

BROOKE HARRISON

REVISED – Ethnographic Essay (Music in Education)

INTRODUCTION

This paper explores the relationship between music and education to determine whether music could be used as a tool to help students learn academic concepts. The research and fieldwork examines *how* and *why* music positively impacts academic learning, if at all, by reviewing the correlations between music and memory and between music and mood.

METHODOLOGY

I reached out to people within the Tallahassee education system who could give insight on the topic of music in the academic classroom. This demographic included teachers, administrators, and students. Administrators and teachers control the presentation of information within the classroom. Personal testimony and specific examples shed light on how often teachers use music in the classroom, the types of music and for what material, and how music may have aided understanding. Students shared their experiences learning new concepts with the help of music, providing perspectives regarding music's effectiveness within the classroom. I collected the data by conducting interviews, both in-person and via email, and by creating an online survey.

MUSIC IN THE CLASSROOM

When I spoke to students and teachers about music in the classroom, specifically as a tool for academic learning, one of the most prevalent examples was the song "I'm Just a Bill" from Schoolhouse Rock. The number of times this song was mentioned suggests that it was widely

used and, more importantly, memorable. Students shared a variety of other examples. These included music videos (the EconStories epic rap battle “Fight of the Century”, Hannah Montana’s “Bone Dance”), a Ted Talk (Akala - Hip-Hop & Shakespeare?), and simple rhythmic tunes (including well-known jingles or silly nursery rhymes). Other Schoolhouse Rock songs made the list, including another social studies/government focused tune about the preamble to the Constitution. Sealey Elementary teacher Rachel Cassidy, who currently teaches math, science, and social studies, used Schoolhouse Rock in her classroom last year when she taught reading and grammar. Leon High School English teacher Kayce Giglio had her students listen to Billie Holiday’s jazz music during the *To Kill a Mockingbird* unit, particularly to lyrics concerning lynchings. Giglio believes this music will help her students connect emotionally to the time period and, therefore, the story. These examples from both students and teachers illustrate what goes on in the classroom and how music aids the academic learning process.

MUSIC AND MISCONCEPTIONS

The online survey was also helpful in repudiating several common misconceptions. The first of these misconceptions is that music is best suited to elementary level classrooms. While it is tempting to think that music is more often used in elementary and middle school classrooms, further research reveals this is not always the case. The survey asked students to select one of three age groups for which they thought music is most beneficial. The option “all age groups” received an overwhelming majority of the votes (68.37%). According to survey participants, music works equally well for high school and college classrooms. So why does this misconception exist? Elementary school teacher Rachel Cassidy put it this way: “I don’t think it’s less effective to use [music] in the upper grade levels, I just think teachers start shying away

from it because it seems more ‘elementary.’” Perhaps this has something to do with the types of material being taught in the upper grade levels. Cassiday believes music is a useful tool for teaching “basics,” but not always for concepts that require “higher order thinking.”

This ties in to the second misconception that music is better suited for academic subjects such as the social sciences or English, but less so for math or foreign language. Survey responses revealed an interesting contradiction to the misconception concerning math. When students were asked “for what academic subjects do you think music is best suited? (select all that apply),” math received the lowest number of votes (40.82%). However, when given an opportunity to provide testimony and examples in a free-response section, a large number of students wrote about their math classes. Students frequently mentioned learning their multiplication tables, the quadratic formula, and PEMDAS (order of operations) by catchy tunes or by watching humorous music videos. A female high school senior wrote, “When I took Algebra 1, our teacher taught us the ‘quadratic formula song’ and I’ve remembered it to this day and it still really helps.” Students provided plenty of examples in support of foreign language classes as well. The large number of votes (61.22%) for the previously mentioned question confirmed as much. Students who took Latin, Spanish, or French classes wrote about memorizing noun or verb endings by putting them to music. A male high school junior wrote about learning “songs to the tunes of children’s songs to help conjugate verbs in French.” A female high school freshman wrote that “in Latin we use songs to learn the declension endings.” In subjects like math and language, it is clear that music plays a large role in memorizing important concepts.

The third misconception is that music serves the same purpose across all academic subjects. With the variety of examples shared by students in the survey, it seems impossible that music would serve the same purpose in each of those classrooms. In an interview with high school English teacher Kayce Giglio, she said, “[Math classes] are using music to memorize formulas and facts, whereas in history or literature we’re more often using music to relate the students to a time period.” She continued, “I don’t use music for memorization or facts at all.” Former Latin teacher Laura Ansola-Crowley agreed, “For subjects like languages and history, music is a great memorization tool. For creative arts subjects, music encourages invention.” It may be difficult to view Giglio’s examples (listening to Billie Holiday music while studying the novel *To Kill a Mockingbird*) as music which also aids students’ understanding of specific academic concepts. A second interview with another English teacher expands upon Giglio’s theories. Trinity Catholic middle school teacher Kayleigh Lazar uses music in her 8th grade Holocaust unit, as a “multisensory approach” which “allows for another level of engagement with the subject matter.” In an email Lazar wrote, “We listen to songs composed during WWII, from radio hits to those written in the concentration camps themselves and recorded after liberation. This brings the time period and the events to life in a whole new way for my students, as they are not only reading about the time period and seeing pictures from archives, they are also listening to what the people of that time period would have heard.” Why should this music be any less valid, if it is a method by which Giglio and Lazar teach their students about the historical periods in which the novels are situated? Giglio described the music she uses and its purpose as more “emotion-based” and she concluded, “That just goes to show that music can be used across any curriculum and for many different reasons and purposes.”

MUSIC AND MEMORY

While students and teachers alike seem to agree that music serves a variety of purposes in the academic classroom, as proven by the online survey and multiple interviews, perhaps the most common purpose music serves is the memorization of basic facts. Why is music used in the classroom? It is used not only for the students' entertainment, but because it is a successful memorization tool. Whether it is the multiplication tables, the quadratic formula, noun or verb endings, the process of a bill becoming a law, or the ideology of two well-known economists, music helps students commit the topic to memory. But how? Why is music different than the other techniques teachers have used to help students understand a particular concept? Leon High School senior Maya Manciangli attempted to answer this question in an interview. She described several instances in which her teachers used music to teach a concept: in her Latin class, her AP US History class, her AP Government class, and her AP Economics class. In Latin, Manciangli memorized noun and verb endings by putting them to the tune of Jeopardy and "Jingle Bells." She said, "And since we already knew [the tunes] growing up, just applying them makes it really easy to memorize."

In many cases, it seems as though the type of music or song choice is not important. The music could be a well-known tune or jingle, as was the case with the Jeopardy theme music and "Jingle Bells," or even something silly and childish like "Pop Goes the Weasel," as one survey participant mentioned. Middle school English teacher Kayleigh Lazar pairs poetry with music, using "everything from Top 40 hits to Christmas carols." Certainly interesting song choices, but Manciangli thought the tunes used in her Latin class were an effective memorization tool due to their repetition and the catchy rhythms. She touched on two key points: repetition and rhythm. In

his book “The Mozart Effect for Children - Awakening Your Child’s Mind, Health, and Creativity with Music,” author Don Campbell writes, “The material melds to the music, as it were, just as simpler information, such as your Social Security number, is easier to recall in a fixed rhythm” (173). An excerpt of Chris Boyd Brewer’s book “Music and Learning,” found on the Johns Hopkins website, is in agreement. Brewer writes, “When information is put to rhythm and rhyme, these musical elements will provide a hook for recall” (Brewer 1995). What is “recall?” Recall is the cornerstone for deep learning. It is the reason students are able to remember certain academic concepts even years later. This ability to recall information after lengthy periods of time is what impresses students most, because it is typically a struggle to remember a concept even overnight for a quiz or exam.

Campbell’s book offers an explanation for why it is seemingly easier to commit music to long-term memory. He writes, “In general, a person’s short-term memory has the ability to hold about seven bits of information. When related groups of information are bundled through rhythm, they may be remembered procedurally as one bit of information, and the volume of material that can be stored increases” (175). In other words, music allows students to bundle groups of information so that more material can be stored in their memories. A male high school freshman wrote, “The ‘I’m Just a Bill’ song helped me pass a test in 8th grade. I learned [the song] in 3rd grade, and have remembered it ever since.” A college senior took the survey and wrote, “For one of my chemistry classes in high school, we watched/learned a YouTube song that helped us remember the electromagnetic spectrum. It really helped me to memorize everything in order and I can still remember it to this day because I remember the song!”

MUSIC AND MOOD

“It’s important to use rhythm, but it’s just as important to have fun” (Campbell 173). Of the 194 students who took the online survey, 89.8% answered “yes” to the question of whether or not they enjoyed learning via music. Music is not the primary method by which academic concepts are taught, so it is a rare and special occasion when it is used to supplement the material in the classroom. This may be one of many reasons students find it enjoyable. During the interview with high school student Maya Manciangli, she stressed her appreciation for the break from routine. Describing the Schoolhouse Rock music video “I’m Just a Bill,” she said, “The visuals are really fun, so [the video] grabs your attention and you’re more likely to remember it than a boring slideshow.” She continued, “So many classes are just notes, and when teachers bring [music] in it really mixes things up.”

Manciangli shared another example: a music video she watched in her AP Economics class, the EconStories “Fight of the Century.” This music video presents the ideologies of economists John Maynard Keynes and Friedrich Hayek as a musical showdown. Manciangli’s AP Economics teacher, Amanda Geiger, relishes the “element of surprise” that is inherent with this particular video. Geiger said, “I don’t tell them it’s a rap... I introduce it very casually.” Even Geiger herself is “reenergized” when she observes the students’ reactions, particularly their surprise when the music starts. Manciangli said, “[The video] was just really fun to watch, so people obviously paid attention, whereas sometimes you just zone out during a lecture and you’re not as likely to absorb the information.” Her honest opinion is perhaps representative of many other high school students who perceive lectures as boring and anything outside-the-ordinary as welcome, refreshing, and fun.

Music is not only enjoyable but is also accessible. It is something students instinctively understand. Students who struggle in school may get a bad taste in their mouths when a particular concept seems overwhelmingly difficult. But music is not so intimidating. Giglio, when speaking about the times she has used music in her classroom, described it like this: “It’s really the one time when I don’t have to be the expert, and [the students] can be the experts with me.” She continued, “It’s almost like I’m getting on their level – but music is on everybody’s level.” Giglio believes students are more “open” to learning new concepts with music. To immediately capture her students’ interest at the beginning of her Shakespeare unit, and to encourage them to give Shakespeare a chance, Giglio shows her class a Ted Talk video (Akala – Hip-Hop & Shakespeare?). The speaker, Akala, relates Shakespeare’s iambic pentameter to the lyrics of early hip-hop music. For many students, it is an unexpected comparison, as Shakespeare is sometimes stereotyped by these younger students as stuffy or irrelevant. In the video, Akala gives his audience a chance to guess whether certain lines are from Shakespeare or hip-hop. The guessing, Giglio mentioned, is particularly fun for her students. If students “aren’t really interested in learning” or “the door is closed,” music might encourage them “to let that door creep open.” She concluded, “And sometimes [the door] will just fall wide open and you’ve gained a lifelong learner.” We could make the simple conclusion that “having fun” equates to being in a better mood, but there is more to it than that. Campbell writes, “Listening to music has been shown to slow the listener’s heart rate, activate the brain waves of higher-order thinking, and create a positive, relaxed, receptive state of mind that is ideal for learning” (173). It is true that music positively impacts the learning environment and is directly related to attitudes that are more conducive to learning.

MUSIC AND MEANS

In order to describe the frequency with which music is used as an academic tool, 69.07% of the student survey respondents selected “not often” as opposed to “occasionally” (26.8%) or “very often” (4.12%). If music is so beneficial when it comes to teaching and learning an academic concept, then why is it not used as a tool more often? It might be helpful to consider the implementation or application of music within the classroom. Elementary school teacher Rachel Cassiday was also able to shed some light on the topic. In describing her day-to-day teaching style, Cassiday mentioned she frequently has students work in small groups and that “songs would need to be more whole-group.” She makes an interesting point. It is just as important to consider execution as it is to consider the types of music used in the classroom and the types of material with which it is associated. It makes sense to give classroom dynamics the attention it deserves. After all, teachers do not step into the classroom and “wing it.” They have a plan, a blueprint if you will, for each class. It is part of their job to find out how tools such as music best fit into that plan.

The teachers’ level of control over what is taught in their classrooms also needs to be taken into consideration. According to Leon High School teacher Amanda Geiger, she does not have much control over content or curriculum, which is often school-wide or state-wide, but she does have control over how she teaches it. She is given a “course outline” and has “more control in how [she] approaches the material,” which leads to another interesting point: a tool is only as effective as the person wielding it. Rachel Cassiday said, “I think any teacher can take something and make it really effective.” Speaking specifically about music within the classroom, she

continued, “I think it depends on how it’s executed.” Music is implemented in different ways in different classrooms, which will surely impact effectiveness and, subsequently, student response and receptivity. According to high school English teacher Kayce Giglio, execution is successful if “the teacher ties [the music] to what they’re doing in class and it’s relevant throughout.”

LIMITATIONS

There are certainly elements of my research that are somewhat subjective. As far as statistics or “hard data” goes, it was difficult to acquire this from the small sample of students/teachers in the Leon County school district. For example, I did not have access to student test scores to compare grades or to provide evidence for my theory that music is beneficial for teaching/learning academic concepts in the classroom. I would have liked to cite an example in which a student saw an improvement in their grade after learning through music. Even then it would be difficult to prove that the improved grade was due to music alone, as there are other factors to be considered. For my intents and purposes, the survey asking for students’ opinions was the best alternative approach. Unfortunately, though my survey received 182 responses, the free “basic” Survey Monkey account limited my access only to the results of the first 100 survey respondents. I also did not have the opportunity to interview students in elementary school, and these students are too young to access my online survey without the help of an adult. I recognize that my research would have been more well-rounded had I spoken to elementary school students.

CONCLUSION

Through my research and fieldwork, I have come to the conclusion that music serves a variety of purposes within the classroom and is a beneficial tool for all age groups and academic subjects.

Music is particularly helpful with memorization and recall. Students find that a concept sticks with them for years if they have put it to music. And, of course, teachers and students believe music is accessible and enjoyable. When music is used in the classroom, students are refreshed by the break from routine. I hope these findings inspire new insights about the learning process and the inner workings of the academic classroom so that strides might be taken to implement music more frequently and more competently in Leon County Schools.

Brewer, Chris Boyd. "Music and Learning: Integrating Music in the Classroom." *Music and Learning*. N.p.: n.p., 1995. N. pag. *Johns Hopkins School of Education*. Web. 15 Nov. 2015.

Campbell, Don G. "The Mozart Effect for Children: Awakening Your Child's Mind, Health, and Creativity with Music." New York: William Morrow, 2000. Print.

Dean, Jeremy. "Memory and Recall: 10 Amazing Facts You Should Know." *PsyBlog RSS*. N.p., 31 Oct. 2012. Web. 14 Nov. 2015.

Lucas, Cheri. "Boost Memory and Learning with Music." PBS. PBS, n.d. Web. 16 Oct. 2015.

Uibel, Stefanie. "Education through music – the Model of the Musikkindergarten Berlin." *Annals of the New York Academy of Sciences* 1252.1 (2012): 51-5. Web.