listen to the sounds properly for the first time. ... they could listen to the sounds differently. It didn't seem to be, "We're in a music lesson with a musical instrument from the cupboard in the hall," it was, "We're actually working together to create something." They were actually really listening to how the

sounds would complement each other and also the impact a certain sound would have. That wouldn't have happened here [in school], definitely.

T1S2 similarly, stated:

Even with the acoustics of the instruments in a confined space sound so much different than in an open environment down the beach. It just gives them that real feel of a sense of place. It's not just about the sounds, it's about feeling the air around you. It's the space that you're using. ... it's hard to put into words, but because your whole body is engulfed in it...when you're on the beach it's everything, it's all encompassing. Your whole body is immersed in it. All of your senses.

Consistently, the data showed that the teachers felt the children had been able to just concentrate on their music-making because of the environment and that this immersion in their music-making had resulted in an improved experience. For example, T2S3 says:

We were all very impressed by the children's behavior and involvement in the music-making project. Some of the children can be difficult to manage and lack motivation but all of the children thoroughly enjoyed the whole experience and really gained a lot from it. They worked really well together on their music... They just seemed to really get into playing their music.

Again, these themes were triangulated by the pupils' responses and found to be supported by the data. For example, P1S5 said:

For some reason I thought - playing music in the woods, it's weird because you feel like you have unlimited time...and nobody's around you. You can't get bossed around... like time stops and you can just do whatever you want. Nobody's there. Anything you can get done; it's just your world.

This immersion and focus resonate with Schafer's (1994, p.42) view that music is important, because "it is in music alone that man finds the true harmony of the inner and outer world".

Conclusion

The analyses of the teacher data suggest they perceived that their pupils' music-making, combined with the affordances of the rural environments, appeared to have been a potent convergence. This accords with Hoad's (2015, p.154) view that, "the physical affordances of the environment are not just functional, they have aesthetic possibilities". There also appears to be an understanding, expressed in the data, of the value of bodily knowings. The teachers report that the pupils' multisensory experiences afforded them an improved creative experience. Furthermore, the pupils' music-making outdoors appears to have had increased cathartic benefits (Vygotsky 1971) resulting in improved behaviour and focus in the children. Moreover, teachers, and indeed the

pupils themselves, reported that the quality of music-making appears to have been augmented, due to the heightened sensory experience of making music in outdoor rural locations. The teachers were very consistent in asserting that being outdoors “in nature” achieved something they could not achieve in school. As T1S4 stated ‘I will promise you, hand on heart, we couldn’t have had the same results and the same enjoyment from the session.’

In trying to represent teachers’ perceptions of the impact of music making in outdoor locations it became apparent that teachers, and indeed pupils, viewed the two as inextricably interlinked. It was not just music-making, or being outdoors, that mattered, but the combination of both. These two factors therefore bound, and provided the context for, everything that followed. As the pupils began making music in an outdoor setting, the teachers noted the impact of various factors which directly resulted. These factors were not hierarchical, nor indeed mutually exclusive, and were normally seen in various combinations, all of which teachers regarded as positive. These included an improvement in their behaviour – which some felt continued afterwards in the classroom – and collaboration. Teacher data further suggested pupils responded to a new soundscape in their music making. This soundscape was also affected by the way the pupils used the affordances of the space, for instance in changing levels or moving positions. The teachers also noted increased experimentation and expressiveness in the music-making. Finally, the teachers reported that the children became very immersed in, and focussed on, their activities. These views are captured in Fig. 1.

Whilst not a panacea, this study suggests that teachers identify potential benefits for children aged 7–10 years in making music in outdoor locations. This research suggests that greater phenomenological, body-focussed understandings in education (Brown and Heaton 2015; Humberstone 2015; Robertson et al. 2015) and an increased awareness of somaesthetic perspectives (Doddington 2014; Shusterman 2006) may be beneficial for teachers to explore in other creative areas of the curriculum. As T1S6 said: ‘It turns the light on in their heads, the outdoors.’

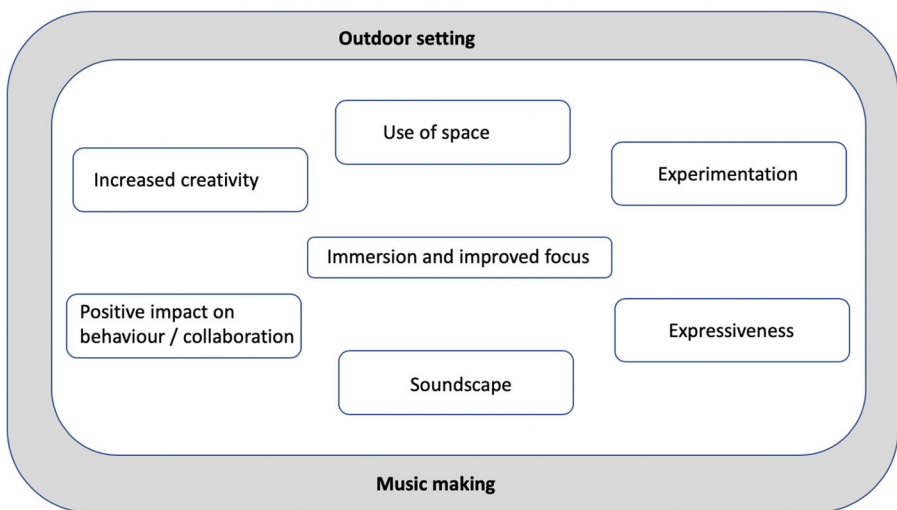


Fig. 1 Model of teacher perceptions of the impact of children aged 7–10 making music in outdoor settings

Compliance with ethical standards

Conflict of interest On behalf of both authors, the corresponding author (Dylan Adams) states that there is no conflict of interest.

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