Tuesday, June 01, 2004

Holyoke Learning Through Music and Technology
Pilot Program
Mid Term Analysis

Pilot Program Goal

The goal for the Holyoke Learning Through Music and Technology Pilot Program was to determine the perceived value of the program by the Holyoke students and community organizations. MassImpact funded the nine week pilot program in order to evaluate the continued funding for an expanded summer program based on the Holyoke community embracing and committing to the pilot, and the student outcomes.

Introduction and Theoretical Framework

Performing, creating and responding to music are the fundamental music processes in which humans engage. Students learn by doing. Singing, playing instruments, moving to music and creating music enable people to acquire musical skills and knowledge that can be developed in no other way. Learning to read and notate music gives them a skill with which to explore music independently and with others. Listening to, analyzing and evaluating music are important building blocks of musical learning. Further, to participate fully in a diverse and global society, students must understand their own historical and cultural heritage as well as those of others within their communities and beyond. Because music is a basic expression of human culture, every student should have access to a balanced, comprehensive and rewarding program of study in music.

In recent years, understanding of the value of music in education has begun to change. Parents, researchers and educators now agree that the study of music is valuable for students in a multitude of ways that extend past the scope of learning how to sing or play an instrument for its own sake. Musical study is now recognized for its impact on learning in other areas of the core curriculum as well as for its contribution to a higher quality school or community learning environment. Music and other arts integration strategies are now a part of new national standards of excellence in public education.

Drawing on these trends in education and research, the Learning Community Group offers the Learning Through Music and Technology program. Students of all ages and from diverse backgrounds gain exposure and access to cutting-edge digital technologies, effective pedagogical practices and chances for personal growth and success that extend beyond classroom walls and allotted instructional time.
Learning Through Music and Technology

Utilizing a variety of computer-based and hand-held composing and editing tools including Cubase and the Madplayer, the Learning Through Music and Technology program designs and implements original lesson plans, performance projects and assessments that students take pride in and enjoy. Program participants learn how to read and compose musical notation, create and edit digital music and perform their own compositions. Students can create their own original music in a variety of genres with the Madplayer and can then record their own vocal performances over the musical score if they desire. As a result, in addition to learning about music theory, program participants can record their own songs and albums, become DJs and producers, singers and rappers, learners and teachers. Participating in these programs also offers the students opportunities to translate learned skills in ways that promote chances for academic success across subject areas, active collaboration with peers, trained professionals and members of the community. Furthermore, the skills learned in these programs are highly marketable in many fields of employment.

Data Analysis and Preliminary Findings

After only six instructional sessions in a Learning Through Music and Technology program, students have demonstrated impressive proficiency in how to compose and produce music on their Madplayers, how to read and perform rhythms, how to read musical notation and how to interface digital technologies that are computer-based and independent of computers. Preliminary assessment data indicates that the vast majority of students scored at least seventy-five to eighty-five percent accurately when asked to read and decode rhythmic notation and also when asked to listen to a rhythm and then to identify it in written form. It is important to note that most of these students had little if any exposure to formal musical training, particularly in reading music. The three students who scored the highest cumulatively on the initial assessment all indicated that they had never learned to read music prior to studying in the Learning Through Music and Technology program. Student success was consistent when analyzing assessment results across gender and age groups. These results can be viewed in the chart below.
### Initial Assessment Results

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<thead>
<tr>
<th>Group #</th>
<th>Group Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Females: Ages 10-13</td>
</tr>
<tr>
<td>2</td>
<td>Males: Ages 10-13</td>
</tr>
<tr>
<td>3</td>
<td>Females: Ages 14-18</td>
</tr>
<tr>
<td>4</td>
<td>Males: Ages 14-18</td>
</tr>
<tr>
<td>5</td>
<td>Females: Ages 19 and Over</td>
</tr>
<tr>
<td>6</td>
<td>Males: Ages 19 and Over</td>
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During the remaining three weeks of this program, students will learn how to operate digital audio workstations and how to coordinate multiple digital devices. Through this synthesis of technological tools, students will acquire advanced musical editing skills that will culminate in the production of a compact disc recording and a live performance in front of peers, families and members of the community. Thus, in addition to the acquisition and application of new skills, students who complete the Learning Through Music and Technology program gain access to experiences and materials that are tangible, rewarding and applicable to future success.

**Summary**

At the six week juncture over 80 students have participated in the pilot program.

It is clear from the preceding analysis that students have achieved significant outcomes and embraced the pilot program. Students with no previous music experience are decoding rhythmic patterns and writing musical notation. Students with no previous music composition experience are creating their own compositions utilizing the MadPlayers. Students are composing in the computer lab and outside of the lab utilizing their MadPlayers. Parents report that their children are constantly composing and performing their compositions and that the MadPlayer has replaced Gameboys and TV in many instances. Parents also report that their children are finding impromptu ways to interface their MadPlayer to stereo equipment such as connecting it to a car stereo and holding an impromptu performance in a grocery parking lot. Students with little propensity to write are writing lyrics and poetry to accompany their compositions. Students with little propensity to stand up in front of a classroom and demonstrate their knowledge do so to demonstrate their notation comprehension. Students with little propensity to perform in front of an audience perform their compositions in class. Students with little access or experience with advanced computer applications are using professional-level music software and hardware to compose and refine their own musical creations.

Students and the Holyoke community have embraced the Learning Through Music and Technology program and achieved significant outcomes. Fourteen community organizations have expressed interest in participating in the summer program.

This program has given students a perspective into several fields including music composition, music production, and digital media production. This program has also spurred student’s interest in core curricular areas such as writing lyrics and poetry, mathematics, music and social studies.