Recent trends in education and research recognize musical study 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. Drawing on these trends, 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.

Utilizing a variety of hand-held composing and computer-based editing tools including the Madplayer and Cubase, 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 offers the students opportunities to translate learned skills in ways that promote chances for academic success across subject areas. The program also encourages active collaboration among peers, trained professionals and members of the community. Furthermore, the skills learned in these programs are marketable in many fields of employment.

Analysis of the final assessments and surveys reveal positive and important results for the participants in the Learning Community Group’s Learning Through Music and Technology program (LTMT) in Holyoke, Massachusetts. The nine-week course taught integrated musical, compositional, and computer skills to students ranging from seven-year-old males to females in their forties. Participants worked collaboratively with LCG staff, friends, and family members in community centers, at home, and even in store parking lots on acquiring and demonstrating newfound ways to create and communicate.

Across gender and age groups, students demonstrated high levels of proficiency in decoding and identifying rhythmic notations and structures. These results were reflected in both the midterm and final assessments. Among all of the participants who completed the final assessment, 86% scored at least 80% accurately on the sections requiring the ability to read, decode and identify rhythms and musical notation. The vast majority of the students scored correctly in the range of 90% to 100%.
Students also demonstrated that they learned about technologically advanced musical software and ways to interface different types of digital technologies effectively. In combination, these technological tools can enable students to become artists, sound engineers and music producers simultaneously and independently. This training and integration was coupled with curriculum focused on rudimentary levels of music theory that further bolstered student potential artistically and academically.

Responses to the survey questions revealed high levels of overall satisfaction with the LTMT program. Students overwhelmingly reported that they enjoyed learning how to make their own music and sharing it with others. A ten-year-old girl wrote, “My favorite part about the studio class is the fact that we got to produce our own music with our own lyrics and thoughts.” In addition to individual enjoyment and learning, family members participated in the program together. Relationships included siblings as well as parents and children. One woman wrote that she looked forward to creating music with her children on the computer after the class ended.

Academically, students’ success in decoding and identifying rhythmic notation correlates with algebraic understanding as evidenced by students’ abilities to distinguish note types and patterns accurately. Students demonstrated this knowledge verbally in games that encouraged friendly competition among peers, on written assessments and in their original compositions created with the Madplayers.

Many of the students wrote, edited and revised original lyrics that were then sung or rapped into their own musical compositions. In response to whether participants enjoyed the writing process, a twelve-year-old boy answered, “I did enjoy the writing and singing. It is fun.” This type of activity is not only enjoyable in its own right, but a clear link to the promotion of interest and advancement in the areas of English and Language Arts.

Exploring and creating in various musical styles also gives participants insight into a wealth of world cultures, promoting curiosity and tolerance that leads to increased interest in the area of social studies. Students reported that program participation introduced them to styles of music such as rock-and-roll and types of Asian music that led them to want to learn more about these styles and to compose in these genres.

Further data analysis revealed that many participants showed friends and family members how to use their Madplayers, finding high levels of success and satisfaction in the teaching process. Several students pointed to the experience of using the Madplayer as a motivation to learn how to play acoustic instruments such as the piano, guitar, bass and drums in the future.

In summary, the overwhelming majority of the students reported that they acquired high levels of knowledge concerning computer applications, digital technologies and music theory. Student responses also demonstrated widespread desire to continue to learn about music and technology, hopefully in future programs. Forty-seven percent of the participants answered that they definitely wanted to participate in another Learning Through Music and Technology program in the future if offered the chance. Overall, the
vast majority of students indicated that they were interested in pursuing future LTMT courses or at least would consider it strongly. An extremely low number of students expressed little or no interest in future LTMT programs. A complete diagram can be viewed below. On a scale of 1-5, 5 expresses that a student would definitely pursue future LTMT course offerings and 1 expresses no desire. Additional information about the Holyoke Learning Through Music and Technology program will soon be available in the form of video and audio recordings on the LCG website at www.thelcg.com and on the LCG’s online radio station, WWCBN. Please visit our website for details.