

Benefits of Music Education: Promoting College Attendance in High School Students

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Abstract

This senior capstone examines the relationship between the benefits of music education and college attendance. In today's society, college is important. It is necessary to promote high school students to attend college. Through the use of two surveys, an interview with a school music director and extensive literature review, this research seeks the answer to the question "how educators promote college attendance through music education to high school students." The findings reveal that the difficulties encountered by high school students are the lack of interest in extracurricular activities. Music education activities may be an opportunity for high school students and motivate them to attend college.

Benefits of Music Education: Promoting College Attendance in High School Students

Music education could be one of many powerful influences students have in promoting a love for learning. However, music education has been decreasingly incorporated into California schools since 2001 (Rabkin & Hedberg, 2011). Although music, according to Mark and Gary, had “been a standard subject in public education since the beginning of compulsory education in America” (as cited in Hanna, 2007, p. 7), it appears to be lacking the academic attention it deserves. This is a necessary program in encouraging students to want to continue learning and to think in a variety of ways. For example, Gardner in 1983 developed The Theory of Multiple Intelligences which states that “musical intelligence is proven as one of the top 3 intelligences required to open up all the other intelligences within any human being in early developmental stages” (as cited in Allegro Multimedia DBA Music Wizard Group, 2013, p. 4).

Reasons leading to music education’s cuts in current education curriculum, beginning in 2001, are numerous. Since standardized testing does not account for music education, it is “difficult for the public to assess its academic value” (Hanna, 2007, p. 7). When money is tight in school districts, “music programmes [sic] are often the first to go...as most colleges do not require music credits for entrance” (Cox & Stephens, 2006, p. 757). Additionally, many policy makers “require rationalizing how music education programs contribute to academic performance in other subject areas” (Hanna, 2007, p. 7). Another potential reason is the lack of knowledge of what music education truly is.

According to Merriam-Webster, music is “the art or skill of creating or performing music” or “sounds that are sung by voices or played on musical instruments” (Music, 2014, p. 1). They also define education as “the action or process of teaching someone especially in a school, college, or university” (Education, 2014, p. 1). As there is no direct definition of music

education, we can infer from these two that music education is the action or process of teaching someone utilizing the art or skill of creating or performing music or by listening to sounds that are sung by voices or played on musical instruments. This is the definition that the term music education will be referring to in this article. To further simplify this definition, I will be working off the basis of two separate types of music education: 1) an education in which music is the main subject being taught and 2) an education in which multiple subjects are being taught with the aid of music. In this article, when Type 1 is referred to it will be discussing aspects of music education programs in which music is the main subject. When Type 2 is discussed, it will be discussing aspects of teaching multiple subjects taught with the aid of music.

This area of research is significant in studying ways to help students attend college and learn how to increase college attendance in the youth of the United States. As Marini, Bargeron, and Soloff, members of the musical group Blood, Sweat, & Tears (1973) state, music is “one of those areas that can only help. I think if you enjoy music, that’s enriching your life” (as cited in *Music Power*, p. 74). Perhaps, if educators went beyond the traditional methods of teaching, such as “lecturing, regular note taking, and...using a textbook” (Barker, 2012, p. 1) to find innovative ways to reach students who may be struggling, we may see a rise in college attendance in the future. One simple solution is using music education in creative ways.

This study is important to the future of many students who currently do not see college, or education in general, as important. By providing high school students with a music education, teachers can promote college attendance. Therefore, I began with the following primary research question:

- How can educators promote college attendance to high school students through music education?

The following secondary questions also help guide the study:

- How are educators currently promoting high school students to attend college?
- Would music involvement promote high school students to attend college according to teachers?
- How should music be taught in high school to engage students with other subject matter?

Literature Review

To further understand the relationship between music and college attendance, I have incorporated extensive literature reviews to aid in this explanation. In this section, the literature reviews will discuss aspects of Type 1 music education such as the State Standards associated with it, the benefits of Type 1 music education, a case study showing results of a similar research process to mine, the effects of the No Child Left Behind (NCLB) Act, and the new state standards being implemented in California: the Common Core. Next, the literature reviews will discuss the benefits of Type 2 music education. Finally, the literature reviews will show evidence of other courses leading to college attendance.

Type 1 Music Education

Since Type 1 music education programs, when available, are included as a subject offered at a high school, these programs must conform to the structure of other courses. Therefore, Type 1 music education follows state standards just as any other course does. Additionally, the effects of the NCLB Act has impacted Type 1 programs as well as all other subjects offered in public schools. Finally, the new standards, the Common Core State Standards, are rapidly being implemented in schools and here you will find what this means for subjects in general, as well as applied to the Type 1 music education programs.

State standards. State Standards are the main operating systems for schools. For each state, each subject has several standards that must be met by certain grade levels. For example, in California, the tenth grade history-social science content standards 10.1-10.3 include being able to relate moral and ethical principles in the development of Western political thought incorporating Greek, Roman, Judaism, and Christianity; compare and contrast different revolutions and their effects on self-government and liberty; analyze the effects of the Industrial Revolution in several countries; etc. (California State Board of Education, 2009, p. 42-43). As you can see, each of these standards are very specific as to what needs to be covered in the course. Also, each has several assessment criterion listed below the standard for educators and policy makers to easily understand if the standards have been met.

Likewise, music education at the high school level has state standards it must conform to. These standards are split into two categories: proficient and advanced (California State Board of Education, 2001, p. 70-75). The proficient level state standards for music in high school (See Appendix A) require students to read, notate, listen to, analyze, and describe music; perform skills on an instrument or vocals, compose, arrange, and improvise; learn the history of music; critically assess and find meaning from music; and make connections, relationships, and applications with music (California State Board of Education, 2001, p. 70-72). The advanced level (See Appendix B) requires students to perform the same tasks, but on a higher level with a deeper understanding (California State Board of Education, 2001, p. 73-75).

Assessment is the main criteria influencing decisions on subjects taught in schools. Although Type 1 music education has assessment criterion listed under their standards, as mentioned above, they still “lack precise quantitative measurements for evaluating their quality”

(Hanna, 2007, p. 7). Currently, music education is assessed through subjective means such as enrollment size of programs, competition ratings, parent satisfaction, etc.

Future assessment tactics are being developed and may potentially lead to an objective way to assess music education. This tool would help keep Type 1 programs in schools and could help bring them back to the schools that have had their music programs cut. One example is a newer version of the Bloom's Taxonomy. In this newer version, there are categories for "factual, conceptual, procedural, and metacognitive" knowledge (Hanna, 2007, p. 9).

The addition of these categories help objectively assess music as music falls into these categories. To have an understanding of how to read the musical notations on a sheet of music, one must be able to factually see all the dimensions of the piece. For example, there are dynamics, specific performance instructions, and a tempo that must be adhered to. To be conceptual, a musician must be able to look at the page of music and decipher the best performance tactics to enable the piece to sound as it should. To be procedural, a music student would practice each section of the piece until all the elements were correctly implemented, such as dynamics, rhythm, tempo, and emotional characteristics. Finally, the metacognitive aspect is similar to the conceptual aspect in that you will need to conceptualize how to play the piece, but going a step further, one must also be able to hear and understand what the piece will sound like in his/her head before even playing it.

Benefits. Type 1 music education programs require intensive amounts of concentration. In a PBS article, "Johnson compares the concentration that music training requires to the focus needed to perform well on a standardized test" (Brown, n.d., p. 4). Additionally, through the processes of learning and performing music, the brain is affected. "The synapses between the brain cells are strengthened" which "increases the brain's capacity" and "in musicians, the front

of the corpus callosum was larger than those of the non-musicians” (Cox & Stephens, 2006, p. 758).

Students involved in music perform better on math related tasks that involve tasks similar in structure of those found in music (Cox & Stephens, 2006, p. 758). A study performed by Mickela in 1983 “found the overall GPA of non-music students to be 2.91 compared to 3.59 for music students” (as cited in Cox & Stephens, 2006, p. 758-759) and also that there was a significantly larger percentage of music students than non-music students with a 4.0 GPA. Later, a study in 1992 showed music students once again had a “significantly higher GPA” than non-music students (Cox & Stephens, 2006, p. 758).

Furthermore, research provided by the College Entrance Examination Board (2013) shows “four or more years of music study” can lead to high school students scoring “34 points higher than their peers on verbal scholastic aptitude tests (SAT’s) and 18 points higher on math (SAT’s)” (as cited in Allegro Multimedia DBA Music Wizard Group, p. 3).

Nevertheless, music does not make a student smarter. Music can influence a student to become more involved in coursework or extracurricular work or even to study more. It can enhance the experience a student has in school, leading to a better education, but it will not make a student smarter. Instead, music gives students intrinsic benefits. According to Pruett, “the many intrinsic benefits to music education include being disciplined, learning a skill, being part of the music world, [and] managing performance” (as cited in Brown, n.d., p. 4).

Case study. A study performed in 2004 analyzed the GPAs of all high school students in regular education courses during the 2002-2003 academic year (Cox & Stephens, 2006, p. 757-763). The purpose was to take past research typically geared toward younger students and find relationships at the high school level. Unfortunately, the results were not significant enough to

be considered. In all cases, the GPAs of music students were only slightly higher than those of non-music students.

The limitations addressed in the study were the sample size and the size of the high school. Perhaps if they had incorporated all students in the school, including the College Preparation (CP), Honors, Advanced Placement (AP), etc. courses, they may have received vastly different results.

No child left behind. The NCLB Act has been the educational framework since 2001 (No child left behind, 2011, p. 1). Now, there is a new framework being implemented: the Common Core. In order to understand music education in the context of the Common Core framework, one must first understand where music education programs were near the end of the NCLB Act due to its damaging effects over the years.

Prior to the NCLB Act, in 1989 there was an “education summit” held by President Bush in which national goals were agreed upon and support for reforms were started (Mathis, 2010, p. 4). In 1994, President Clinton passed Goals 2000 which supplied grants to states in order to adopt content standards and a national goals panel. This led to one of the first backlashes against the federal government’s increasing roles in education.

In 2001, President Bush Jr. who, according to Mathis (2010) enacted standards and high-stakes testing in Texas, reauthorized the Elementary and Secondary Education Act, titling it “No Child Left Behind” (p. 4). Although the NCLB Act, at first, “was viewed as a virtue” (Mathis, 2010, p. 4) due to its accountability requirements, it soon become a topic of debate when schools were found to have “lowered their standards under NCLB in order to avoid the law’s escalating punitive elements” (Mathis, 2010, p. 5).

The NCLB Act relies on “reading and mathematics test scores to determine whether schools are making progress in reducing achievement gaps among various subgroups of students” (Cawelti, 2006, p. 1). However, according to Gullfoyle (2006), once schools develop the mindset of “What gets measured gets done” (p. 4) then the subjects not measured get taken out of the curriculum.

According to Martinez (2009), music education was just one of the many “vital” programs to be cut when the “new round of cuts” (p. 2) occurred in California. These cuts were due to a “budget shortfall of \$24 billion” causing the “Democratic-led State Legislature [to pass] \$15 billion in cuts to social programs and public education” (Martinez, 2009, p. 1). As Arne Duncan, the U.S. Department of Education Secretary, reflects:

President Obama recalls that when he was a child ‘you always had an art teacher and a music teacher. Even in the poorest school districts everyone had access to music and other arts.’ Today, sadly, that is no longer the case. (As cited in Rabkin & Hedberg, 2011, p. 6)

Common core. In 2009, the Common Core State Standards were developed to provide “consistent learning goals across states” (About the Standards, 2014, p. 2). Currently, the Common Core is only working with Mathematics and English Language Arts (ELA) standards; however, these two subjects are now blending other subject matter within these standards. For example, in the ELA standards under the Common Core, students will not only learn about literature, but literary nonfiction, literature discussing history and science, data research literature, etc. to ensure students are college and career ready (Myths vs. Facts, 2014, p. 5).

Additionally, a refreshing change incorporated with the Common Core leaves implementation of the standards to the teachers (Myths vs. facts, 2014, p. 6). This means teachers are now responsible for creating lesson plans and delivering creative and engaging lessons to their

students. Furthermore, this means the use of Type 2 music education can be incorporated into classrooms.

Type 2 Music Education

Since Type 2 music education does not have its own class, there are no state standards associated with it. Additionally, these do not need to conform to the NCLB Act's regulations and do not specifically tie into the Common Core. Instead, this type of music education can be implemented into all subject courses as a supplement to the course.

Benefits. Although type 2 music education does not have its own class, it is needed now more than ever in our high schools, due to Type 1 programs being cut. According to Mark (1996) music provides “means of expression that go beyond ordinary speaking and writing” (p. 21). It is “a unique record of diverse cultures and how these cultures developed over time” and it provides “distinctive ways of understanding human beings and nature” (Mark, 1996, p. 21). Thus, music helps us to relate to one another and understand each other because it develops these senses, thoughts, and feelings.

Additionally, according to Rabkin and Hedberg (2011) “arts education is associated with the development of dispositions and inclinations that scaffold learning in general, reaching well beyond the arts to a broad range of positive cognitive, social, and emotional outcomes” (p. 21). By actually participating and having a hands-on learning experience with music, Mark (1996) claims students “can engage the imagination, foster flexible ways of thinking, develop disciplined effort, and build self-confidence” (p. 21-22).

Music in the classroom could be a useful tool in helping certain students grasp concepts or make connections with other subject matter or peers. Type 2 music education is not a rigid structure and is created in any way the teacher sees fit in implanting in his/her classroom.

Music and Other Courses

With the benefits of Type 1 and Type 2 music education in mind, we know music helps develop parts of students' brains and in some cases, can even raise GPAs. Along with this knowledge, there is evidence supporting high school students who take CP, Honors, AP, courses at a local Community College, or other "higher-level" courses being better prepared for and attending college after high school.

At the core of CP courses is academic preparation. According to Perna (2005), both "academic preparation and achievement are important predictors of both predisposition toward, or interest in, attending college and actual college enrollment" (p. 114-115). Additionally, there is consistent support for college enrollment rates being higher in students who took CP or other academic preparation courses in high school (p. 116). Another common high school course track "that had generally beneficial effects on student learning and personal development included taking honors courses" (Astin, 1993, p. 3).

Honors courses are typically considered more difficult and harder to earn the same grade a student would earn in a regular academic course. According to Sadler and Tai (2007) to remedy this for GPA considerations, often schools grade on a higher scale, for example "A=5, B=4, C=3, D=2, F=1" (p. 7) when regular courses are on a scale of A=4, B=3, C=2, D=1, F=0. Often, if students perform well in these classes, their resulting GPAs are higher due to this higher scale.

AP courses expose students "to advanced work while in high school" (Sadler & Tai, 2007, p. 6). According to Phillips Academy, these courses were originally intended for "elite private school students" to help them earn their college degree in a shorter time due to earning college credit through the AP courses (as cited in Sadler & Tai, 2007, p. 6). Now, however, the

AP courses have grown “to involve 1,200,000 students” (Sadler & Tai, 2007, p. 6). Typically, AP courses are also graded on the higher scale, leading to, in some cases, higher GPAs for students enrolled in these courses.

Like AP courses, taking courses at a local Community College could help reduce the time in earning a degree in college, due to earning college credit in high school. Other “higher-level” courses may include the International Baccalaureate or even courses offered at specific schools for their specific populations.

Unfortunately, at least one study provided by Geiser and Santelices (2004) shows “the number of AP and honors courses taken in high school bears little or no relationship to students’ later performance in college” (p. 1). Although this may be the case, with the higher grading scales mentioned earlier, these courses still may impact the students’ GPAs providing them with a higher admission status than non-AP or Honors students.

Due to the findings showing that there were no significant differences in GPA between high school music students and non-music students, but lacked data including students enrolled in CP, Honors, or AP courses, I began research utilizing a new set of data. This data incorporates the relationship between music students and “higher-level” courses.

Method and Procedures

The nature of my studies were entirely anonymous. These studies included an extensive Literature Review, a survey of the general population, a survey of high school music students, a survey of high school non-music students, and an interview with a high school music director.

Procedure

The literature reviews, discussed in earlier sections, provided guidance in framing my survey and interview questions.

The first study was meant for the general population of anyone who went through high school already. After creating the survey questions (See Appendix C) using Google Forms, I posted the link to the survey on my Facebook website page for all of my family and friends to access. Additionally, I emailed the link to my coworkers in the Student Housing & Residential Life office on campus and to the Liberal Studies Department who forwarded the survey to all Liberal Studies students. I received 75 responses to my online survey.

The second study was meant for current high school students either involved in music or not involved in music. After creating a survey asking similar questions (See Appendix D), I printed out 150 copies and gave them to a local high school music director. This music director made copies as needed, handed them to her music students, gave copies to non-music teachers to give to their students, and gave me the completed surveys. I received 148 completed surveys.

I selected non-high school students for the first survey to ensure I had data about college attendance being promoted in high school from all generations. I selected high school students for the second survey because this was as young as I wanted to include in the scope of my research in terms of college promotion in schooling.

The high school music director interview consisted of five interview questions (See Appendix E). These questions were meant to provide the opinion of a music teacher in how to incorporate music in other subject levels. I chose to interview this teacher due to the high level of involvement with research in the field, the involvement with writing about music's importance, and the several years of performance and teaching this person has accumulated.

This approach helped to answer my research questions by providing me with percentages of respondents who were involved in music in high school which either directly led to their attending college, or indirectly led to their attendance in college due to their involvement in CP,

Honors, AP, Community College, or other “higher-level” courses during high school. I argue these courses are significantly related to involvement in music.

After receiving 75 responses to the online, non-high school student survey, I analyzed the relationship between the number of respondents who selected “Yes” to both being involved in music in high school and being enrolled in CP, Honors, AP, Community College, or any other “higher-level” courses during high school; and the correlation between the number of respondents who selected “No” to being involved in music in high school, but selected “Yes” to being enrolled in CP, Honors, AP, Community College, or any other “higher-level” courses during high school. I then converted these numbers into percentages. It is now easy to see the percentage of students who took courses geared toward college whom were also involved in music compared to those whom were not involved in music during high school (Table 1).

Furthermore, utilizing only the data from the respondents who selected “Yes” to being involved in music, I compared the numbers between those who claimed this involvement supported college attendance to the respondents who claimed this involvement did not support college attendance. Once again, I converted these numbers into percentages to easily compare (Table 3).

After receiving 148 responses to my paper survey for high school students, I analyzed the relationship between the number of respondents who selected “Yes” to both being involved in music and being enrolled in CP, Honors, AP, Community College, or any other “higher-level” courses during high school; and the correlation between the number of respondents who selected “No” to being involved in music in high school, but selected “Yes” to being enrolled in CP, Honors, AP, Community College, or any other “higher-level” courses during high school. I then converted these numbers into percentages. Once again, this allows for an easier comparison

between the percentages of students who took courses geared toward college whom were also involved in music versus those whom were not involved in music during high school (Table 2).

Next, I gathered only the data from the respondents who selected “Yes” to being involved in music. From this data I compared the numbers between those who claimed this involvement supports college attendance to the respondents who claimed this involvement does not support college attendance, as well as included a Not Applicable category since it appeared several students were unsure if this involvement did or did not support college attendance. Once again, I converted these numbers into percentages to easily compare (Table 4).

Finally, I combined the results from both surveys regarding how college is promoted to high school students. I added the responses corresponding to each of the categories (Teachers discussed, or discuss, the possibilities in class; School advisors/counselors supplied, or supply, information and support; Extracurricular coach/mentor encouraged, or encourages, attending college; College students or faculty visited, or visit, campus; Parents stressed, or stress, the importance of college; No one encouraged, or encourages, college attendance; or Other) and listed the responses provided under other. I then converted the numbers into percentages to easily compare the sources of the largest promoters for college to high school students (Table 5).

Results and Findings

The results found in these surveys show a significantly higher percentage of students who were involved in music in high school and took CP, Honors, AP, Community College, or other “higher-level” courses (Tables 1 & 2).

Table 1
Comparison of Respondents Involved in Music vs. Respondents Not Involved in Music in High School and Enrolled in Courses Geared Toward College

Involved in Music?		CP, Honors, AP, Community College, or Other* Courses	Percent
Yes	21	18	85.7%
No	54	38	70.4%

Note. CP = College Preparation. AP = Advanced Placement.
*Other refers to any other “higher-level” courses geared toward college.

Table 2
Comparison of High School Students Involved in Music vs. High School Students Not Involved in Music and Enrolled in Courses Geared Toward College

Involved in music?		CP, Honors, AP, Community College, or Other* Courses	Percent
Yes	108	71	65.7%
No	40	21	52.5%

Note. CP = College Preparation. AP = Advanced Placement.
*Other refers to any other “higher-level” courses geared toward college.

Additionally, the survey respondents currently out of high school do not significantly claim their music education supported college attendance (Table 3). On the contrary, however, a high percentage of music students currently in high school claim their music education supports college attendance (Table 4).

Table 3		
<i>Comparison of Respondents Involved in Music in High School Claiming Music Supported College Attendance vs. Claiming Music Did Not Support College Attendance</i>		
Did music involvement support college attendance?		Percent
Yes	9	42.9%
No	12	57.1%
Total	21	

Table 4		
<i>Comparison of High School Students Involved in Music Claiming Music Supports College Attendance vs. Claiming Music Does Not Support College Attendance</i>		
Does music involvement support college attendance?		Percent
Yes	65	60.2%
No	14	13.0%
N/A	29	26.9%
Total	108	
<i>Note. N/A = Not Applicable. Percentages may not add to 100% due to rounding.</i>		

Furthermore, there was a significantly high percentage of current high school music students who did not know how to answer the question corresponding to whether their music education supported college attendance (Table 4).

Referring back to the first secondary question: *how are educators currently promoting high school students to attend college?* The study shows teachers, then school counselors and advisors, and lastly extracurricular coaches or mentors, as well as college personnel and students, are the promoters in high schools. However, the largest promotion source are the students' parents, not educators (Table 5).

Table 5		
<i>Sources Who Promote College Attendance to High School Students</i>		
How were, or are, you encouraged to attend college in high school?		Percent
Teachers discussed, or discuss, the possibilities in class	144	64.6%
School advisors/counselors supplied, or supply, information and support	137	61.4%
Extracurricular coach/mentor encouraged, or encourages, attending college	87	39.0%
College students or faculty visited, or visits, campus	87	39.0%
Parents stressed, or stress, the importance of college	149	66.8%
No one encouraged, or encourages college attendance	15	6.7%
Other*	12	5.4%
<p><i>Note.</i> Percentages do not add to 100% due to multiple selections per respondent.</p> <p>*Other responses included: AVID (Advancement Via Individual Determination) program, it was assumed that after graduation you would attend a university, self-encouragement, college campus tour, it was expected for everyone to go to college after high school, and took college classes during high school.</p>		

The second secondary question asked: *would music involvement promote high school students to attend college according to teachers?* The high school music director interviewed states, “Absolutely!” (Teacher, personal communication, April 30, 2014). Additionally, this teacher believes “music classes tend to attract students that are more interested in attending college...due to the discipline required to learn music” (Teacher, personal communication, April 30, 2014). According to the literature reviews mentioned earlier, SAT scores were higher overall for high school students involved in at least four years of music (Allegro Multimedia DBA Wizard Group, 2013, p. 3). Additionally, being enrolled in CP, Honors, and AP courses can lead to college acceptances (Perna, 2005, p. 114-115). Finally, as this study shows, more music students are enrolled in CP, Honors, and AP courses than non-music students.

The last secondary question asks: *how should music be taught in high school to engage students with other subject matter?* According to the high school music director, music can be beneficial in all classes. Some examples provided were:

Teachers can play classical music quietly while students are working independently, as well as during collaborative time. Science classes k-12 can build simple musical instruments. Math classes can study the 'mathematical' components of music. History classes can teach social awareness of a society through learning about the music during that time period. The list is endless. (Teacher, personal communication, April 30, 2014)

Discussion

Harwood (n.d.) explains “there is a rhythmical musical element in all living speech even to this day...in earlier civilisations [sic] it was so strong that speech was naturally rhythmical. Metrical speech came before unmetrical [sic], poetry before prose” (p. 33). This explanation clearly depicts how music is natural, we were rhythmical first. This may also explain why

certain children learn better when they learn math by singing the times tables, or reading poetry to learn grammar, or tap their fingers when spelling. Rhythm and music is natural! Arne

Duncan once stated:

In America, we do not reserve arts education for privileged students or the elite. Children from disadvantaged backgrounds, students who are English language learners, and students with disabilities often do not get the enrichment experiences of affluent students anywhere except at school. (As cited in Rabkin & Hedberg, 2011, p. 6)

How sad is it that this is no longer the case? Now, the only students who receive the most beneficial of music education, Type 1, are the students whose parents pay to have them in an after school program typically not located on their campus.

Furthermore, according to Allegro Multimedia DBA Music Wizard Group (2013), many students “end up being labeled ‘learning disabled’ ‘ADD’ (Attention Deficit Disorder) or simply underachievers” (p. 5). This tragedy can be remedied by providing these students with an education catered to their “unique ways of thinking and learning” which “aren’t addressed by a heavily linguistic or logical-mathematical classroom” (p. 5).

I argue that the reason there is so little data about the relationship between music education and college attendance is because it is not an objective measurement, but a subjective one. I believe by linking the percentage of music students enrolled in CP, Honors, AP, Community College, or other “higher-level” courses, you can use this data to connect these students to college. Earlier in this article the data suggested these “higher-level” courses are associated with helping high school students attend college. My study shows a large percentage of high school music students are enrolled in these classes.

My ultimate goal is to educate every student about college so each and every student can make an informed decision for himself/herself instead of only having one option he/she is aware of. This study provides one way to engage some students with the notion of college through music. Later, I may be able to find other subject areas that will interest more students.

Problems and Limitations

The main obstacle I encountered was in obtaining data for my survey to high school students. Unfortunately, while working with a local high school music director, the music director's schedule and my schedule were not identical. I provided the surveys to the music director only a couple days before the high school's spring break, resulting in a small sample size for me to work with before the high school's spring break. This sample size also only included high school music students, giving me no comparison between music and non-music students.

Additionally, I did not allot enough time to analyze the data and interview the music director. Therefore, the interview questions (See Appendix E) were not asked until very late in the research process.

A limitation to this study is there is no evidence from the anonymous respondents that any of them went to college after high school. As for the anonymous current high school students, I will not be able to know now if they will follow through with their college plans.

Another limitation is recognizing that the value I place on higher education is not the same as other families or students may place it.

Recommendations

Future educators can be influencers for students to attend college by promoting it in everything they teach. One recommendation I have is to remember the benefits of music education and try pairing it with any subject. Especially if you see a student struggling due to a

disability, ADD, or because you think this student is not capable of learning the material, try bringing music into the classroom as a tool.

Conclusion

Music is natural and has been around since the beginning of early communications between people. It is something all humans can relate to. In today's society, where higher education is important, I want to be able to promote college to all students so they can make an informed choice about whether college is the right path for them or not. Music is one way to promote this. I started my research looking for an answer to the question: how can educators promote college attendance to high school students through music education?

As discussed, there are two types of music education: Type 1-music programs and Type 2-music incorporated into courses as a supplemental tool. For Type 1 music educators, the best way to promote college attendance is to make your students aware of the scholarship opportunities available through music performance or even bring your music students to a college campus and show them the music department or a music performance. For Type 2 music incorporation, educators can use music as a tool to study other cultures; music in history to learn about historical figures, populations, and areas; musical concepts of rhythm for mathematics; etc.

Although I did not find specific research pertaining to my study, I found major relationships. College Preparation (CP), Honors, Advanced Placement (AP), Community College, and other "higher-level" courses are significant indicators of college attendance. My study found a high percentage of high school music students who were also enrolled in several of these courses.

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Appendix A

Source: California State Board of Education. (2001). Content standards: Visual and performing arts, music. Retrieved April 13, 2013, from <http://www.cde.ca.gov/be/st/ss/>

1.0 ARTISTIC PERCEPTION

Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Music - Students read, notate, listen to, analyze, and describe music and other aural information, using the terminology of music.

Read and Notate Music

1.1 Read an instrumental or vocal score of up to four staves and explain how the elements of music are used.

1.2 Transcribe simple songs when presented aurally into melodic and rhythmic notation (level of difficulty: 1 on a scale of 1–6).

1.3 Sight-read music accurately and expressively (level of difficulty: 3 on a scale of 1–6).

Listen to, Analyze, and Describe Music

1.4 Analyze and describe the use of musical elements and expressive devices (e.g., articulation, dynamic markings) in aural examples in a varied repertoire of music representing diverse genres, styles, and cultures.

1.5 Identify and explain a variety of compositional devices and techniques used to provide unity, variety, tension, and release in aural examples.

1.6 Analyze the use of form in a varied repertoire of music representing diverse genres, styles, and cultures.

2.0 CREATIVE EXPRESSION

Creating, Performing, and Participating in Music - Students apply vocal and instrumental musical skills in performing a varied repertoire of music. They compose and arrange music and improvise melodies, variations, and accompaniments, using digital/electronic technology when appropriate.

Apply Vocal or Instrumental Skills

2.1 Sing a repertoire of vocal literature representing various genres, styles, and cultures with expression, technical accuracy, tone quality, vowel shape, and articulation—written and memorized, by oneself and in ensembles (level of difficulty: 4 on a scale of 1–6).

2.2 Sing music written in three or four parts with and without accompaniment.

2.3 Sing in small ensembles, with one performer for each part.

2.4 Perform on an instrument a repertoire of instrumental literature representing various genres, styles, and cultures with expression, technical accuracy, tone quality, and articulation, by oneself and in ensembles (level of difficulty: 4 on a scale of 1–6).

2.5 Perform on an instrument in small ensembles, with one performer for each part.

Compose, Arrange, and Improvise

2.6 Compose music, using musical elements for expressive effect.

2.7 Compose and arrange music for voices or various acoustic or digital/electronic instruments, using appropriate ranges for traditional sources of sound.

2.8 Arrange pieces for voices and instruments other than those for which the pieces were originally written.

2.9 Improvise harmonizing parts, using an appropriate style.

2.10 Improvise original melodies over given chord progressions.

3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of Music - Students analyze the role of music in past and present cultures throughout the world, noting cultural diversity as it relates to music, musicians, and composers.

Role of Music

3.1 Identify the sources of musical genres of the United States, trace the evolution of those genres, and cite well-known musicians associated with them.

3.2 Explain the various roles that musicians perform, identify representative individuals who have functioned in each role, and explain their activities and achievements.

Diversity of Music

3.3 Describe the differences between styles in traditional folk genres within the United States.

3.4 Perform music from various cultures and time periods.

3.5 Classify, by genre or style and historical period or culture, unfamiliar but representative aural examples of music and explain the reasoning for the classification.

4.0 AESTHETIC VALUING

Responding to, Analyzing, and Making Judgments About Works of Music - Students critically assess and derive meaning from works of music and the performance of musicians in a cultural context according to the elements of music, aesthetic qualities, and human responses.

Analyze and Critically Assess

4.1 Develop specific criteria for making informed critical evaluations of the quality and effectiveness of performances, compositions, arrangements, and improvisations and apply those criteria in personal participation in music.

4.2 Evaluate a performance, composition, arrangement, or improvisation by comparing each with an exemplary model.

Derive Meaning

4.3 Explain how people in a particular culture use and respond to specific musical works from that culture.

4.4 Describe the means used to create images or evoke feelings and emotions in musical works from various cultures.

5.0 CONNECTIONS, RELATIONSHIPS, APPLICATIONS

Connecting and Applying What Is Learned in Music to Learning in Other Art Forms and Subject Areas and to Careers - Students apply what they learn in music across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to music.

Connections and Applications

5.1 Explain how elements, artistic processes, and organizational principles are used in similar and distinctive ways in the various arts.

5.2 Analyze the role and function of music in radio, television, and advertising.

Careers and Career-Related Skills

5.3 Research musical careers in radio, television, and advertising.

Appendix B

Source: California State Board of Education. (2001). Content standards: Visual and performing arts, music. Retrieved April 13, 2013, from <http://www.cde.ca.gov/be/st/ss/>

1.0 ARTISTIC PERCEPTION

Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Music - Students read, notate, listen to, analyze, and describe music and other aural information, using the terminology of music.

Read and Notate Music

1.1 Read a full instrument or vocal score and describe how the elements of music are used.

1.2 Transcribe simple songs into melodic and rhythmic notation when presented aurally (level of difficulty: 2 on a scale of 1–6).

1.3 Sight-read music accurately and expressively (level of difficulty: 4 on a scale of 1–6).

Listen to, Analyze, and Describe Music

1.4 Analyze and describe significant musical events perceived and remembered in a given aural example.

1.5 Analyze and describe the use of musical elements in a given work that makes it unique, interesting, and expressive.

1.6 Compare and contrast the use of form, both past and present, in a varied repertoire of music from diverse genres, styles, and cultures.

2.0 CREATIVE EXPRESSION

Creating, Performing, and Participating in Music - Students apply vocal and instrumental musical skills in performing a varied repertoire of music. They compose and arrange music and improvise melodies, variations, and accompaniments, using digital/electronic technology when appropriate.

Apply Vocal or Instrumental Skills

2.1 Sing a repertoire of vocal literature representing various genres, styles, and cultures with expression, technical accuracy, tone quality, vowel shape, and articulation—written and memorized, by oneself and in ensembles (level of difficulty: 5 on a scale of 1–6).

2.2 Sing music written in four parts with and without accompaniment.

2.3 Sing in small ensembles, with one performer for each part (level of difficulty: 5 on a scale of 1–6).

2.4 Perform on an instrument a repertoire of instrumental literature representing various genres, styles, and cultures with expression, technical accuracy, tone quality, and articulation, by oneself and in ensembles (level of difficulty: 5 on a scale of 1–6).

2.5 Perform in small instrumental ensembles with one performer for each part (level of difficulty: 5 on a scale of 1–6).

Compose, Arrange, and Improvise

2.6 Compose music in distinct styles.

2.7 Compose and arrange music for various combinations of voice and acoustic and digital/electronic instruments, using appropriate ranges and traditional and nontraditional sound sources.

2.8 Create melodic and rhythmic improvisations in a style or genre within a musical culture (e.g., gamelan, jazz, and mariachi).

3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of Music - Students analyze the role of music in past and present cultures throughout the world, noting cultural diversity as it relates to music, musicians, and composers.

Role of Music

3.1 Analyze how the roles of musicians and composers have changed or remained the same throughout history.

3.2 Identify uses of music elements in nontraditional art music (e.g., atonal, twelve-tone, serial).

3.3 Compare and contrast the social function of a variety of music forms in various cultures and time periods.

Diversity of Music

3.4 Perform music from a variety of cultures and historical periods.

3.5 Compare and contrast instruments from a variety of cultures and historical periods.

3.6 Compare and contrast musical styles within various popular genres in North America and South America.

3.7 Analyze the stylistic features of a given musical work that define its aesthetic traditions and its historical or cultural context.

3.8 Compare and contrast musical genres or styles that show the influence of two or more cultural traditions.

4.0 AESTHETIC VALUING

Responding to, Analyzing, and Making Judgments About Works of Music - Students critically assess and derive meaning from works of music and the performance of musicians in a cultural context according to the elements of music, aesthetic qualities, and human responses.

Analyze and Critically Assess

4.1 Compare and contrast how a composer's intentions result in a work of music and how that music is used.

Derive Meaning

4.2 Analyze and explain how and why people in a particular culture use and respond to specific musical works from their own culture.

4.3 Compare and contrast the musical means used to create images or evoke feelings and emotions in works of music from various cultures.

5.0 CONNECTIONS, RELATIONSHIPS, APPLICATIONS

Connecting and Applying What Is Learned in Music to Learning in Other Art Forms and Subject Areas and to Careers - Students apply what they learn in music across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to music.

Connections and Applications

5.1 Explain ways in which the principles and subject matter of music and various disciplines outside the arts are interrelated.

5.2 Analyze the process for arranging, underscoring, and composing music for film and video productions.

Careers and Career-Related Skills

5.3 Identify and explain the various factors involved in pursuing careers in music.

Appendix C

High School Influence on College Attendance Online Survey

All questions are concerned with time spent in high school. Please answer according to your high school participation.

How were you encouraged to attend college in high school?*

Select as many as apply.

- Teachers discussed the possibilities in class
- School advisors/councilors supplied information and support
- Extracurricular coach/mentor encouraged attending college
- College students or faculty visit campus
- Parents stressed the importance of college
- No one encouraged college attendance
- Other:

Were you involved in music in high school?*

- Yes
- No

If yes, did this involvement help support college attendance?

Provided scholarship opportunities, visited colleges through musical involvement, etc.

- Yes
- No
- N/A

Were you enrolled in College Preparation, Honors, Advanced Placement (AP), Community College, or other “higher-level” courses during high school?*

- Yes
- No

If yes, which ones?

Select as many as apply.

- College Preparation
- Honors
- AP
- Community College
- N/A
- Other:

Was music ever incorporated into classroom activities to reinforce subject matter?*

Such as songs, background music, class performances, etc.

- Yes
- No

If yes, please list the musical activities you remember.

*Required answer

Appendix D

High School Participation Paper Survey

All questions are concerned with your time spent in high school.

How are you encouraged to attend college?

Select as many as apply.

- Teachers discuss the possibilities in class
- School advisors/councilors supply information and support
- Extracurricular coach/mentor encourages attending college
- College students or faculty visit campus
- Parents stress the importance of college
- No one encourages college attendance
- Other:

Are you involved in music?

- Yes
- No

If yes, does this involvement help support going on to college?

Provides scholarship opportunities, visit colleges through musical events, etc.

- Yes
- No
- N/A

Are you enrolled in College Preparation, Honors, Advanced Placement (AP), Community College, or other “higher-level” courses?

- Yes
- No

If yes, which ones?

Select as many as apply.

- College Preparation
- Honors
- AP
- Community College
- N/A
- Other:

Is music ever incorporated into classroom activities to reinforce subject matter?

Such as songs, background music, class performances, etc.

- Yes
- No

If yes, please list these musical activities.

What are your plans for after high school?

Appendix E

Music Teacher Interview Questions

1. How important is music in the lives of your students?
2. Do you believe music education has the potential to increase college attendance?
3. If yes, how so? If no, why not?
4. How do you think music education could be implemented into courses to complement subject matter?
5. Are there any techniques you have tried and were successful?