Measure by Measure:

Developing the Whole Child Through the ETM® Music Education Model



Model and Evaluation Summary

2005 - 2008 Arts in Education Model
Development and Dissemination Project
Funded by the US Department of Education



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Measure by Measure: Developing the Whole Child Through the ETM® Music Education Model

Education Through Music (ETM) was founded in 1991 in New York by an attorney and an investment banker who shared a commitment to improving the education of children in at-risk communities. They found their inspiration in the story of a failing Bronx school that was in danger of being closed until the addition of music to the curriculum contributed to a dramatic rise in student achievement and motivation. After only a few years of providing music as a core subject and using music as a tool to support learning and development, the school saw improved attendance and reported 98% of students scoring at grade level in reading and mathematics. ETM began as a pilot program at a troubled school in Mt. Vernon, New York, that also came to experience great success. Within four years of ETM's implementation, students at each grade level showed steady and significant improvement on standardized test scores in reading and math. The school won a National Blue Ribbon School of Excellence Award from the U.S. Department of Education in 1994

and has served as a model for the more than 30 schools served by ETM in the last 18 years.

Today, ETM continues to provide vocal, instrumental, and general music instruction to students in disadvantaged schools that would not have had school-wide music programs otherwise. ETM serves all students, including those with special needs, and promotes the integration of music into the overall academic curricula in order to enhance students' school performance and general development.

A founding principle of ETM is that every child deserves a well-rounded education: one that includes music. Unfortunately, many schools, especially those serving children in low-income communities, provide no music instruction or rely solely on short-term or one-time programs provided by external organizations on an "ad hoc" basis. ETM offers a comprehensive model that incorporates music into the regular educational program of every child, throughout the academic year.



The ETM model includes the following components which are essential for strengthening the place of the arts as a core subject in the regular curriculum:



- The formation of long-term partnerships with under-resourced elementary schools that involve the support and participation of principals, academic teachers, and other members of the school community. The ETM model stresses mutual accountability, both in terms of responsiveness to school leadership as well as principal support and participation in program management.
- High quality music instruction that includes the implementation of a sequential, skills-based curriculum, implemented on a weekly or twice-weekly basis that meets State and Federal standards for music education.
- Ongoing professional, pedagogical training and mentoring for teaching artists, addressing individual needs for growth and development as classroom educators as well as strategies for collaboration and integration.

- ment for classroom teachers to help them implement ideas for partnership and collaboration with teaching artists, to support them in integrating music into other areas of the academic curriculum, and to create a learning community that recognizes the place of the arts in the overall school environment.
- Principal guidance and training to maximize effective leadership and support instructional integration.
- Parent and community outreach to increase awareness of the importance of the arts in education and to build support for program sustainability.
- The **regular assessment** of student music skills and other learning outcomes along with the **ongoing evaluation** of other program components.

Education Through Music and its partner schools have garnered awards and recognition for excellence throughout the program's 18-year history:

- As previously mentioned, ETM's first partner school won a Blue Ribbon School of Excellence Award from the U.S. Department of Education in 1994.
- In 2005, ETM received a three-year grant from the U.S. Department of Education Office of Innovation and Improvement through the Arts in Education Model Development and Dissemination (AEMDD)

program for the further development and evaluation of its instructional model.

ETM has received a Four-Star Rating (out of a possible four) from Charity Navigator, America's premier independent charity evaluator, for two years in a row (2007 and 2008). This award recognizes ETM's ability to effectively manage and further develop their financial resources¹.

¹ Less than 18% of all charities ever receive consecutive four-star ratings, indicating that ETM outperforms the majority of non-profits in America with respect to fiscal responsibility.

ETM has responded to requests from schools and organizations across the country by providing expertise and consultation in the areas of professional development, curriculum development, and other aspects of the ETM model.

The ETM program model has been replicated in multiple communities across the U.S. and the organization now has affiliates in Los Angeles (ETM-LA, Inc.) and San Francisco (ETM-Bay Area, Inc.). These affiliates serve more than 2,250 children.

Six ETM partner schools (out of eight ETM public schools that participated in this evaluation) received "A" ratings from the New York City Department of Education for the 2007-08 school year. These scores represent progress in student achievement on state Math and English Language Arts exams as well as attendance levels and maintaining

positive school environments. Only 45% of all elementary schools in New York City received "A" grades during the same year.



During the 2008-09 academic year, ETM is serving more than 9,000 children in New York City through partnerships with 20 schools.

This report summarizes results of a three-year evaluation of Education Through Music completed with funding from the U.S. Department of Education's AEMDD grant (referenced above). This evaluation measured program outcomes among eight ETM public schools during the 2005-06, 2006-07, and 2007-08 academic years. Evaluation methods included the following:

- Pre/post (annual) student knowledge and skills assessments;
- Student surveys and interviews (administered during the first two years of the evaluation);

- Principal surveys, interviews and focus groups;
- Academic teacher surveys
 (administered each fall and spring²);
- Parent surveys;
- Standardized test score tracking at the school level;
- Teaching artist surveys and observations³; and
- Interviews with ETM staff.

The purpose of this report is to both document the ETM educational model as well as to report on the results of the evaluation.

Underlying all of ETM's programs and services is the philosophy that learning in music is as fundamental to the growth of children as learning in math, science, and literacy. The goal for education, especially at the elementary levels, is to provide a balance of experiences and opportunities that enables children to acquire as many intellectual, emotional, and social skills as possible, as deeply and thoroughly as possible.

—From the ETM website

² Teacher and teaching artist focus groups were also conducted in Year One of the evaluation.

³ See Note 2.

Characteristics of ETM Partner Schools

ETM serves schools in low-income, urban neighborhoods that primarily serve African-American and Hispanic students.

School	Total Enrollment⁴	Percentage of Students Eligible for Free/Reduced Price Lunch ⁵	Student Racial/Ethnic Backgrounds ⁶	
School 1 Brooklyn	584 Students PreK to 5	82%	Black/African-American: 87% Hispanic/Latino: 6% Other ⁷ : 6%	
School 2 Manhattan	331 Students PreK to 5	95%	Black/African-American: 32% Hispanic/Latino: 64% Other ⁷ : 4%	
School 3 Bronx	584 Students PreK to 5	87%	Black/African-American: 23% Hispanic/Latino: 72% Other ⁷ : 5%	
School 4 Bronx	1,119 Students K to 5	92%	Black/African-American: 53% Hispanic/Latino: 41% Other ⁷ : 6%	
School 5 Bronx	837 Students K to 5	79%	Black/African-American: 68% Hispanic/Latino: 24% Other ⁷ : 8%	
School 6 Manhattan	408 Students K to 5	98%	Black/African-American: 12% Hispanic/Latino: 87% Other ⁷ : 2%	
School 7 Manhattan	346 Students PreK to 5	83%	Black/African-American: 28% Hispanic/Latino: 68% Other ⁷ : 5%	
School 8 Bronx	771 Students K to 5	92%	Black/African-American: 86% Hispanic/Latino: 11% Other ⁷ : 4%	

As previously mentioned, the AEMDD evaluation measured outcomes among public schools that partnered with ETM during the 2005-06, 2006-07, and 2007-08 years. These include four schools in the Bronx, one in Brooklyn, and three in Manhattan (see the table at left).

Over the three years of the evaluation, ETM served more than 5,000 students per year in these eight schools. The poverty status of the schools served is evident in the high percentages of students at each school (with an average of 89%) eligible for free or reduced price lunches. In addition, ETM served high percentages of African-American/Black and Hispanic/Latino children, including many whose families were recent immigrants to the U.S.

Thus, during the evaluation period, ETM primarily served students from demographic groups that tend to show higher levels of educational risk than other groups.

⁴Enrollment numbers were taken from each school's website and reflect the 2008-09 academic year.

⁵Eligibility for free/reduced price lunch and student racial/ethnic characteristics were taken from school reports posted by the New York Department of Education and reflect the 2006-07 academic year, the latest year for which this information was available.

⁶ See Note 5.

⁷ "Other" racial/ethnic backgrounds include American Indian/Native American/Alaskan Native, Asian/Asian-American/Pacific Islander, Caucasian/White, and other unspecified racial/ethnic groups.

Curriculum and Instruction

ETM provides qualified teaching artists to serve on staff at partner schools who teach a comprehensive and skills-based music curriculum specifically developed to support State and Federal educational standards⁸.



THE PROGRAM: ETM works in partnership with low-income public schools to provide weekly or twice-weekly, skills-based music instruction throughout the academic year to all students, regardless of their ability levels or special education status. Without ETM, the schools served by the program would not have the resources to provide a comprehensive music curriculum to their students.

The program hires **qualified teaching artists** to provide instruction in general music and one or more of the following areas: violin, cello, recorder, guitar, drums, keyboard, choral music, and/or music therapy⁹, and helps them create a

classroom environment that is conducive to learning. Because resources for school-employed music teachers vary from school to school, teaching artists may be the sole music instructors at the school, or they may supplement existing music faculty who are unable to provide regular music instruction to all students without ETM's help. Teaching artists, as well as the school-employed music teachers serving partner schools, receive ongoing training, supervision, and mentoring from the ETM program staff.

All ETM students have the opportunity to showcase what they have learned through musical performances open to parents and community members, typically during the

⁸ The curriculum also falls within the guidelines of the New York City Department of Education's Blueprint for the Arts.

⁹ Provided by certified music therapists employed by ETM.

holiday season and in the spring of each year. These performances provide an opportunity to raise parent and community awareness of ETM and of the importance of the arts in the school environment.

THE CURRICULUM: The ETM curriculum is based on a series of benchmarks that provide a framework for instruction. These benchmarks are arranged by grade level (from Kindergarten through 5th grade) in five broad categories: 1) ensemble and performance skills; 2) rhythm (duration); 3) melody (pitch); 4) other elements of music (vocabulary, musical form, etc.); and 5) social studies connections. These benchmarks identify skills and knowledge that 80% or more of the students should master by the end of the academic year.

ETM designed a collection of sample lesson plans that provide a variety of activities that engage students with diverse learning styles. These lessons are the result of a collaboration between ETM program staff, teaching artists, and school music teachers, who wrote the materials and classroom teachers who consulted on the age-appropriateness of activities and content. Following ETM workshops on how to use the manual, teaching artists adapt the lesson plans to meet the needs of their students.

OTHER INSTRUCTIONAL

RESOURCES: During the 2005-06, 2006-07, and 2007-08 program years, with U. S. Department of Education AEMDD funding, ETM developed special resources to aid teaching artists and other music faculty at their partner schools in delivering effective, age-appropriate, and creative music instruction. This includes the development of the lesson plans referenced above,

and a Resource Manual containing supplemental worksheets, composer biographies, integration activities, and a song collection. The song collection contains nearly 90 songs for the music classroom, including folk songs from around the world, spirituals, and game/activity songs in the public domain. Teaching artists choose the activities and materials that most effectively meet the needs of their students. The materials are available to teaching artists and other educators on a comprehensive and enhanced website that was also developed with AEMDD funding.

ARTISTIC ENRICHMENT:

To nurture arts appreciation and enhance instruction, ETM offers arts enrichment opportunities for low-income students in its partner schools to experience live, professional performances of quality music across a range of genres. These opportunities include: 1) in-school concerts designed by teaching artists to align with ETM's curriculum; 2) concerts by professional singers and pianists sponsored by the Marilyn Horne Foundation; 3) scholarships to the Usdan Center for the Creative and Performing Arts summer day camp; 4) after-school instruction supported by collaborations with other organizations; 5) concerts by professional ensembles; and 6) school visits from guest artists.



The arts require study. Disciplines in the arts cannot be learned through random or casual experiences any more than math or biology can. The arts require regular, systematic programs of sequential instruction leading to yearly specified outcomes. There is, indeed, content in the arts beyond superficial liking, warm feelings, and a vague belief in their inherent goodness. That content consists of skills and knowledge. The arts are enjoyable, but they are by no means merely fun and games.

— Paul R. Lehman, Content of the Curriculum, 2nd edition, 1995

¹⁰ Specific benchmarks evolved over the course of the evaluation as ETM staff worked to make them realistic but also appropriately challenging at each grade level.

School Partnerships and Principal Support

ETM develops successful, long-term partnerships with low-income schools that are made possible through ongoing principal involvement and leadership development.

LEADERSHIP SUPPORT AND

DEVELOPMENT: ETM is unique as a school-based arts education program that functions as a separate not-for-profit while stressing accountability and responsiveness to school leadership. For the ETM model to be effective, it is vital that the program is administered in a true partnership with school administration and teaching faculty. Principals and other members of the school leadership receive one-on-one guidance in ETM program management and also meet with other ETM principals on a regular basis for training in music instruction supervision, integration and assessment, and building community support. These activities and resources are essential in developing principals' support of the program, which, in turn, is necessary for gaining the cooperation of schoolemployed music faculty and classroom teachers in collaborating and implementing integration activities with ETM teaching artists¹¹. The AEMDD grant provided the resources needed to develop a Principal's Manual to provide additional support to school management.

PARTNERSHIP EFFECTIVENESS:

Over the three years of the ETM evaluation, principals and academic teachers expressed high levels of satisfaction with the program and staff of ETM. This satisfaction, along with evidence that school leadership and classroom teachers participate in and sup-



port the program, shows that ETM forms effective partnerships that are necessary for the program to succeed.

On Spring Evaluation Questionnaires implemented during each year of the evaluation, all public school principals reported that ETM is effective in delivering the music program as planned and expected. In fact, all but one principal (in year two of the evaluation) rated ETM as "very effective" in this area.

One of the primary strengths of our school's partnership with ETM is the collaboration and communication that occurs among teaching artists and the staff at our school. ETM demonstrates flexibility and the willingness to adjust the program to meet the needs of our students [Partner School Principal].

ETM's support and supervisory staff are always willing and able to assist with ETM situations and any other concerns the school may be experiencing. They assist in grant writing, scholarships for students to attend camp and many other areas.

—Partner School Principal

¹¹ Over the course of the evaluation, some schools showed lower levels of principal support and cooperation than others (see a discussion of this topic in the section on Challenges in Program Implementation and Plans for the Future). Overall, it appears that low principal involvement (on the part of one or two principals each year) is associated with lower levels of professional development participation, lower levels of collaboration between classroom teachers and teaching artists, and weaker program outcomes, although the project did not include a formal, comprehensive evaluation of principal support and how it varied among schools.

Most principals exhibit consistent involvement with and support of ETM and their schools' teaching artists¹².

School leaders tended to rate the teaching artists serving their schools as "very effective." Most principals report observing teaching artists during music instruction several times per year. Many of them met with teaching artists as well as schoolemployed music teachers from one to four times during the year to discuss concerns about instruction, with one principal indicating that she met with teaching artists or music teachers on a weekly basis. Nearly all of the principals over the three years of the evaluation rated the frequency and content of their contacts with teaching artists as "excellent," while nearly all also rated the frequency and content of their contacts with the ETM Director of Programs and other ETM staff as "excellent." Comments from Principals' Evaluation Questionnaires include the following:

I am always able to reach out to the staff at ETM to assist me with providing opportunities for my students to learn more about music and the arts.

Apart from occasional classroom visitations, I have frequent informal contact with the teaching artists regarding their material needs, their goals and objectives for sequential student learning and teacher professional development, curricular integration, and scheduling. I also inform them about upcoming school events/assemblies as well as the program goals and objectives of our DOE music teacher and other arts-in-education partnerships.

ETM administrators are proactive in visiting and ensuring that things run smoothly.

Teaching artists and I meet regularly to discuss plans and progress.

classroom teachers at ETM schools also support the program and ETM staff. Academic teachers at ETM schools are strongly encouraged by principals to not only observe but also participate in their students' music classes. Most academic teachers at ETM schools indicate the teaching artists serving their students are effective, with approximately three-quarters of these teachers indicating the teaching artists are "very effective." Most of these teachers also report (on Spring Evaluation Questionnaires) that they have a collaborative relationship with the teaching artists who work with their students.

In sum, relationships between ETM and partner school staff tend to be mutually supportive and effective in creating true partnerships – partnerships that are often out of the reach of other external organizations working in today's public schools. The support and involvement of school leadership is a key aspect of the program's success in providing skills-based instruction for all students in partner schools.



Training and Professional Development

ETM provides specialized training and professional development to both teaching artists and classroom teachers that strengthen partnerships and assist educators in implementing strategies to support instructional integration.

In order to better serve its students, ETM has developed resources and training for music teachers and classroom teachers alike. Regrettably for teachers and students, even schools that have music teachers on staff provide them with limited or no appropriate opportunities for professional development and training. Likewise, classroom teachers rarely know or understand what is happening in the music classroom and how it impacts the lives and education of their students. Through ongoing professional development seminars, workshops, and the development of other resources, ETM has supported teaching artists and music teachers in enhancing the quality of instruction and supported classroom teachers in using music to support student learning in other areas.

A primary professional development function of ETM is the training and development of teaching artists and music teachers. Annual New-Hire Trainings and Teaching Artist Academies provide participants with comprehensive training to be effective educators in the classroom. New hires complete five-day clinics each August, with all teaching artists completing three days of workshops each September and multiple workshops during the rest of the school year. Faculty for these professional development seminars includes

ETM staff as well as experts in music education from area colleges and universities. Topics covered include curriculum mapping, lesson planning, student assessment, classroom management, instructional integration, interactive lessons, music methodologies, and other topics. Teaching artist evaluations of these workshops were strong over the three years of the evaluation. Additionally, ETM staff members make regular site visits to each school to observe music classes and mentor teaching artists and music teachers.

Each year, ETM program supervisors conduct at least two formal observations of teaching artists and complete assessment rubrics for comparison in the fall and spring. Rubrics are used to score the lessons presented by teaching artists with ratings of 1("needs immediate improvement") to 5 ("outstanding") in the following areas: 1) the clarity of the overall aim of the lesson; 2) the clarity of the lesson objectives; 3) lesson presentation; 4) learning activities selected to support the lesson's aim and objectives; 5) the learning environment established by the teaching artist; 6) classroom/behavior management; 7) the integration of learning skills or content that support other curricular areas; and 8) student assessment. During the first year of the evalua-



Our partnership with ETM allows me to provide quality, affordable music instruction to our students. In addition, the ETM program allows for more teacher participation in the instruction of music. There is a strong sense of visual presence, collaboration and follow up by ETM administrators with school administrators in meeting the needs and goals of the school throughout the year. Also, the program provides a fine cadre of artists who mentor students, including those that demonstrate a strong interest in music, through elective afterschool programs. Finally, the artists collaborate with teachers in an effort to integrate music with monthly units or themes.

— Partner School Principal The school has greatly benefited from the professional development components of ETM's work with our teachers, both during classroom instruction by highly skilled teaching artists and at their annual Teachers Institute, and the opportunities for me to meet with other principals to share music education goals and experiences.

—Partner School Principal

tion, 14 teaching artists were assessed with 69% showing improvement in their overall scores from fall to spring. Nine teaching artists were assessed the next year with four showing improvement. In Year Three, 12 teaching artists were assessed with the rubrics and half raised their scores from fall to spring.

On annual evaluation questionnaires, ETM teaching artists are highly rated by principals as well as by classroom teachers at partner schools. **Teachers commented on the strengths of the teaching artists who work with their students,** with many teachers commenting that their teaching



artists are good at working with and motivating students:

They are very patient with children. They keep their interest and make each child feel special.

She is very understanding of the class's special needs. Students are excited about coming to class. The class enjoys the variety of what they have to learn.

She is very focused and provides students with a clear focus for each lesson. Her fo-

cus/goals for each session are clearly met. She is a wonderful singer and overall, just a good music teacher who knows what to do to motivate children.

Each year, ETM sponsors an **annual training institute for classroom teachers.**

During this Saturday professional development opportunity, teachers participate in interactive music sessions that present ideas and techniques for incorporating music and the other arts into their classroom curriculum. Workshops include topics like reaching special needs students through music, using music to support literacy and math, and demonstrating how musical ensembles build confidence and cooperation. As an example, the Teachers Institute for the final school year covered by the evaluation occurred in September 2007 and reached more than 175 teachers, principals, and other guests. This particular institute emphasized basic musical concepts and integration strategies to incorporate music into other areas of the curriculum by grade level.

On a school-by-school basis, classroom teachers also have the opportunity to participate in in-service workshops facilitated by ETM staff throughout the academic year. These workshops further address integration strategies and collaboration (including how academic teachers can use teaching artists as an instructional resource) as well as program challenges and new information in effective instruction and integrational practices.

Over the three years of the evaluation, attendance at the Teachers Institute and participation in in-service workshops varied according to a number of factors, including teacher availability, school schedules, and school motivation/cooperation in planning and participating in ETM offerings. Nonetheless, **principal and teacher evaluations of ETM professional development offerings remained consistently strong**, with nearly all principals indicating on Spring Evaluation Questionnaires that they had observed positive impacts of professional development training on their staff. Additionally, most of the teachers who attended the Institute each year rated the workshop as "very effective" on Spring Questionnaires. Those who attended special in-service sessions also perceived the trainings to be effective.

Evaluation surveys were distributed at the conclusion of each Institute and in-service.

Over the three years of the evaluation, teachers reported high levels of agreement that the facilitators were effective, that there was an open atmosphere for learning and discussion, and that the workshops accomplished their individual learning objectives.

Overall, this evaluation suggests that the ETM approach to professional development is another feature that sets the program apart from other external organizations serving public schools. ETM places a special emphasis not only on preparing their teaching artists to be effective in classroom instruction, but also in training classroom teachers to use music to support other areas of student learning.



Collaboration and Integration

One of the hallmarks of the Education Through Music program is the emphasis on collaboration and coordination among teaching artists, music faculty, and academic (classroom) teachers.

The word "integration" has come to mean many things in the world of arts education; ETM's integration philosophy includes the support of student learning across the curriculum by focusing on the teaching of transferable cognitive skills. ETM works with teachers to identify cognitive skills common to music and other academic subjects, such as sequencing, classifying, analyzing, and summarizing. This approach to integration is important because music can support students' overall learning on many different levels: as examples, understanding song lyrics

supports reading comprehension and literacy skills; music from different cultures and periods of time demonstrates topics in social studies and cultural diversity; an understanding of meter and rhythm is associated with mathematical principles; and the study of sound and the production of sound are topics in physics and general science. Music can assist students in developing cognitive connections among academic disciplines while opening doors to self-expression and creativity.

As previously mentioned, this approach to instructional integration is a frequent topic

ETM has given us the opportunity to provide music instruction for all of our students. Prior to ETM we did not have a formalized music program. The staff at ETM is always available to assist us with questions and concerns. ETM has provided professional development for our whole staff to not only educate us *in the importance of arts* education for our students, but also in incorporating skills and strategies into our existing curriculum. —Partner School Principal of ETM professional development offerings for both teaching artists and classroom teachers. Over the three years of the evaluation, principals, classroom teachers, and teaching artists reported on instructional integration and collaboration that occurred in each school, with examples of this occurring on a more frequent and in-depth basis with each succeeding year. For example, during the 2005-06 academic year, while most principals reported on Spring Evaluation Questionnaires that teaching artists and classroom teachers were incorporating music into other areas of instruction, the examples they cited were very brief and not particularly substantive, except for the following two:

The ETM teaching artist continually supports English Language Arts through reading, listening, and writing within her music program.

The teaching artist in the upper grades assisted teachers in integrating literacy strategies when planning for the 4th grade Music Fair and the 5th grade Latin American Celebration. Students had to speak on stage, write dialogues, perform, do research, etc. The teaching artist in the younger grades helped to support balanced literacy techniques by involving the students in shared reading experiences, listening activities, etc.

By the spring of 2008, principals reported that integration was occurring on a more frequent basis. They were also able to share more elaborated examples of integrated instruction:

In Pre-K through 2nd grade classes, students experience letter and sound recogni-

tion in their classrooms and in the music room. Students also learn patterns in literacy, math, and music.

A special education class that was working on expressing feelings and controlling inappropriate behaviors used drums to indicate how they were feeling at that moment.

I have observed teaching artists working with the students on specific skills and providing students an opportunity to review and practice previously taught material, then apply those skills to other subject areas. Our teaching artists also incorporate into their lessons our school-wide skills of the month.

Teaching artists ask teachers what they are working on in literacy and social studies and attempt to align their teaching to those.

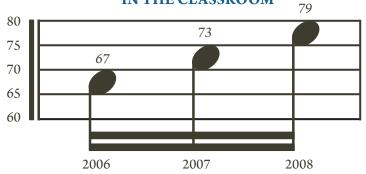
ETM teaching artists' lessons are always grounded in English Language Arts and Math literacy as students sing the lyrics of songs and learn rhythms and patterns of musical notes. Additionally, they engage children in higher-level social development as they have them cooperate in singing and moving together in unison and harmony.

In addition, principals reported that, during this same year, teaching artists had collaborated with classroom teachers in implementing **integrated units** in math and social studies as well as collaborating in planning and presenting assemblies and performances at other school-wide events.

Over time, the number of academic teachers in ETM partner schools who reported using music and the other arts to enrich their classroom instruction increased.

During the first year of the evaluation, on Spring 2006 questionnaires, 67% of the teachers reported using music in the classroom. By 2007, this number had increased to 73%. In the spring of 2008, nearly 80% of the classroom teachers in ETM partner schools reported using music and the other arts to enhance their teaching. This means that children in these schools experienced music as an important part of their overall education.

PERCENT OF TEACHERS USING MUSIC IN THE CLASSROOM



Student Outcomes



ETM believes that an effective music program is accountable for producing measurable student outcomes in skills and knowledge. Through the effective implementation of the ETM model, the program supports the achievement of positive student outcomes in music, academic skills, and youth development.

MUSIC KNOWLEDGE AND SKILLS ASSESSMENTS:

ETM is unique among not-for-profit organizations providing music education in schools because it assesses measurable outcomes in the arts discipline being taught. The ETM philosophy stresses the importance of music as a core subject in the academic curriculum, an area of study that is vital to the education of the whole child.

During the three-year evaluation, at the beginning and end of each school year, randomly selected students enrolled in ETM schools were assessed on musical skills and knowledge according to their ETM curriculum levels. Assessments were closely aligned with the ETM curriculum and were

revised each year according to similar revisions in the curriculum. In years one and two of the evaluation, assessments were administered one-on-one with students demonstrating specific skills like tapping steady beats on drums; echoing rhythmic patterns clapped by the evaluators; sightsinging simple melodies, and matching vocal pitches. Evaluators used a three-point scale (1 = "skill not attained"; 2 = "skill almost attained"; and 3 = "skill attained") to score each assessment item. These scores were then summed (and divided by the total number of items, then converted to the percentages) to form total scores. In year three, the assessment was changed into a written test so that more students could be included in the process.

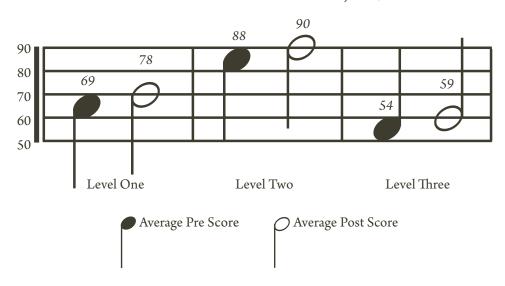
During each year of the evaluation, ETM students showed significant improvement in total scores in such areas as listening, rhythm, and vocal development at the three curriculum levels tested. As an example, as shown in the graph below, from the fall of 2005 to the spring of 2006, the average score of students assessed at Level One improved their scores by nine points, a change that is statistically significant. A slightly smaller average increase (though still statistically significant) occurred among Level Three students. Level Two students, on average, increased by two points from fall to spring, a change that is not statistically significant; however, both pre and post scores were high, leaving less room for improvement from fall to spring¹³. In year two, score increases were similar and were statistically significant for Level Two and Level Three students. In the third year, scores increases were again statistically significant for Levels Two and Three.

Overall, annual pre/post music assessments show that students in ETM schools make measurable progress toward meeting Federal and State standards in the arts.

Results of student surveys and interviews (365 completed during the first year of the evaluation and 280 completed in 2006-07) support this finding. Nearly all students could appropriately name at least two things they had learned during their music classes. Many students commented on learning to play their instruments and learning to read notes. Other students mentioned learning solfege syllables, various songs, rhythms, hand signs, how to play scales, and information about various composers and musicians. Overall, students themselves agreed that they had acquired musical skills and knowledge through their participation with ETM.

SAMPLE ASSESSMENT RESULTS, 2005-06





¹³ The Level Three post score for this year (as well as the pre score) was lower than anticipated. After careful review by ETM program supervisors, it was determined that part of the reason for these relatively low scores was the difficulty of the newly-created assessment tool and perhaps an "overly ambitious" approach to setting benchmarks for older students. The following year, benchmarks and assessments were reviewed and revised to be more realistic. A similar process occurred for Level Two benchmarks and assessments because assessment results suggested that they were perhaps not as challenging as they should have been. During the second year of testing, fewer students were assessed due, in part, to the time required for the benchmark and assessment revision process. For the third year of the evaluation, students were tested using a written assessment more closely aligned with the ETM curriculum and revised benchmarks.

OTHER ACADEMIC IMPACTS:

Over the three years of the evaluation, in addition to rating ETM as highly effective in increasing student involvement in the arts and student skills in music, most principals of partner schools also indicated that ETM is effective in supporting student skills that can be applied in other academic subjects.

For example, on evaluation questionnaires completed each spring:

Nearly all principals agree that ETM is effective in helping students learn to pay attention and focus. Most of them also agreed that ETM helps increase student interest in school.

The majority (66%) of parents/ guardians who completed surveys at one of their children's ETM musical performances also believed that ETM had improved their children's ability to pay attention. Parent/guardian survey results also suggest music instruction had motivational impacts on their children as evidenced by the following comments:

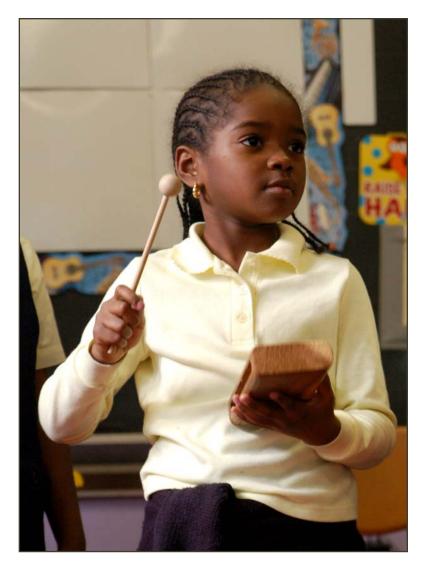
Music class gives my daughter something to look forward to at school.

My son likes to attend the music classes and this makes him more excited about school.

Music seems to calm my daughter and she listens more closely when she is spoken to.

My son has ADHD and this type of activity has helped to provide extra support.

Most classroom teachers (threequarters or more each year of the evaluation) agreed with principals that ETM supported improvement in students' ability to pay attention. Slightly fewer agreed that ETM also helped students become more



interested in school. Their comments include the following:

Children seem more cooperative and motivated to fulfill responsibilities. Music instruction provides a most positive dimension to a child's self-worth and commitment to school. It also builds confidence.

The teaching artist is very well liked by her students. She brings out the best in them. They become eager participants and learners. Everyone experiences success in her class. My students have learned self control and they have a love for music and I attribute that to ETM.

ETM gives children a "spark" in their everyday school life.

Finally, approximately 70% of class-room teachers at ETM schools agreed, over the three years of the evaluation, that ETM supported improvement in students' math skills, literacy skills, and/or skills in other academic areas. Principals also reported strong agreement with this finding. Comments include:

Music threads throughout our curriculum, supporting student skills in math and English Language Arts. If I didn't believe that music supports the academic curriculum, I wouldn't have ETM at this school [Partner School Principal].

School	Change in Average ELA Scale Scores		Change in Average Math Scale Scores	
	ETM School	Peer Schools	ETM School	Peer Schools
School 1	+5.5	-3.8	+15.6	-1.0
School 2	+5.2	+6.9	+1.2	+1.1
School 3	+9.7	+3.4	+2.8	+2.6
School 4	+5.5	+1.6	+1.1	+2.3
School 5	+8.7	+2.3	-9.9	+15.6
School 6	+6.9	+2.5	+2.4	+1.8
School 7	-1.4	+6.2	+2.9	+6.9

Some of my students showed improvement academically and socially because of the ETM program [classroom teacher].

By providing comprehensive and skillsbased instruction, Education Through Music supports improved educational outcomes in English Language Arts (ELA) and Math in its partner schools. The New York City Department of Education allows limited access to standardized test score results by school community. In 2008, average scale scores were posted online for third through fifth graders for 2006, 2007, and 200814. The ETM evaluation included a cohort analysis that tracked average scale scores in ELA and Math for ETM partner schools that began program participation in 2000 or later. This analysis followed the average scores for third graders in 2006, fourth graders in 2007, and fifth graders in 2008, essentially following a cohort of students¹⁵ as they participated in third grade (in 2006) through fifth grade (in 2008).

Analyses show:

- These students, in six of the seven partner schools¹⁶ that began ETM implementation in 2000 or later, **showed improvement in ELA average scale scores** from third through fifth grades.
- In addition, students in five of the seven partner schools showed more improvement in ELA scores than students in comparison schools¹⁷.
- These groups of students, in six of the seven partner schools in the analysis, also

¹⁴ These years coincide with the AEMDD grant and with the strengthening of the ETM model/curriculum in setting educational milestones for students and developing resource manuals for Teaching Artists.

¹⁵ All students in these grades were included in the analysis, not just those who were at the particular schools for all three years.

¹⁶ Schools One through Six in the accompanying table.

¹⁷ For each ETM partner school, six comparison schools were identified through a list of peer schools provided by the New York City Department of Education (NYC DOE). As stated in the NYC DOE Progress Report for each school, "Peer schools are those New York City public schools with a student population most like this school's population." Each school has up to 40 peer schools. For the purpose of this analysis, the first three and last three peer schools on each school's list were used to comprise the group of comparison schools.

showed improvement in average Math scale scores from third through fifth grades.

Students in four of the seven schools showed more improvement¹⁸ in Math scores than students in comparison schools.

During evaluation interviews, a number of principals attributed student gains in standardized test scores, in part, to participation in ETM. Comments include:

Student achievement on standardized tests during 2007-2008 dramatically improved and we were able to move many of our students from the bottom quartiles on both the NYS ELA and Math tests, such that we were able to climb from a "C" to an "A" on our School Report Card. I attribute this to many factors, including the long-term impact of the ETM program on student learning.

In every aspect of our standardized testing, we have made strong gains. We made tremendous progress in our first year of ETM. We had no real music program before. ETM has helped me realize my vision of music for every child. Without ETM, I know that our scores would not have increased like they have.

ETM definitely helped support our increase in test scores. ETM has made a vast improvement in our school culture. It helps children focus, concentrate and listen and build stamina for learning.

Thus, although a randomized, controlled study would have been necessary to show that ETM **caused** improvements in student test scores, this evaluation nevertheless found evidence that suggests **improved test performance** is associated with ETM **program participation**.

DEVELOPMENTAL OUTCOMES:

According to principals, classroom teachers, and parents/guardians, other ETM impacts include positive effects on students' overall development. These include outcomes in the areas of self-confidence and self-esteem and the ability to cooperate and get along with others.

- During the evaluation, principals at ETM schools tended to "strongly agree" that ETM supported growth in student self-confidence and self-esteem, with most classroom teachers (75% or more) also agreeing.
- On 2006-07 Spring Evaluation Questionnaires, principals commented that music instruction helped improve students' abilities to present or speak in front of an audience.
- Most parents (84%) who completed surveys agreed that music classes and musi-



¹⁸ Although for two schools (Schools 2 and 3), scores were extremely close to those of their peer schools.

cal performances helped their children feel better about themselves. Specifically, parents commented that their children were more self-confident, less shy in front of others, and/or were happier or more enthusiastic. Parent remarks include the following:

Music class has helped to open my son's ability to communicate more openly and be more expressive.

Performing on stage and receiving praise has boosted my daughter's confidence.

My son has learned poise, posture, and presence within a group, along with how to cooperate and sing with his classmates to give a good show.

Principals also tended to agree that ETM supported improvements in students' ability to cooperate and get along with each other, with most teachers (80% or more each year) also agreeing.

Most parents/ guardians (81%) agreed that ETM helped their children learn something about social skills and manners.

I love the ETM program. It makes my children feel like more than one of a crowd. They know that they make up part of an important group, and if they are not present, they will be missed. They look forward to concerts, practices and presentations. The program satisfies my concerns for my children's social development.

Results of student surveys and interviews also suggest that music classes were enjoyable and developmentally appropriate experiences. For example, 2006-07 results¹⁹ showed that student attitudes toward music were overwhelmingly favorable, with approximately 97% agreeing they liked music, 81% reporting they liked music "a lot," and 73% reporting they enjoyed their

music classes. Nearly 40% of the students said they had shared what they had learned at home, by playing their instruments and singing songs for their families, with some commenting that they sang for younger brothers or sisters. Students noted that singing, playing instruments, learning new songs, performing, playing musical games, and their teachers were all aspects of music class that made it fun. Their comments include:

I like playing at concerts and playing mellow music.

I get to learn a new instrument, strings, and more.

We sing and learn new things about music.
The music makes it fun.

Our teacher is funny and I love playing the violin.

Other comments suggest that many ETM students were highly engaged by their teaching artists, contributing to their enjoyment and no doubt supporting positive developmental outcomes as previously discussed in this report:

[Our teaching artist] is fun and patient, and mostly what I know is that she loves music more than anything.

He is a great music teacher who takes things seriously and focuses on his job and his students.

He is a fun teacher and he loves to share songs with us.

When you mess up, she doesn't get mad. She just tells you to keep trying.

She is so fun and full of laughter. She is a bubbly person.

I like him because he's fun and he can relate to us.

—From the 2005-06 ETM Evaluation Report

Most of the parents who completed surveys (91%) reported that their children talked about their music classes at home; they talked about their *instruments* and the songs they were learning: how they enjoyed the class; and how participating in the program made them happy. Ninety-four percent of the parents reported their children liked their ETM classes "a lot," with another 5% indicating they liked their classes "a little." Parent comments include: "Music class makes my son think about good things," and "She told us about the songs she was singing with her class and she sang the songs to the whole family." Other parents commented on how much their children "loved" their ETM Teaching Artists.

¹⁹ The results of student surveys and interviews were remarkably similar during the first two years of the evaluation. ETM staff and the evaluator agreed that repeating the process during the third year would probably not produce any new information, so evaluation resources previously used for student surveys and interviews were re-allocated to other areas.

Finally, during the interviewing process, a number of students mentioned music, spring and winter concerts, and singing or playing their instruments when asked to describe the "best thing" about school. One student commented, "The best thing about school this year was learning how to play songs on the violin and how to read notes." Another said the best thing was "the fun times [I had] playing music."

In sum, results of both quantitative and qualitative evaluation strategies suggest that ETM supports a **wide range of student outcomes**. These include positive impacts on music and other learning skills along with positive influences on children's self-confidence and social skills. There also appears to be an association with program participation and improved student performance in Math and English Language Arts.

ETM and School Communities



ETM is part of a comprehensive approach that seeks to improve educational outcomes for all students in disadvantaged urban schools while building support for long-term program sustainability.

Parent and community support is critical to student success and the long-term sustainability of educational programs. As a part of ETM's approach, music teachers and ETM staff present at meetings of parents, school leadership teams, and similar groups involving parents and community leaders, emphasizing the importance of the arts in education and gathering input into ETM program development. Parents are important audiences at student concerts. In addition, many schools participate in the lives of their larger communities by presenting free performances at neighborhood locations.

Most principals report that ETM has an important impact on the culture of their schools. They note that ETM helps build parent support and community involvement:

Parents appreciate the fact that their children are exposed to the arts/music program and express this in the learning environment survey given out by our City government.

Parents continue to value the quality of arts education at our school, exemplified by the ETM program. As a result parents continue to enroll their children in the school with the expectation that we will provide an arts-enriched education in addition to our core curriculum instruction.

Some members of the community have noticed our commitment to arts education and our capacity to sustain partnerships with arts-in-education organizations and, as a result, have provided additional arts-based programs for our students.

Challenges in Program Implementation and Plans for the Future

As with any program involving the numbers of schools and people that ETM serves, there were a number of challenges encountered in program implementation during the three years covered by the AEMDD grant. These are outlined below.

CHALLENGE ONE: Over the three years of the evaluation, some schools showed relatively low participation in ETM professional development offerings. In some cases, ETM staff members were unable to schedule professional development workshops at individual schools because school administrators had difficulty scheduling time for an ETM workshop in the midst of mandates for other topics, or they did not follow through on the communication and organizational tasks required to make the workshops happen. Similarly, although classroom teachers were paid for attending the Saturday ETM Teachers Institute, a couple of schools showed repeatedly low (or no) participation. This lack of participation was mostly due to a breakdown in support from school administrators who were responsible for providing Institute information to their teachers and encouraging them to attend. This challenge is being addressed in the future through increased efforts to stress principals' responsibilities in supporting professional development on an ongoing basis. In addition, ETM is building capacity to support this area by expanding its program staff; new staff member responsibilities

include developing more effective systems of: 1) ongoing communication with school administrators, and 2) marketing/promoting professional development opportunities available from ETM.

CHALLENGE TWO: At times, there were lapses in school leadership support or follow through with ETM program responsibilities. As referenced above, these lapses were associated with lower teacher participation in professional development offerings, which, in turn, was associated with decreases in teacher collaboration and coordination with ETM teaching artists. Overall, in schools where principal support and cooperation were highest, participation in the range of ETM program offerings was higher than in other schools, and curriculum integration activities were more frequent. To address this challenge, ETM is disseminating its new Principal's Manual as a resource to school leaders. ETM also plans to document principal involvement on a systematic basis, to address lapses in responsibilities in a more structured fashion, and to more carefully examine principals' likely levels of support and involvement before accepting schools as ETM partners.

CHALLENGE THREE: All eight schools in the evaluation experienced turnover in one or more of their teaching artists during the three-year period. Turnover was particularly high at schools that also showed lapses in principal support for and

involvement with ETM. In a few cases, ETM ended the employment of teaching artists who had recurring problems with job performance. Other cases involved efforts to find the right match between the specializations and unique skills of teaching artists with the needs and specific requests of partner schools. ETM is currently working to create more sustainable and effective teaching artist/school matches by: 1) providing

more training to teaching artists in the use of new program resources (including the ETM website and a new resource lab at the ETM office); 2) making the teaching artist interview process more comprehensive; 3) strengthening the mentoring provided to teaching artists from experienced ETM program staff; 4) peer observations; and 5) ensuring principals are actively involved in the hiring process.

Challenges in the Evaluation Process

Over the three years of the AEMDD grant, a number of challenges also occurred in the evaluation process. These are described below.

EVALUATION CHALLENGE ONE:

Particularly at the beginning of the AEMDD grant and evaluation, ETM staff experienced challenges in setting appropriate benchmarks (targets for achievement) for students at different levels of learning. Results of skills assessments developed during the year prior to AEMDD funding showed that the ETM curriculum needed significant revision. This included focusing on fewer measurable skills and on skills and activities that were most relevant to State and Federal standards. The revised benchmarks (and the revised assessment) were, for some students, perhaps not as challenging as they should have been, while the benchmarks and assessment for older (Level 3) students were too ambitious. Although these issues were addressed over the course of the AEMDD project and evaluation, this means that the evaluation does not have assessment results that are consistent in content from year to year. Nevertheless, the evaluation was still able to measure knowl-



edge and skill increases among participating students during each school year.

EVALUATION CHALLENGE

TWO: Originally, the evaluation plan included collecting comparison data at schools similar to ETM partner schools with a focus on using schools that were interested in implementing ETM in the future. Schools were identified to serve as comparisons, but efforts to collect principal and teacher surveys at the schools yielded

a very small sample, a sample that was too small to make any meaningful comparisons. In the future, similar efforts to secure comparison data will involve providing incentives to schools for their participation.

EVALUATION CHALLENGE

THREE: The original evaluation plan also included cohort analyses of standardized test scores (for individual students) from the year before the school's ETM participation (as a baseline) through the final academic year addressed by the evaluation (2007-08) to track student performance

over time. Although ETM and the evaluator followed all protocols established by the NYC DOE necessary to access school data, repeated attempts to secure the data from both the NYC DOE and through principals at the individual schools²⁰ failed throughout the three-year period, as did attempts to secure school-level data for years prior to 2005-06 from the NYC DOE. It is hoped that advances in the NYC DOE's online data system will mean that future efforts to perform an appropriate analysis of standardized test results will be possible.

Education Through Music Evaluation Summary

Education Through Music is an award-winning program that provides high quality arts education to students in disadvantaged schools that would otherwise lack comprehensive and sequential music instruction. A three-year evaluation funded by the U.S. Department of Education helped identify the components of the ETM model that make it effective in supporting positive outcomes for students and school communities. These components, and outcomes associated with the ETM model, include the following:

ETM serves schools in low-income, urban neighborhoods that primarily serve African-American and Hispanic students.

Over the three years of the evaluation, ETM served more than 5,000 students per year in eight high-poverty public schools. These schools served high percentages of African-American/Black and Hispanic/ Latino children, including many children whose families were recent immigrants to the U.S. Thus, ETM primarily served students from demographic groups that tend to show higher levels of educational risk than other groups.

ETM provides qualified teaching artists to serve on staff at partner schools who teach a comprehensive and skills-based music curriculum specifically developed to support State and Federal educational standards.

ETM works in partnership with lowincome public schools to provide weekly or twice-weekly music instruction throughout the academic year to all students, regardless of their ability levels or special education status. Without ETM, the schools served by the program would not have the resourc-

 $^{^{20}}$ When principals generated reports of student standardized test scores from the NYC DOE data system, records for most students were completely blank.

es to provide a comprehensive, standardsbased music curriculum to their students.

ETM develops successful, longterm partnerships with lowincome schools that are made possible through ongoing principal involvement and leadership development.

ETM is unique as a school-based arts education program that functions as a separate not-for-profit while stressing accountability and responsiveness to school leadership. For the ETM model to be effective, it is vital that the program is administered in a true partnership with school administration and teaching faculty. Relationships between ETM and partner school staff tend to be mutually supportive and effective in creating partnerships that are often out of the reach of other external organizations working in today's public schools. The support and

involvement of school leadership is a key aspect of the program's success in providing skills-based instruction for all students.

ETM provides specialized training and professional development to both teaching artists and classroom teachers that strengthen partnerships and assist educators in implementing strategies to support instructional integration.

The ETM approach to professional development is another feature that sets the program apart from other external organizations serving public schools. ETM places a special emphasis not only on preparing their teaching artists to be effective in classroom instruction, but also in supporting classroom teachers to enhance their own teaching by incorporating the arts across the curriculum. Principals and teachers report ETM professional development



opportunities are effective in achieving a range of learning objectives.

One of the hallmarks of the Education Through Music program is the emphasis on collaboration and coordination among teaching artists, music faculty, and academic (classroom) teachers.

Through ongoing professional development seminars, workshops, and the development of other resources, ETM has supported teaching artists and music teachers in enhancing the quality of instruction and supporting classroom teachers in using music to enhance student learning in other areas. Over the course of the evaluation, the number of academic teachers in ETM partner schools who reported using music and the other arts to enrich their classroom instruction increased significantly. This means that children in these schools experienced music as an important part of their overall education.

ETM believes that an effective music program is accountable for producing measurable student outcomes in skills and knowledge. Through the effective implementation of the ETM model, the program supports the achievement of positive student outcomes in music, academic skills, and youth development.

Overall, annual pre/post music assessments show that students in ETM schools make measurable progress toward meet-

ing Federal and State standards in the arts. In terms of other academic impacts, principals and classroom teachers indicate that ETM is effective in supporting student skills that can be applied in other academic subjects. These skills include the ability to pay attention and focus.

By providing comprehensive and skills-based instruction, Education Through Music supports improved outcomes on standardized tests in English Language Arts (ELA) and Math in its partner schools. From 2006 to 2008, most ETM schools not only showed improvement in overall test scores but also outperformed comparison schools.

ETM also supports students' overall development. This includes supporting outcomes in the areas of self-confidence and self-esteem and the ability to cooperate and get along with others.

In sum, Education Through Music is based on an effective program model that supports a wide range of positive impacts in disadvantaged schools that serve high percentages of students at educational risk. This evaluation found that ETM answers the call to provide "regular, systematic programs of sequential instruction leading to yearly specified outcomes²¹," including important gains in student skills and knowledge. The evaluation also found that ETM goes beyond the scope of many arts education programs by forming true, mutually-accountable partnerships with school communities, supporting the inclusion of music as a core component of the academic curriculum and promoting the development of the whole child.

²¹ See the quote from Paul Lehman, p. 6.

About LS Associates:

LS Associates is a consulting firm that specializes in the evaluation of arts education and outreach programs. Leslie Scheuler, PhD, President of LS Associates, has completed research and evaluation projects for the U.S. Department of State, the John S. and James L. Knight Foundation, the Missouri Alliance for Arts Education, the American Ballroom Theatre, the New York Philharmonic, The Pulitzer Foundation, and numerous arts organizations across the United States.



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Model and Evaluation Summary of Education Through Music, Inc. www.ETMonline.org