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Music as Method: Musically Enhanced Narrative Inquiry

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Abstract

While artist-researchers have been productive within the domains of the literary arts, visual arts, dance and drama, there is little musical arts-based educational research reported in the literature. This article introduces a research methodology to address this deficit: musically enhanced narrative inquiry (MENI). The article describes the methodology and its foundation in narrative inquiry, enhanced by arts-informed research processes. It provides an example of a MENI research project, *Teaching Lives*, that employs narrative and musical processes to explore and represent the personal, practical knowledge embedded within the stories of an experienced schoolteacher. The article is accompanied by three short audio files: musical representations of the data that integrate the recorded words of the participant with music, composed by the researcher, to illuminate the teacher knowledge within the narratives.

Introduction

Two decades ago Tom Barone and Elliot Eisner sent out a call for artful innovation within the realm of educational research:

> It is important for us to point out that neither language nor numbers have a monopoly on the means through which humans represent what they have come to know…research need not be limited to written reports. Experience in the world is, after all, construed from "multimedia" events and is not limited to what we read…educational research ought to exploit the capacities of mind to process information in a variety of ways. A parochial conception of the vehicles with which we think are legitimate for doing and reporting educational research will certainly limit the varieties of understanding and the forms of meaning that we are able to secure. (1997, pp. 90-91)

And the call has been answered. In recent years arts-based educational researchers have been active, exploring educational phenomena through the creation of (to offer just some examples) novels (Saye, 2002; Sameshima, 2007); poetry (Sullivan, 2000; Leggo, 2011); visual art (Blaikie, 2013); photography (Holm, 2014); collage (Finley, 2002); dance (Ricketts et al, 2008; Boydell, 2011); and educational ethnodrama (Saldana, 2003).

However, while artist-researchers have been productive within the domains of the literary arts, visual arts, dance and drama, music "remains the least used medium" in arts-based research (Leavy, 2015, p. 132). A possible reason is that the training required to work meaningfully with music in a research context may be–or may be perceived to be–prohibitive (Leavy, 2015). Further, a significant portion of those who are trained as musicians do not have experience composing music. While it is inherent within the training of visual artists and poets to produce their own, original pieces, musicians–particularly those outside the realm of popular music–often focus only on performing music that others have created, and so may not be inclined or able to produce musical representations of researched phenomena. Another challenge for music-based research is finding a way to disseminate it; while visual art-based research or fiction and poetry-based research are easily accommodated within traditional print and electronic journal formats, academic journals (with the notable exception of this one) are rarely willing or able to publish multi-media submissions.

Despite the challenges, the possibilities offered by music-based approaches to research are rich. Music has long been employed across cultures and contexts to tell and enhance the sharing of stories; it can be used efficiently and powerfully to symbolize meaning. Music can also be used to shape meaning, or influence interpretation (as film music does), a capacity afforded by the tremendous power of music to represent and evoke emotion. Employed in the

representation of research, music has the potential to "affect audience members in new ways" (Leavy, 2015, p. 127). Music also has the capacity of simultaneity; techniques of orchestration can serve to present multiple or layered meanings at the same time (Daykin, 2004). Perhaps most significant in the consideration of music as a method for researching is the notion that it can impart what other forms of communication cannot. According to Heinrich Heine, "where words leave off, music begins." Music has the potential to enable ways of knowing, illuminating, representing and communicating that are simply not available to other modalities.

Some of the few pioneers using music as method in educational research include Terry Jenoure, Daniel Bakan, and Peter Gouzouasis. In research exploring the experiences of African American artists teaching at predominantly White post secondary institutions, Jenoure (2002) musically coded and organized data into a musical performance collage that incorporated recorded spoken prose and poems sung live. Bakan (2013) made use of musical composition to represent "a transitory moment in [his] a/r/tographical queries into song as research and pedagogy" (2013, p. 4), creating a song entitled 'This is the Beauty of Song,' and performing it with voice and acoustic guitar. Gouzouasis (2013) has described two examples of his use of music as method in educational research. Working with colleagues on a performance presentation about artography, Gouzouasis composed and performed music for guitar inspired by composers Benjamin Britten and John Dowland, "to parallel and compliment the development of [the group's] conceptual propositions…[functioning] as both an explanatory and aesthetic metaphor" (p. 2). In another project (Gouzouasis, Grauer, Irwin, & Leggo, 2005), exploring "Aristotle's notions of tèchne (art), phronesis (practical wisdom), knowing (theoria; related to wisdom, or sofia), doing (praxis), and artful production and making (poiêsis)" (2013, p. 4), Gouzouasis prepared a 12-minute multi media presentation consisting of spoken narrative text, a backdrop of original photographs of Greece, and music. The music was an elaborate re-working of Vivaldi's *Four Seasons*, re-orchestrated for "a variety of plucked, synthesized, string instruments e.g., guitars and bouzoukee, also marimbas, and xylophones" (p. 3). Gouzouasis performed the solo violin part in the second movement live for the AERA conference presentation, on a heavily distorted electric guitar. In preparing the music, Gouzouasis was both exploring and representing the presentation topic:

> the entire process of painstakingly researching Vivaldi scores, entering the music into a digital format, re-orchestrating the score, selecting the images, scanning them and photo-realistically editing them, writing (editing) and recording the narrative, learning and performing the solo violin part of the second movement, and writing the paper was related to the very topic of the presentation—tèchne, phronesis, knowing, praxis, and poiêsis. (2013, p. 4)

Apart from these few pioneering efforts in musical arts-based educational research, there is little reported in the literature. As Leavy wrote, "[m]usic is still underutilized in social research" (2015, p. 140). With this article I introduce a research methodology to address this deficit: musically enhanced narrative inquiry.

A New Methodology: Musically Enhanced Narrative Inquiry

As a teacher, educational researcher and musician-composer, I have been working for some time to devise a way to wear these three hats at once in order to explore and represent understanding of educational phenomena through musical processes. I have developed an approach that I call musically enhanced narrative inquiry (MENI). The approach builds on literary forms of narrative inquiry through the use of sound and music. Bowman (2004) has identified the capacity of sound to put us in the world as no other sense does. Further, as Barone and Eisner wrote, "[s]ound, which reaches its apotheosis in music, makes possible meanings and other forms of experience that cannot be secured in nonmusical forms" (2012, p. 1). Bresler (2006) has argued that a fundamental aim of qualitative inquiry is to promote empathic understanding, which "involves resonance, an embodied state of mind that is cognitive and at the same time, affective and corporeal" (p. 25). To achieve this resonance, Bresler calls for the creation of 'embodied narratives' that move beyond verbal and visual languages to consider "the role that musical ways of knowing can play in the generation and understanding of narrative" (p. 23). My conception of MENI is inspired by the notion that, through music and sound, it may be possible to explore, reveal and communicate meanings otherwise ignored – that sound and music may enhance the potential of narrative to engender resonance and empathic understanding.

In the following paragraphs I will describe the methodology and its foundation in narrative inquiry, enhanced by arts-informed research processes. I will then provide an example of a MENI research project, *Teaching Lives*, and close by discussing some considerations of this research and the MENI approach.

A Foundation of Narrative Inquiry

I feel as though stories have always been central to my relationship with the world, and indeed central to my very being. If the stories were extracted from me, I think I would simply crumble, ash-like, and blow away. So when I came to teaching, and realized how complex a calling it was (and how little I understood), I sought to learn more about it in the way I learn best—through stories. Fortunately for me, the stories were all around me. I come from a family of teachers. My brother, sister, cousin, mother, aunt and grandmother are all teachers. Many of the stories I needed I had already heard. Unwittingly absorbed and tucked away, they lay dormant within me. Only when I began teaching in schools myself did the stories begin to

come alive, to glow and vibrate with resonance and significance (like a guitar, untouched in the corner of a room, will suddenly resonate with sympathetic vibrations if you speak the right frequency). Recognizing their value, I sought more teaching stories, digging them out of colleagues, students, and my own former teachers. I also learned the value of telling my own teaching stories, realizing that meanings drifted into focus and became apparent when I related and thereby re-lived my learning and teaching experiences, found words to articulate what they meant to me, and observed how those who listened took in what I needed to say. As Clandinin and Connelly (2000) have succinctly explained, "stories lived and told educate the self and others" (p. xxvi).

Indeed narrative researchers have been capitalizing on the potential of stories for building knowledge of teaching and learning for some time. Bruner (1985) conceptualized teacher knowledge as being either paradigmatic knowledge (propositional knowledge such as generalizable maxims and findings from classroom research) or narrative knowledge (often expressed and exchanged by teachers in the narrative mode of anecdotes and stories, and heavily dependent on the unique context of a particular classroom). Jean Clandinin and her colleagues have been exploring teacher knowledge and experiences through narrative since the early 1980s. Their work has identified that teachers hold 'personal practical knowledge' that links past professional and personal experiences to present practices (Clandinin, 1983); can be represented by and through teaching acts (Connelly and Clandinin, 1986); interconnects past, present, and future (Connelly & Clandinin, 1988); is lived out by teachers in classroom 'safe places' (Connelly & Clandinin, 1988); is a deeply personal knowledge gleaned from experience and intimately linked with the knower herself (Clandinin & Connelly, 1995); and emphasizes the narrative structure of teachers' thinking; not only do teachers make sense of and communicate their experiences through stories, but narrative understandings guide teachers' practices (Clandinin & Connelly, 1999).

As a means of exploring and understanding educational phenomena, particularly teacher knowledge, narrative inquiry has significant potential. Narrative inquiry is "a way of understanding experience" (Clandinin & Connelly, 2000, p. 20). Clandinin has explained that "people by nature lead storied lives and tell stories of those lives, whereas narrative researchers describe such lives, collect and tell stories of them, and write narratives of experience" (2006, p. 45). Narrative, according to Thomas (2012), is "one of our most fundamental ways of making meaning from experience" (p. 209). In addition, by focusing on individuals, "narrative opens up what grand theory tends to shut down" (Bowman, 2006, p. 14), and honours the notion that "an n of 1 can be used to secure knowledge of a process or an outcome that can serve as guide for work in the future" (Barone & Eisner, 2012, p. 170). Narrative inquiry has the potential to leverage the capacity of an individual's stories to help build understanding of complex phenomena like teaching and learning.

When I began post-graduate work in education I was inspired by and drawn to narrative inquiry. I was inspired by the potential for developing rich and nuanced understanding; I was drawn by the stories. And I was excited by the potential of narrative inquiry not only to explore and develop knowledge, but also to communicate and share knowledge through stories. Indeed, "the principal attraction of narrative as method is its capacity to render life experience, both personal and social, in relevant and meaningful ways" (Connelly & Clandinin, 1990, p. 10). What could be more relevant and meaningful and resonant to an audience of teachers than sharing research through stories? Perhaps stories with music.

…Enhanced by Arts-Informed Research

The fundamental rationale for making use of the arts in research is that the arts are a way of knowing; through art, one can explore and express understanding. Further, artistic processes and products may be able to illuminate and communicate meanings in ways that traditional research cannot—to "extend beyond the limiting constraints of discursive communication in order to express meanings that otherwise would be ineffable" (Barone & Eisner, 2012, p. 1).

There are various schools of practice, or approaches, to researching through the arts. I align my work with arts-informed research, and the following defining elements described by Knowles and Cole (2008, pp. 33-34):

> – *Methodological integrity* – The art form must work to illuminate and achieve the research purposes
> – *Creative inquiry process* – Rather than rigid research guidelines, a researcher relies on the processes of art making to inform the inquiry in ways congruent with the artistic sensitivities and technical (artistic) strengths of the researcher
> – *Presence of the researcher*, subjective and reflexive, is evident in the research text
> – *Centrality of audience engagement* – The use of the arts in research is not for art's sake. It involves the reader/audience in an active process of meaning-making…the art informs and engages; the research text is explicitly intended to evoke and provoke emotion, thought, and action.

Knowles and Cole suggest arts-informed research is "sufficiently fluid and flexible to serve either as a methodological enhancement to other research approaches or as a stand-alone qualitative methodology" (2008, p. 33). In my conception of musically enhanced narrative inquiry, I see arts-informed (or more specifically, music-informed) research processes as a means to extend the potential of narrative inquiry, enabling me to research "in ways that more fully acknowledge the richness and complexity of human experience" (Knowles & Cole 2008, p. 32).

Combined Potential

To summarize the potential I see in combining narrative inquiry and arts-informed research, I propose that people learn from and through stories, and that people learn not only by listening to stories, but also by creating and sharing them. As a narrative researcher, then, I learn through listening to the stories participants relate to me, and also through examining, considering, and re-telling those stories – a process Polkinghorne (1995) described as 'narrative analysis.' Ideally, as I craft the re-telling of the story, I am able to infuse all that I have learned into the version I send forward. By employing the arts, this process is enhanced. Art making, like story telling, can serve as a vehicle to explore and develop understandings. Given that art can tell stories in ways that language cannot, it increases the artist's ability to communicate those understandings. So, as an arts-informed researcher working with stories artistically – engaging in artistic analysis – I can gain enhanced understanding of the meanings they hold. Then, as I craft artful representations, I can infuse those representations of the stories with all I have learned about them. By combining narrative and artistic processes to artistically analyze and re-present stories of teaching and learning, I can gain and communicate deep understanding of the meanings the stories hold.

Barone posed a question in 2007: "Dance, opera, and music also contain narrative dimensions…What might result from explorations of these art forms as media of disclosure in narrative research?" (p. 462). My work with musically enhanced narrative inquiry is a direct response to that question – an exploration of the potential of music and sound to enhance narrative research. To provide an example, I offer a description of the research project, *Teaching Lives*.

Teaching Lives: A Musically Enhanced Narrative Inquiry

Learning from Teachers' Stories

As a means to help novice teachers develop understanding of teaching, teacher educators often look to narrative representations of practice (Pulvermacher & Lefstein, 2016). Teachers' stories have the benefit of providing a "highly accessible, very engaging means to promote reflection on the complexity and highly contextualized nature of schooling and instruction" (Preskill, 1998, p. 345). Teachers' personal practical knowledge is embedded within their stories of who they are and who they are becoming as they interact with children (Clandinin, Murphy, Huber, & Orr, 2010, p. 82). Engaging with such stories has the potential to advance novice teachers' understanding, increase interpretive competence, enrich practical repertoires, broaden vision, and even bring about life changes (Conle, 2003). Accordingly, the narratives of experienced teachers have significant potential value in supporting the development of novice teachers' professional identities and practices.

The purpose of this research was to tap into teachers' personal practical knowledge by gathering stories of their lived experiences of teaching and learning, and to analyze the stories to illuminate the pedagogical understanding nested within them. With this study I sought to learn: *What is the personal practical knowledge that experienced educators have developed over a lifetime of work with children in schools?* My intention was to closely analyze and explore the participant teachers' knowledge in all its nuances and complexity, and to represent my understanding of it with musical representations that were engaging and accessible to those interested in learning about teaching.

Methods

Participants. The teachers at the heart of this inquiry are Betty and Lindy (names used with permission), two experienced schoolteachers who have each accumulated a lifetime of teaching knowledge. Betty began teaching in 1956, and retired in 1984. Lindy taught from 1973 to 2012. Both taught in public schools in England – Betty in a rural village, and Lindy in inner city London. The data discussed and represented in this article were all provided by Betty.

Data collection. In the summer of 2014 I carried out eight 60-90-minute interviews over a three-week period: three one-to-one interviews with each participant and two interviews with both participants together. The interviews addressed the overarching questions: What were the critical moments and experiences that shaped your teaching? What stories need to be told? All interviews were digitally audio-recorded and transcribed. Transcripts were sent to the participants for verification.

Data analysis. The data analysis involved two stages. First, I carried out textual analysis: I read through the interview transcripts, seeking segments that could work as discrete narratives and form the basis of musical-narrative 'pieces.' Once I had identified suitable text, I engaged in 'narrative analysis' (Polkinghorne, 1995), synthesizing and configuring the participant words into stories as a means to both develop and embody the knowledge of teaching and learning that the words and stories represented (Connelly & Clandinin, 1990). Second, I engaged in musical analysis: Using digital audio technology, I selected and positioned participants' actual recorded words within an audio document, to create an audio version of the story narrated in the participants' own voice. I added musical framing, underscoring and commentary to the story in order to further explore and communicate the meanings embedded within it. A more detailed description of the analysis process follows, contextualized with the presentation of the data.

Presenting the Data

Back a Kid Again. The first section of text I targeted for musical analysis and representation was Betty's response to the question 'what is a good teacher?' Someone who enjoys being with the students, she explained, and learning with them. I went through the transcripts to identify not just the response itself, but other interview text segments that fit with the narrative, for example, Betty's admission that she felt and enjoyed being a 'bit of a kid' herself, especially as she had had so few children to play with when she was young, being an only child. Within audio editing software I organized various chunks of the interview sound files into a logical, focused narrative:

> *Researcher:* I'm just wondering what you think makes a good teacher?
> *Betty:* Well obviously somebody that enjoys being with the kids, you know. Being with them and *wanting* to be with them. That's the whole idea.
> 　　…I felt a bit kid-like, wanted to join in with them because it was so interesting what we were doing…I was just as interested as they were in whatever it was we were doing, whether it was wildflowers, or these things in the water, you know…It almost took me back to my own childhood, in a way. I mean I was an only one, and I had no experience of other kids. So I thoroughly enjoyed it once I became a teacher with kids, you know. It was something I'd missed out, all my life.
> 　　I suppose it was because I felt I was a bit of a kid myself and I felt, when I was with them, I was back a kid again.

I then examined the narrative to identify key phrases, or in vivo codes, that represented larger themes—significant, resonating aspects of Betty's experiences and understandings of teaching. (Please see table 1).

Table 1
Themes in 'Back a Kid Again'

Theme	Representing
Wanting to be with them	Enjoyment of the students
It was so interesting what we were doing	Enjoyment of co-learning with students
Back a kid again	Re-experiencing childhood amongst her students
It was something I'd missed out, all my life	Fulfillment of childhood longing to be with other children

I imported the audio narrative, in Betty's own voice and words, into music sequencing software. Then I set to work to musically enhance it. I began by creating musical motifs to underscore and represent the text themes, generating the motifs directly from the rhythm, pitch and cadence of Betty's voice as she spoke the words (the in vivo code) that represented the theme. I positioned the musical motifs directly beneath the spoken phrases to musically code them, underline them, mark them as significant, and lift them up and out of the text:

> – *Wanting to be with them*
> – *I was just as interested as they were*
> – *Back a kid again*

I did not create a musical motif for the fourth theme:

> – *It was something I'd missed out, all my life*

This was an artistic decision. I felt the three musical motifs were enough for this short piece (just 73 seconds in length), and I felt the poignancy of this sentiment was sufficiently illustrated and lifted out of the narrative with Betty's own voice. I chose instead to have no music underlining this theme. I removed all underscoring to signal the significance of the words – I lifted them up with silence.

Next, I divided the spoken text into chunks, to allow some breathing space between story segments. I re-introduced the musical motifs and the associated words or themes at various points throughout the story to hearken back to the notion they represented. I then composed a musical backdrop to frame it all, opting for a simple harmonic progression, simple rhythms, and just a few musical timbres. My musical choices were governed by the desire to produce something energetic and child-like. To listen to the piece 'Back a Kid Again,' please follow this link: www.dropbox.com/s/a6apbwlt5blspjz/BackAKidAgain.mp3?dl=0

Magnified Pond Creatures. For the second piece, I focused on another story Betty told. It is useful to know that the events occurred when Betty taught, during the 1970s and 80s, in a small village school just two kilometers from her home in rural Kent, England. Betty taught the younger children (4-7) downstairs, while her colleague (the school's headmaster) taught the older children (7-11) upstairs.

> I always do mucking about doing silly things, you know? Whatever I wanted to do. Well we all do, don't we? And *discovering* things! I mean we were opposite that pond, Quarry Pond, you know? And I used to dip in there, and I had a huge glass tank full of all these *incredible* things that live in the water, tiny things…

I had a great big projector at one time – it was an overhead projector. Goodness knows why David had got it. But – and all the big ones were watching me, you know, some of David's grown up (you know, the upper) kids were there as well. The whole lot were up there. And it was fantastic! I managed to put some, some water in these two glasses. There must have been two pieces of glass with some of this water in between. I'm not quite sure how I did it, and I know that in the end the glass cracked. But it was great fun while we were looking at this. It ended up cracking, but before it went, we'd got one of these incredible little shrimp-like things magnified – I shall never forget that.

And we had a very enjoyable time, looking at all these weird things that were in the water, just over the road, you know? That was great fun. We thoroughly enjoyed seeing these weird things. It was really lovely.

I used music to lift the following phrases out of the text. (Please see table 2).

Table 2
Themes in 'Magnified Pond Creatures'

Theme	Representing
And *discovering* things	Teacher and learners discovering together
Goodness knows	Exasperation at administrative decisions
And it was fantastic!	Shaping experiences as special, lifting them up out of the everyday, and rendering them memorable
Whatever *I* wanted to do	Teacher-driven curriculum
And all the big ones were watching me	Self-consciousness and heightened excitement when an experience is taken out of the realm of the ordinary
Just over the road	Stepping outside the classroom to find expanded possibilities for learning in new yet nearby contexts

To listen to the piece 'Magnified Pond Creatures,' please follow this link:
www.dropbox.com/s/xe4k3ev92xqrt46/MagnifiedPondCreatures.mp3?dl=0

Sweet Thames. For the third piece, I chose a different kind of story – a story not of joy and excitement, but of pain and frustration. This is the story Betty told:

One little boy – he was a dear little boy, rather shy, and not much confidence—but he sang beautifully. And I taught him *Sweet Thames Flow Softly* [MacColl, 1967]. And I always remember him standing up, in front of the class, singing *Sweet Thames Flow Softly*. It was really a lovely experience.

He left my class, and went upstairs to David's class, and he'd got no confidence and those kids actually sort of *tortured* him. Fooling him about, pushing him around, pushing his chairs over – and he was in absolute agony. This boy: that while he was in my class he actually loved singing and his confidence was sky high, you know? He stood up there singing to the whole class this long, beautiful song. And after that he went upstairs and was absolutely demolished.

It took all his confidence away.

He'd got no control over the kids, at all. To let that happen to that poor boy. I should think that was a black mark against David for not controlling that. I hope he felt ashamed of himself.

That must have been agonizing for him, when they were sort of pushing him around, and kicking him about, tipping his chairs over. Thoroughly torturing him, really.

I mean mostly all the kids were very healthy and happy but he was a very shy…He did need care, really. You know – he wanted someone to just look out for him. And he was the very one that it shouldn't have happened to.

He was taken away after that, and went to Goudhurst school. So…

Researcher: Do you know if the boy did any better when he went to Goudhurst?

Oh I'm sure he did—I'm sure he did well. He became a baker afterwards, I do know that. Went down to bake for Aber's down in Lamberhurst. Oh no, he did OK. He was perfectly all right.

For this piece I employed a slightly different compositional processes. Although, as in the other pieces, I generated the musical motifs (representing significant themes within the narrative) from the pitches, cadence, and rhythm of Betty's spoken words, in this piece the musical motifs sound alone, suggesting the words and themes rather than including an actual re-statement of the words. The musical motifs punctuate and weave in and out of Betty's story. In addition, in this piece I differentiated musical motifs from each other not only by rhythm and melodic contour, but also by instrument, tempo, pitch range, and articulation (Please see table 3).

Table 3
Themes in 'Sweet Thames'

Theme	Instruments	Representing
Rather shy, and not much	Piano (midrange	The boy and his need for special

confidence	pitches, slow)	attention and care
But he sang beautifully	Piano, strings and recorder (lyrical)	Identifying and celebrating a way for the boy to shine
David's class	Cello (low pitches, heavily accented)	The place where it all fell apart – Betty's frustration, pain and powerlessness when the boy was removed from her care
Fooling him about	Piano (low pitches, fast and staccato)	The torture of a child being bullied
Care	Finger cymbal	Providing care
He was perfectly all right	Solo recorder	The – uncertain, more hopeful than factual – claim that the boy went on to be fine

To listen to the piece 'Sweet Thames,' please follow this link:
www.dropbox.com/s/9t1hlnbe7xwhhru/SweetThames.mp3?dl=0

Member checking. Following the composition of the pieces, as a means of member checking, I sent the audio files to Betty to find out what she thought. With regard to 'Back a Kid Again' Betty responded that the "music sounded jolly like being a kid!" Reacting to 'Magnified Pond Creatures' she described realizing I had "used sound to accentuate certain aspects just as you would underline writing," and that it was "a clever piece of aural underlining." She described the piece as "fun" and thought student teachers would enjoy it. With regard to 'Sweet Thames,' Betty told me I had "picked out the changing moods just right." Evident in these responses is Betty's characteristic politeness and desire to encourage. While the responses suggest, at least on the surface, support that the pieces aligned with Betty's sense of what she intended to communicate with her stories, and that the pieces do not convey or suggest meanings that ring false for her, the tone of the responses, admittedly, also suggests she may not have been entirely forthcoming with any critical perceptions she may have had.

Discussion

My intention with these pieces was to identify, unpack, interpret, and re-present the knowledge that Betty holds and shares in and through her stories of teaching. I used narrative and music to explore what particular stories meant to me, and how they might speak to other teachers. Working with the data musically enhanced my analytical and communicative capacity; music allows me another mindset, an affective way of knowing, with which to engage the data and an audience.

Musical processes allow me to frame the stories, emphasize certain aspects, juxtapose ideas, and even to question the narration. My intention, for instance, with the unresolved harmony at the end of *Sweet Thames*, was to not only underscore but also *question* Betty's claim that, despite the boy's brutal experience of bullying, in the end "he was perfectly all right." The musical treatment of the stories allows me to follow the suggestion of Czarniawska (2004), who maintains that narrative analysis should include deconstructing the stories—revealing dichotomies and examining disruptions, contractions, and silences.

An important consideration in arts-based research is how the art will be received, and the ramifications of that reception. The individual who engages with the art might reject or embrace it, or experience a response somewhere in the middle. Sharing my musical research representations at conferences, in presentations, and with the reviewers of this article I have received mixed feedback. What does it mean for the research if the art does not resonate with the reader? Will the reader still receive the artist-researcher's intended communication concerning the researched phenomenon, or does a rejection of the art result in a shutting down of the reader's capacity or will to make sense of what the artist-researcher has learned and wishes to share? Will readers and listeners of the work I present here be able to appreciate what I have learned and strive to share about Betty's knowledge of teaching if they disdain my musical representations? Is one's capacity to take something meaningful from this work directly correlated with one's appreciation of the art?

I have created these pieces for teachers, pre-service and in-service. I can only hope that whether my musical renderings appeal to them or not, teachers will consider and contemplate – with a view to enhancing personal understanding – the particular dimensions of teaching and learning that the pieces address. I hope that the musical treatment of these stories will render them accessible, resonant, and thought provoking. I hope these musically enhanced narratives will help those who listen to hear, recognize and consider the meanings embedded within.

Unlike other research traditions, the test to determine whether this research is done well will not be found in the generalizability of findings, or the inter-rater reliability of multiple data analysts, or even the affirmation through member checking and negotiation that participants' experiences are accurately portrayed. I make no claim to objectivity: my research processes are firmly rooted in my own experiences and understandings. My personal bias concerning what is important and not directly informs the way I carried out all stages of the inquiry. I embrace this subjectivity; I am, unabashedly, the lens. I chose which of Betty's stories to work with, and which to ignore. I subjectively employed the wonderful potential of music to manipulate and shape the meanings *I* found within them. My artistic sensibilities combine with my experiences and perceptions of teaching and learning to make this work what it is.

Rather than concerns of objectivity, or traditional measures of internal and external validity, the test of the value of this work will be how the products resonate with those who encounter them. In narrative inquiry "validity relates specifically to personal meaning drawn from stories, not to an observable, measurable truth" (Thomas, 2012, p. 216). Similarly, the potential in research through the arts is not in pinning down truths, but in opening up understanding. Validity is assured, according to Barone and Eisner, when the study has both "structural corroboration," that is, sufficient evidence is reported to support its claims, and "referential adequacy," as indicated when "The story rings true. The analysis is cogent and credible. The tale is coherent. The *meanings* are generalizable" (2012, p. 163, italics mine). To test the validity of the research I have presented here, one might ask: Do the stories ring true? Do the musical representations follow convincingly from the participants' words? Do they meaningfully address and illuminate important dimensions of teaching and learning? Might they make a difference in teaching lives?

My aim in creating these musically enhanced narratives from the source material of Betty's stories is to use the power of music to provoke affective responses that fuel meaning making concerning teaching and learning. My intent is to offer evocative and affective vicarious experiences of a teacher's world, including the joy that learning with young children can bring, as illustrated in *Back a Kid Again*; the crafting of an educative experience to lift it up out of the everyday and render it special, as described in *Magnified Pond Creatures*; and the frustration and heartache of care-fully nurturing a child's spirit, only to relinquish care and so see the child suffer, as represented in *Sweet Thames*. Through this work I strive to enable those who engage with it to consider some of the nuances of these teacher stories, and to build their own meanings from them. I hope this work may lead to new or reinvigorated understandings of teaching and learning, inform and inspire teaching practice, and so make a difference in teaching lives.

Having discussed this specific example of a musically enhanced narrative inquiry, I now zoom out to discuss the methodology. In addition to an audience of teachers who may find it useful to share in what I have learned about Betty's knowledge of teaching, I also seek an audience of researchers who may find it useful to share in my perceptions of how musical processes can be employed to analyze and represent qualitative data. My intention is to provide a template for using music as a tool to carry out research. At present, music is underutilized within the realm of arts-based research; the template I offer here may help other musician-researchers get started. In describing these methods and in proposing this methodology, however, I do not intend to suggest that this is the only way music could or should be used in a music-based research approach. I offer my methodology as a template to be adopted or adapted as researchers see fit. Just as I hope teachers may glean something

useful concerning Betty's knowledge of teaching even if they do not like the music, I also hope researchers may see possibilities for using music as method even if they do not like the particular method I espouse. Music has immense potential as a tool for examining and representing social phenomena; it is high time that potential is explored.

Future researchers may wish to explore a broad variety of phenomena through musical processes. Musical methods may be particularly well suited to researching music-related phenomena, such as the experiences of music educators, music students, or musicians. In such cases – as a modification of the method described in this article – music produced by the participants themselves could potentially be incorporated into the musical representation of the findings. However, it is not necessary that music methods be relegated to musical phenomena; more broadly, to offer just a few examples, variations of these musical methods might be applied to biographical or life history inquiries, to case studies of classrooms or schools, or to ethnographies. In my own future research I intend to continue to focus these methods on the stories and experiences of individuals within educational contexts. I hope to use the methods to continue to illuminate teaching and learning, and so contribute to new ways of knowing and exploring teaching lives.

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