



ETM IMPACT EVALUATION FINDINGS

Education Through Music, Inc.
2013-2014 School Year Findings



INTRODUCTION

This report is an overview of how the Education Through Music (ETM) program impacted the students and schools being served during the 2013-2014 school year. The findings are based on impact evaluation data collected by ETM, and focus on how the program contributed to students' academic achievement and general development. The findings also address how the program was perceived by its partner school communities.

There is a substantial need for music education in our schools, as referenced in The New York City Department of Education's 2013-2014 Annual Arts in Schools report: 59% of city schools do not have a full-time certified music teacher, and only 36% of 6th-8th graders reported participating in music classes (New York City Department of Education, 2014a). Thus, it is vital to deliver music education programs, such as Education Through Music, as well as measure the impact that music education can have on students within New York City schools.

In the 2013-2014 school year, ETM partnered with 27 NYC schools and served 15,000 students in grades K-8, from low-income families. ETM's music instruction is comprehensive, sequential, skills- and standards-based. In addition to teaching children musical skills and knowledge, music teachers use music to support learning in all areas. Through music instruction's emphasis on transferable cognitive skills and content integration, ETM aims to enhance students' academic performance. Through music instruction combined with students' concert performances, ETM aims to build students' general development. ETM's research findings from the 2013-2014 school year demonstrate the beneficial impact music education has on students' overall success.

EVALUATION APPROACH

Over the 2013-2014 school year, ETM collected data from students, parents, classroom teachers, and principals across partner schools. At the start of the school year, a more focused evaluation design, referred to as the longitudinal evaluation, was implemented. Within this design, student data was collected among nine partner schools located in the same geographic area of the Bronx. By focusing data collection among a specific set of schools, ETM is able to gather in-depth survey and assessment information from students. Since partner elementary and middle schools are geographically located near one another, ETM can more easily track students' musical, academic, and general development from 3rd through 8th grades.

This report uses several sample sets of students' academic assessment data. These include the *ETM school sample* (aggregate academic data from all students in grades 3-8 within longitudinal evaluation schools) and the *ETM student sample* (individual academic data from 676 students in grades 3-8 within longitudinal schools). Lastly, the *non-ETM school sample* (aggregate data from all students in grades 3-8 within peer schools) provides a comparative set of students who did not receive the ETM program. ETM analyzed data from public peer schools located

within the same borough as the longitudinal evaluation schools. For a definition of New York City's peer schools, and the selection process for the non-ETM school sample, see the Methodology Analysis section.

In addition to assessment scores, ETM collected survey data from students in grades 3-8 among the ETM school sample. In total, ETM collected academic assessment and/or survey data from 979 students. Survey data were also collected from parents of students within the ETM school sample, and from classroom teachers and principals across all ETM partner schools.

A summary of findings is provided in the next section. For a complete list of data collection instruments and sample sizes, see the Methodology Data Collection section.

SUMMARY FINDINGS

1) ETM students show greater academic achievement than their peers in non-ETM schools. The ETM program supports learning in the academic areas of Math and English Language Arts (ELA). Comparative data from the New York State (NYS) Assessment suggest that students within ETM schools show greater academic achievement than students in NYC public schools that have similar demographic populations and are within the same geographic region of NYC. Furthermore, ETM students' academic achievement is positively correlated to their musical achievement, based on performance measures from the NYS Assessments and the ETM Music Assessment.

2) ETM positively impacts students' academic achievement. Students, classroom teachers and principals agree that ETM supports academic achievement. According to middle school student survey responses, 92% reported that music class "improved their academic skills." In addition, ETM students significantly increased their NYS Assessment Math and ELA proficiency from the 2012-13 to 2013-14 school year. Among classroom teachers surveyed, 95% reported that ETM increases students' "academic development" and 94% reported that ETM improves students' "critical thinking skills." Furthermore, 100% of principals highly rated ETM's effectiveness in improving students' academic achievement.



3) ETM has a positive impact on students' social and emotional development. As indicated by survey responses from students, classroom teachers and parents, the program helped students within the areas of self-esteem, confidence about school and positive attitude. Among middle school students, 95% believed that music class helped them to focus their attention. Classroom teachers, parents and students believed that the program increased students' creativity.

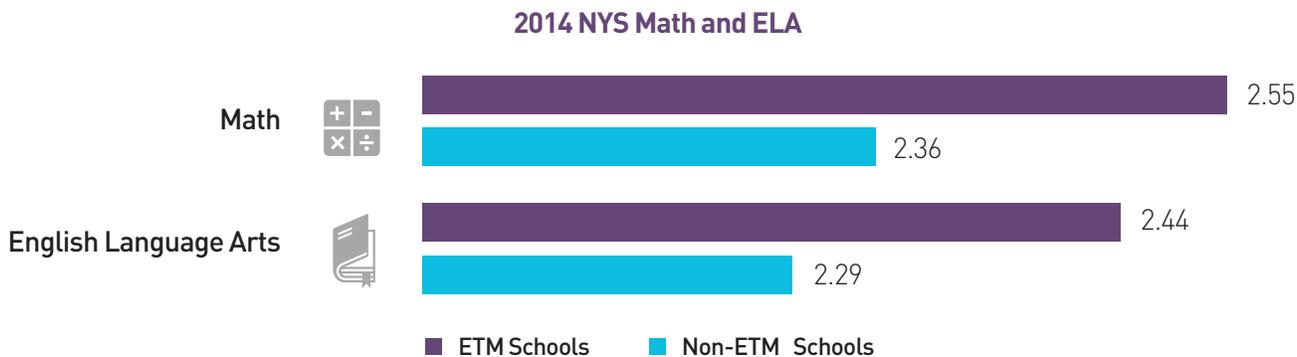
4) ETM's partner school leadership highly regard the ETM program. All principals surveyed rated the overall program as either "excellent" or "good" and highly rated ETM's effectiveness in providing a quality music program. Furthermore, all principals reported ETM as effective in increasing students' engagement.

KEY FINDINGS

ETM students show greater academic achievement than their peers in non-ETM schools.

Students in ETM partner schools show greater academic achievement than students in schools that did not receive the ETM program (non-ETM school sample). This finding is evidenced by the fact that ETM partner school students' proficiency on the 2014 New York State (NYS) Assessment in both Math and English Language Arts (ELA) is higher than the proficiency of students in neighboring peer schools.

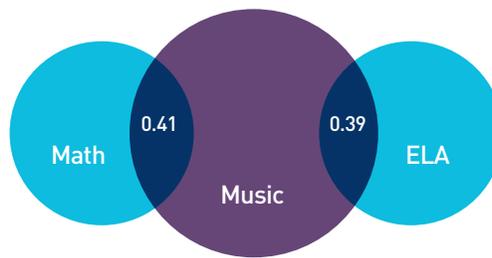
The NYS academic proficiency ratings range from 1.0 to 4.5 points, with a 4.5 representing the highest achievement. ETM students' averages are higher than their peer students by 8.1% in Math (0.19 points) and by 6.6% in ELA (0.15 points).



Furthermore, ETM students' academic proficiency ratings are positively associated to their ETM Music Assessment scores. Regression analyses show that a 10 point increase on the ETM Music Assessment corresponds to an increase in Math proficiency ratings of 0.2 points, and an increase in ELA proficiency ratings of 0.17 points. Both corresponding increases are statistically significant. See the Methodology Analysis section for an explanation of statistical significance.

A correlational analysis between academic achievement and music achievement (a measure of the extent to which these two variables fluctuate together) confirms a moderate, positive correlation. On a coefficient scale of 0 to 1, with 1 representing a perfect correlation, Math and Music have a significant correlation coefficient of 0.41, while ELA and Music have a significant correlation of 0.39.

Correlation: Academic and Music Achievement



ETM positively impacts students’ academic achievement

The ETM partner school communities agree that ETM supports academics. Among classroom teachers surveyed, 95% reported that ETM increases students’ “academic development” and 94% reported that ETM improves students’ “critical thinking skills.” Furthermore, 100% of principals highly rated ETM’s effectiveness in improving students’ academic achievement.

Percent of classroom teachers who believe that ETM:



According to middle school student survey responses, 92% reported that based on their participation in music class, they have “improved their academic skills” and 90% reported that they have “used their imagination to solve a problem.”

Percent of students who reported that based on participation in music class, they:



Furthermore, ETM students significantly increased their NYS Assessment Math and ELA proficiency from the 2012-2013 to 2013-2014 school year. The proficiency scores of students in the ETM student sample increased more than scores of students citywide and of students in the non-ETM school sample. See the Appendix.



*Improvement was statistically significant among ETM student sample

ETM has a positive impact on students' social and emotional development.

A high percentage of respondents reported that the music program helped students' development across a variety of social and emotional measures, as well as increased students' creativity. Similar to the 2012-2013 school year responses, nearly all parents and classroom teachers believe that the ETM program has the greatest impact on students' confidence, positive attitude, self-esteem, and creativity.

Percent who report that ETM positively impacts students' CONFIDENCE:



Percent who report that ETM positively impacts students' POSITIVE ATTITUDE:



Percent who report that ETM positively impacts students' SELF-ESTEEM:



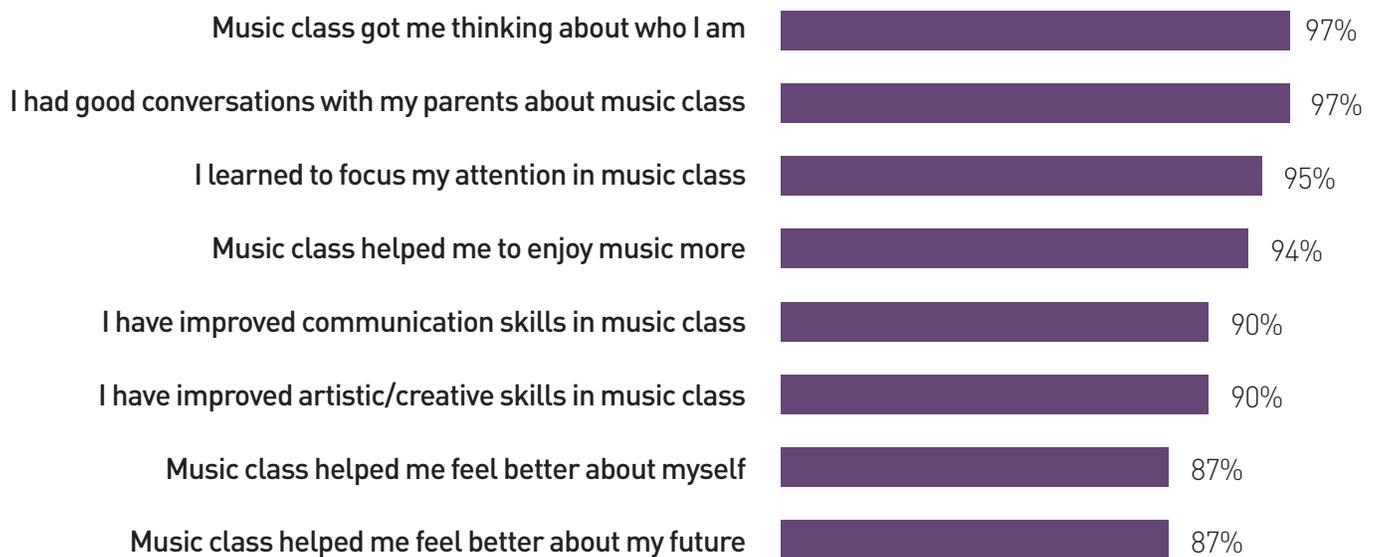
Percent who report that ETM positively impacts students' CREATIVITY:



Students also reported that going to music class helped them to increase their self-esteem and confidence. Their opinions were measured by survey items such as “feel better about myself” and “feel better about my future.” Students in grades 6-8 indicated that music class developed their self-identity, with 97% agreeing that “music class got me thinking about who I am.” They also believed that music class had a greater impact on helping them to focus their attention, improve their communication skills, and talk with their parents about music class.

Students agree with parents and classroom teachers that the program improves their creativity with those in grades 6-8 reporting that they “improved artistic/creative skills” and those in grades 3-5 reporting that music class helped them to “be more creative.” Among students in grades 3-5, 94% felt music class helped them to “enjoy music more.”

Percent of students who report:

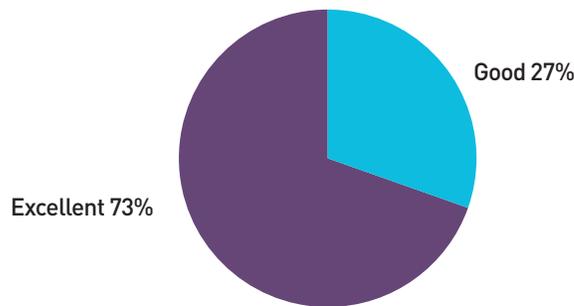


In regards to school motivation, 86% of students in grades 3-5 felt that going to music class helped them “care more about school” and 86% of students in grades 6-8 felt that based on their participation in music class, they “increased their desire to go to school.” Over 90% of parents and classroom teachers agreed that the ETM program increased school motivation. Students’ school motivation was also measured by the number of days they attended school during the year. Students’ attendance correlated positively to their academic achievement. Their attendance also correlated positively to their decision to participate in an ensemble program (band or orchestra).

ETM’s partner school leadership highly regard the ETM program.

Principals have a high regard for the overall ETM program (e.g., ETM instruction, music events, school-wide professional development). 100% of principals rated the 2013-2014 ETM program as either “excellent” or “good.”

Principals’ overall rating of the ETM program:



In addition, 100% of principals highly rated the ETM program’s ability to increase students’ engagement and academic achievement. All principals felt that ETM was effective in providing a quality music program, with 93% rating the effectiveness as “excellent” or “good.”

Principals’ ratings of ETM’s effectiveness in:



CONCLUSION

The findings from the 2013-2014 school year indicate that ETM is meeting its objectives of supporting students' academic achievement and general development. Overall, students in schools that receive the ETM program perform better academically than students in schools with similar demographics that do not receive the ETM program. Students' participation in ETM music class and school performances contributes to their creativity as well as to their development in social and emotional capacities. In addition, the program encourages students' motivation for school in general.

ETM students' achievement is dependent on a quality music program as well as support from the overall partner school communities. The findings show that

the students' parents, classroom teachers, and principals agree that the program improves students' academic and general development outcomes, as well as supports students' school motivation and engagement. Principals of partner schools show high regard for the overall program. This strong support among school leadership is necessary for students' success.

NEXT STEPS

Since the start of the 2014-2015 school year, ETM has been collecting and analyzing student data which will enable more rigorous analyses. Among the ETM student sample, pre- and post-surveys of their perceived abilities in music class, a measure of self-

efficacy, are being administered. Now in the second year of the longitudinal evaluation study, ETM will continue to track individual student achievement and involvement in music as they continue through the ETM program and beyond.

METHODOLOGY

Data Collection

- **Student Survey:** Approximately 421 students in grades 3-5 and 61 students in grades 6-8 were surveyed in 7 ETM partner schools. Music teachers administered the survey to students during music class in May and June 2014. The survey for students in grades 3-5 was modified from the *After-School Initiative's Toolkit for Evaluating Positive Youth Development* (The Colorado Trust, 2004). The survey for students in grades 6-8 was modified from the *Youth Engagement Survey 2.0* (Hanson & Larson, 2005).
- **Classroom Teacher Survey:** Approximately 300 classroom teachers of Kindergarten through 8th grades were surveyed in 27 ETM partner schools. The survey was administered through an online format in May and June 2014. The survey was developed by ETM.
- **Parent Survey:** Approximately 282 parents of children in Kindergarten through 8th grades were surveyed in 9 ETM partner schools. The survey was administered in May and June 2014, through an online format and in-person at ETM concert events. The survey was developed by ETM.
- **Principal Survey:** The principal survey was completed by 15 principals from ETM partner schools. The survey was administered through an online format in May and June 2014. The survey was developed by ETM.



- **New York State Assessment:** ETM collected NYS Math and ELA Assessment data from 669 and 676 students (respectively) in grades 3-8 in 9 ETM partner schools. The NYS Math and ELA tests were administered in Spring of 2014. After the students completed the assessments, ETM submitted a data request to the NYC Department of Education to receive individual students' test data of students whose parents provided consent.
- **ETM Music Skills Assessment:** ETM collected Music Assessment scores from 3,419 students in grades 3-8 in 18 ETM partner schools. Music teachers administered the written assessment to students during music class in May and June 2014.

Analysis

For this report, ETM used frequencies and means to analyze survey data. In order to analyze the NYS Math and ELA assessment data, ETM used proficiency rating means. According to the New York City (NYC) Department of Education (DOE), “the first digit of the Proficiency rating corresponds to the Performance Level, and the other digits reflect how close the student is to the next level” (New York City Department of Education, 2014b, p.6).

The non-ETM school sample was obtained from the NYC DOE peer schools list, accessed from the School Quality Reports website (New York City Department of Education, 2015). According to the NYC DOE, “peer schools are the New York City public schools, of the same school type, with student populations that are most similar to the school across every student characteristic used for peering” (New York City Department of Education, 2014b, p. 3). For each ETM sample school, ETM included all public schools from the peer schools list that were located in the same borough of NYC (Bronx) and did not have ETM. Then, ETM compared each longitudinal evaluation school to the selected peer schools.

For students whose individual data was obtained, their assessment means were compared using a paired samples t-test (among the same group of students). Data collected from these students was also used to test the correlation between various factors (i.e., academic achievement, music achievement, ensemble participation, attendance) using the Pearson Product Moment Correlation and a linear regression between students’ academic achievement and music achievement.

The analyses included in this report are statistically significant, indicating that the findings have a high likelihood of being accurate and are not due to chance. Specifically, all test results are significant at p-values of less than 0.05, implying that each finding has a 95% chance of accuracy.

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APPENDIX

Year to Year Proficiency Rating in Math and ELA

2012-2013 school year

2013-2014 school year

ETM student sample (ELA)	2.51	2.60
ETM student sample (Math)	2.61	2.79
Non-ETM school sample (ELA)	2.28	2.29
Non-ETM school sample (Math)	2.27	2.36
Citywide schools (ELA)	2.54	2.49
Citywide schools (Math)	2.63	2.73





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