by Benjamin Bolden

Learner-Created Podcasts

Students' Stories with Music

Abstract: This article describes uses for podcasts in music education, focusing on learner-created podcasts as an opportunity for students to construct and represent knowledge. The author outlines a podcast assignment that enables secondary and postsecondary students to examine and more deeply understand the meaning music holds for them and the role it has played in their lives. Using audio editing technology, students describe significant music experiences and combine spoken-word narration with illustrative music excerpts to create an audio documentary. Student benefits of engaging in the podcast creation process (e.g., opportunities for active music listening, enhanced reflection, self-expression, enriched communication, increased self-knowledge, and creativity) are addressed in the conclusion.

Keywords: constructivism, creativity, learner-created podcasts, reflection, technology, Web 2.0

Recently, I was making plans to drive three hours to attend a regional music education celebration. With a view to making the most of my time behind the wheel, I downloaded a number of podcast assignments that my students had recently completed and burned them to CD. As I drove, I listened to the audio documentaries that described the power and meaning of the students' significant interactions with music. (Names in these descriptions are pseudonyms.)

Ella portrayed the watershed experience of performing, as a little girl, the role of the youngest Von Trapp family singer in a community theatre production, her narration interwoven with snippets of the *Sound of Music* soundtrack.

Jamie chronicled his burgeoning love for fiddle music, illustrated with breathless examples of the Canadian East Coast Celtic folk scene.

With her own keyboard composition to set the mood, Rachel related the heart-rending story of being told, after a month of violin lessons, that she did not have an aptitude for music. It was not until three years later that she found the courage to try again, with a different teacher, and was able to realize how wrong that premature judgment had been.

Amanda, overtop a recording of her own student's tentative efforts, proudly expressed the excitement she felt when the young pianist won first prize in a local music festival.

Samuel explained the significance of the musical relationship he enjoyed with his grandmother, their tradition of curling up on the couch together to watch classic movie musicals, singing along lustily with Judy Garland and the rest. Now that his grandmother has passed on, the songs bring her back to him and help him recall the valuable musical experiences they shared.

Podcasts offer a tool for music educators and their students to explore and share significant aspects of their musical lives.

Benjamin Bolden is an assistant professor, Faculty of Education, Queen's University, Ontario, Canada. He can be contacted at ben.bolden@queensu.ca.

Khalid took me inside the world of video gaming and explained how the rich orchestral soundtrack of a favorite game enhances his other-worldly virtual adventures.

Anouk shared the delight her grandfather found in listening to her play the piano. As the song played quietly behind her words, she described how, wracked with chronic pain as he approached the end of his life, Anouk soothed her Papa with the poignant chords and melody of Leonard Cohen's "Hallelujah."

Podcasts in Music Education

Podcasts are assembled packages of audio (and increasingly video) content that can be accessed through computers and digital media players. Along with blogs, wikis, social networking sites, and video-sharing sites, podcasts are associated with "'Web 2.0," which refers to the second generation of Web development and design that supports multiple modes of communication, interaction, information sharing, and collaboration on the World Wide Web.[1]

Web 2.0 technology is increasingly affecting the ways people interact with one another and their environments. For the "born digital" generation, digital media, such as podcasts, are ubiquitous in work, play, and social communication.[2] The resulting shifts in accessing, constructing, and sharing knowledge are of particular interest to educators: in the teaching and learning realms, these changes present increasingly complex challenges and opportunities.

Audio podcasts represent a particularly potent tool for use in music education. With the inherent capacity to include music as well as voice narration, and indeed any recorded sound imaginable, digital sound files have enormous potential as a medium for exploring, building, and sharing musical knowledge and meaning.

Music education literature has addressed a variety of possibilities for podcasts in and beyond the classroom. Researchers Clara Coutinho and Pedro Moto examined the pedagogic experience of sixth-grade students in Portugal whose teacher built podcasts featuring their classroom music-making. The researchers found podcasts to benefit students by enabling them to gain digital competence and digital wisdom.[3] In an undergraduate popular music program in England that used podcasts for delivering material, students reported that the podcasts motivated learners, enabled student interaction, offered time-shifted learning engagement, and personalized learning.[4]

Educators can make use of podcasts in various ways. Teachers can engage in personal professional development by listening to podcasts, such as TED Talks (www.ted.com).[5] Teachers can bring relevant podcasts into their classrooms to augment curriculum content (e.g., the New York Philharmonic Podcast at http://nyphil.org/broadcast/podcasts/index.cfm).[6] Teacher-produced podcasts can serve to review topics covered in class, as an instructional guide (e.g., wind-instrument tonguing technique), as an opportunity to record and share classroom music-making with a broader audience, or even as an opportunity to share personal music (e.g., radio-show programs: "My Favorite Pieces to Conduct"[7]).

Beyond externally accessed and teacher-produced podcasts, a constructivist perspective of teaching and learning would suggest that to maximize the educational potential of podcasts, learners ought to construct their own.

Constructivism is a theory of learning based on the premise that learners build knowledge within themselves through a process of personally imbuing experiences with meaning. Constructivist learning activities, accordingly, enable learners to access experiences from which they can construct knowledge.[8] Through the experience of creating a podcast, students necessarily engage with the content material much more thoroughly than they would through passive listening to a podcast manufactured by someone else. As a result, the learner's experience of the content is more likely to result in the development of meaningful knowledge: Learners have the opportunity to construct knowledge as they construct their podcasts.

A range of promising podcast options is available in a music context. Student-generated podcasts might serve to demonstrate a student's own singing or playing, along with reflective commentary; collect together and present analysis of various performances of musical repertoire; examine the life, times, and work of a particular composer or performer; feature music that represents the student's cultural background[9]; or present an interview with a musician, interspersed with appropriate musical recordings. In short, the podcast can serve as a medium for learners to assemble any kind of audio; spoken words, musical excerpts, recorded rehearsal sessions, and much more (e.g., sound effects) can be imported, edited, and positioned to communicate and express whatever the podcast creator wishes to convey. As a vehicle for developing and sharing musical knowledge and understanding, podcasts have tremendous potential.

Assignment Rationale

This article outlines a podcast assignment that has proved effective as a means for secondary and postsecondary students to examine what music means to them and the role it has played in their lives. The National Association for Music Education's National Standard for Music 9 suggests the value of "understanding music in relation to history and culture."[10] Providing the opportunity for students to examine their own relationships with music is a good place to start.

A key premise of constructivism is that learners can only construct knowledge on a foundation already in place; people develop knowledge by connecting new experiences to old ones, building on previous knowledge constructs. While the primary purpose of the assignment described here is to provide each student with the opportunity to learn how music has affected his or her own *personal* history and culture, it follows that this learning can support the student's further development of knowledge about music in relation to history and culture in general.

For a pragmatic example of the kind of knowledge a student can build through examining personal musical history, the student might identify factors that have contributed to particularly powerful music engagement or enjoyment. A conscious effort to involve these factors in subsequent music experiences is likely to help the student sustain meaningful and purposeful engagement with music. Working on the premise that it is useful to know where you have been in order to figure out where you want to go, the active process of reflection can help students identify aspects of music-making that are personally significant. The complex histories of music engagement and diverse cultural practices that students carry with them into music experiences will influence learning trajectories and result in varied approaches to music.[11] If students recognize specifically how music has been, is, or might be meaningful to them, they are in a better position to focus their musical learning on those things that matter most, find success where it is most individually meaningful to do so, and so sustain personal motivation and engagement.

"My Story with Music"

I have used this assignment with instrumental, choral, and general music students at the secondary level, as well as music education students at the postsecondary level. As the assignment is designed to enable students to explore their own unique experiences, it works equally well regardless of the class focus (general music, band, choral, strings, guitar, keyboard, or other).

The assignment requires that students produce a three- to five-minute podcast in which personally significant pieces of music—or pieces that represent personally significant interactions with music—are combined with narrated commentary reflecting on the student's relationship with music at various points in his or her life. For example, the student might bring in an excerpt of a favorite song that he or she enjoyed listening to at a younger age, with narration that explains how the song

connected the individual to a certain peer group or brought to mind a meaningful experience. The student might include a recording of a piece of music he or she played or sang at some point, with commentary explaining how the experience of learning or performing it made the student feel or what the piece meant or represented for the student.

Introducing the Task

To prepare students for creating their own podcasts, they receive a detailed assignment description that covers the assessment criteria (see Table 1), the podcast parameters, technical considerations, and step-by-step instructions (shared in the following). I also hand out a "River of Life" schematic diagram (a rudimentary sketch of a winding river on an otherwise blank piece of paper) and encourage students to plot and write brief notes about noteworthy music experiences encountered over the course of their lives.[12] I invite students to carry out this reflective exercise as they listen to a sample podcast I created, with the hope that the musical experiences I describe as important for me will bring to mind some of their own. The sample podcast explores my performing of music with family, in choirs, in garage rock bands, and in musical theatre productions; music listening as a child, teenager, and adult; and encounters with composing. (If time allows, I encourage teachers to create their own podcasts as examples—it's a superb means of gaining the practical know-how to assist students, and it's also a valuable opportunity to share some personal musical history.) You can listen to my example at http://benjaminbolden.ca/sharing-3/podcast-my-story-with-music.

On the next day of class, I take students to a computer lab and introduce them to the process of podcast creation using audio editing software. Together we navigate through the steps necessary to import a music file and record voice narration overtop. I circulate—along with several students recruited from the class who are already familiar

with the software—to troubleshoot and offer support as students dive in and figure out how to get going.

Podcast Parameters

- Length of three to five minutes (many students want to go longer, but it is useful for them to strive to be concise and make the hard choices in identifying the music experiences that are the most important)
- Must contain *at least* three pieces of music with commentary
- No more than fifteen seconds of any one music clip without commentary on top of it (it is essential that students do not think of themselves as disc jockeys here—they are using the music to illustrate their stories).

Technical Considerations

- Students will need access to a computer with a built-in or external microphone and earphones.
- The computer will need to have audio editing software installed. Audacity (http://audacity.sourceforge.net) can be easily downloaded and installed free, and there are versions for both Windows and Mac operating systems. Garage Band software is preinstalled on Macintosh computers and works well.
- Useful Audacity tutorial: Mixing a Narration with Background Music http://manual.audacityteam.org/index.php?title=Tutorial_-_Mixing_a_Narration_With_Background_Music
- Useful Garage Band tutorial: Podcasting http://multimedia.journalism.berkeley.edu/tutorials/podcasting/
- It is entirely possible to realize the benefits of this activity with very basic technological means. If computer hardware or software described here is unavailable or prohibitively uncooperative, students could produce the "podcast" as a live performance, narrating over chosen excerpts of recorded music played on a boom box, stereo, or whatever technology is available.

TABLE 1

Podcast Assessment Rubric

Text/Narrative: The spoken text and choice of musical excerpts successfully communicates rich and thoughtful reflection on a variety of personal interactions with music at various points in your life.

A = very high level of thoughtful reflection (e.g., thorough contemplation of the complexities and nuances of music experiences) . . . on a rich variety of personal interactions with music	**B** = thoughtful reflection (e.g., some contemplation of the complexities and nuances of music experiences) . . . on a variety of personal interactions with music	**C** = limited reflection (e.g., surface-level contemplation of music experiences) . . . on a limited variety of personal interactions with music	**D** = very little reflection . . . on a very limited variety of personal interactions with music	**F** = unacceptable level of reflection

Technique: Care and consideration need to be used in the technical realization of your podcast.

- Is the podcast carefully and effectively crafted?
- Are the music clips and spoken narrative at appropriate, well-matched volumes?
- Is there a minimum of unintentional "noise" such as clicks, hissing, distortion, and so on?
- Is the cutting and pasting of audio events precise, careful, and thoughtful?

A = Ready for broadcast	**B** = Good	**C** = Some problems	**D** = Many problems	**F** = Unacceptable

Aesthetic/Expressive Elements: Have you used technical expertise and artistic consideration to create something that is more than the sum of its parts? Does the podcast convincingly and artistically communicate your story with music? For example,

- Have you explored the expressive possibilities of manipulating and playing with the audio events (cutting and pasting, juxtaposing, repeating, layering, adding audio effects, etc.)?
- Does the piece have a sense of structure and shape? A sense of conclusion? Is there a sense of thoughtful, considered organization?
- Are there moments of tension and release? Does it have a sense of direction?
- Have you manipulated elements so that the podcast represents expressive communication through artistic decision-making: more than a series of chunks of music and narrative?

A = extremely effective effort and exploration in this area	**B** = effective effort and exploration in this area	**C** = some effort and exploration in this area	**D** = very little effort or exploration in this area	**F** = no effort or exploration in this area

Step-by-Step Instructions for Students

- Brainstorm a list of personally significant interactions with music at various points in your life.
- Identify specific music excerpts that will work to represent these experiences and collect (or perform and record) MP3 versions of the pieces.
- Write commentary (bullet points are fine) to accompany each musical selection.
- Open an audio project with the software you have decided to use.
- Import the MP3 music files you want to include into the audio editing software and position them on the time line.
- Record your narration on top of the music.
- Finally, edit until you have everything positioned where you want it and sounding the way you want it.
- Convert the podcast to MP3 format, and then listen to it in its entirety to ensure it plays correctly and that there are no technical glitches!
- E-mail the MP3 file to your teacher.

Avoiding Pitfalls

The most common barriers to student success and engagement in the activity result from technological glitches. The following points address some of the most common issues my students and I have encountered:

- Most software includes an "undo" feature that is extremely valuable—it is easy to make potentially disastrous mistakes. This feature enables you to return your project to the way it was before the error.

- Digital audio projects are very large in terms of digital information; if work needs to be transported between computers, you will need to use a USB stick rather than e-mail.
- After working for any length of time, it is wise to save your developing podcast not only as a project within the audio production software (whether working in Audacity or GarageBand or other), but *also* as an audio file such as MP3. The MP3 format is much more stable and transportable than working projects.
- When an Audacity (.aup) file is created, the software automatically creates an accompanying data folder. When saved, the icon for the *Audacity* file (e.g., mypodcast.aup) will appear wherever you have saved it along with a data folder (e.g., mypodcast_data). The data folder contains the actual chunks of audio (recordings of your voice and pieces of music). The .aup file contains only instructions (e.g., "play the audio file for seven seconds then fade out"). You need to have both file and folder together in the same place in order for the audio file to sound. If moving your work between computers, you must ensure that you move both the .aup file and data folder!

Sharing the Podcasts

Students may find it valuable to share their podcasts with the rest of the class, if they are comfortable doing so. Teachers should approach the activity with care and sensitivity, however, as the podcasts—in my experience—often explore highly personal subject matter. Students have submitted podcasts that describe, for example, the role music has played in finding the courage to "come out" to family and peers, in coping with the death of loved ones, in bridging broken relationships, and in easing the chronic pain of a grandfather in palliative care. Students' stories have also communicated the darker music experiences: the wounds and scars of musical humiliation and failure and the psychological abuse

of tyrannical or simply misguided conductors and teachers.[13]

While podcasts are often broadcast over the Internet, the term *podcast* in this article refers only to the constructed audio file—a collage of spoken word and music excerpts, regardless of whether the audio files are actually posted to the Internet or broadcast. Publication is a possible but not necessary aspect of podcast creation. For a variety of reasons, I specifically do not recommend that students post or publish their audio files online. My students e-mail me the MP3 audio and in some cases share them with friends.

As long as the podcast is not actually published or posted, copyright issues are minimal. Nevertheless, it is important to realize that copyright law applies to podcasts. If the audio file *is* published, it would be advisable to only use music that is in the public domain (copyright-free). For more detailed podcasting copyright information and advice, see http://wiki.creativecommons.org/Podcasting_Legal_Guide.

Benefits of Student-Created Podcasts

The podcast is a powerful medium for students to reacquaint themselves with music and musical experiences that have contributed significantly to the construction of their musical selves. As mentioned previously, National Standard 9 suggests the value of "understanding music in relation to history and culture." Carrying out the podcast assignment described in this article enables each student to examine how music has contributed to the development of his or her personal history and culture.

Constructing a podcast on any topic also represents a significant opportunity for creativity. Gaining familiarity and facility with audio editing software is not only an extremely valuable skill for musicians and music lovers in a utilitarian sense; it also opens the door to a pursuit with great potential for artistic satisfaction. Putting the audio file together is in many aspects akin to composing—the positioning, splicing, and layering of musical

and narrative chunks of audio offer the potential for artistic decision-making. In my experience, many students take great pride in their podcasts, perhaps because the final product represents such a rich opportunity for artistic expression.

The most obvious advantage of a podcast over a written assignment is that students can incorporate actual music—whether professionally or personally recorded—directly into the assignment. Perhaps the simplest and most valuable aspect of working directly with audio is that students have a superb opportunity to listen to and actively engage with music that is meaningful to them. Students have reported that the visceral immediacy of having the music "right there" facilitates the reflective aspect of the assignment; the music excerpts evoke responses that the students are not only able to remember, but to reexperience. The students are then extremely well positioned to speak about the meaning the music holds for them.

In constructing the podcast, students can weave music in and out and around the spoken text. The possibilities for expressive and communicative enhancement are significant. Podcasters can use music to create or augment or manipulate mood, evoke resonant responses in the listener, subtly or explicitly illustrate narrative elements, and so on.

Additional advantages of podcast communication pertain to the use of spoken rather than written words. Some students have indicated that they were able to express ideas more fluently when speaking aloud. Vocal inflections, so significant to oral communication, can serve to increase communicative accuracy and expressivity. Students have also reported that repeatedly listening to their own words (inevitable when constructing and refining a podcast audio file) resulted in increased self-knowledge. It also helped students identify changes necessary to increase the accuracy of saying what they intended to say. Multiple listenings enabled students to ensure that spoken words matched intended meanings.

Finally, once created, the audio file serves as an extremely effective vehicle

for sharing the author's artistic, expressive, and communicative efforts. The piece can be disseminated to friends or the world. While this is true of a written paper, students have indicated that they are much more likely to share their podcasts than written assignments.

Extensions

There are a number of ways to extend the podcast work described here further into music curricula. Students can build on what they have learned while exploring and analyzing personal music experiences to inform decisions such as what to listen for in a new musical encounter (how they seek richness within music), what kind of music to perform or compose to maximize its impact for particular situations (how they engage others with music), what personal practice or rehearsal strategies to employ (how they manage their own music learning), and what to do to draw learners in and fire them with the excitement and potential of music-making (how they can engage their own future music students, for those who wish to teach).

Students can also apply the learning encountered in the technical, aesthetic, and structural realization of the podcast to a variety of music curricula. Podcast construction can serve as a vehicle for students to richly engage with all kinds of musical subject matter, building and sharing assignments or projects in an audio file format, such as the following:

- Music and narration knitted together in the theoretical and structural analyses of musical works, with students narrating their findings overtop a recording of the piece (addressing NAfME's National Standard 6: Listening to, analyzing, and describing music)
- Presentation of audio stories or dramas with musical underscoring (Standard 8: Understanding relationships between music, the other arts, and disciplines outside the arts)
- Life and times biographies of composers or performers, or interviews with musicians, interspersed with musical examples (Standard 9: Understanding music in relation to history and culture)
- Critical analyses of performances by self or others narrated overtop of recordings of the performances (Standard 7: Evaluating music and music performances).[14]

Additionally, in creating podcasts students encounter elements of compositional design that they can readily transfer to composing electronic music, electro acoustic music, and music for acoustic instruments and voices (Standard 4: Composing and arranging music within specified guidelines). Furthermore, students can transfer the skills and knowledge developed from working with sound editing software to a multitude of digital sound projects, such as engineering and producing musical recordings, building a soundtrack for a film or video, and so on.

Final Words

As a vehicle for learning and then communicating learning, podcasts build on the possibilities that traditional written research and reflective paper assignments afford. This seems particularly apparent in a music education context. As a means for musicians and music learners to build and share knowledge, the creating of audio podcasts makes sense. With podcasts, students not only have the opportunity to communicate about music, but to communicate with it and through it as well.

NOTES

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