



2015-2016 Innovation Grant Report

Middle and Upper School Music

Project Inspiration

The impetus to apply for the Innovation Grant came from a multi-year, collaborative curricular review of the choral and general music curricula in the Lower, Middle, and Upper Schools. In partnership with the Director of Lower School Music, Elizabeth Wooster, we developed a comprehensive approach to music education that includes six elements: move, play, listen, sing, read, and create. By evaluating students at various grade levels, we are able to incorporate each of these elements into both the general and performance classrooms alike.



As a result of this renewed focus, music literacy became a fundamental point of development for students. In addition the many elements that were already in place, such as the Global Connections



curriculum and the many choral performances, we discussed ways to implement more rigorous and thorough musical literacy skills that would include composition and performance. As we explored various ways to incorporate this, we discovered the many programs available for the iPad. Although much of this technology is in its infancy, we saw an opportunity to set Brimmer apart from other schools in the

way that music is taught, and to enhance student engagement on a multitude of levels.

Project Goals

One of the primary goals of the project was to purchase of licenses for the iPad applications *Garageband* and *Notion*. These two programs are among the most sophisticated and advanced composition applications available and allow students to explore a wide variety of skills. Since students work independently on projects, this allows those with more musical experience to create more advanced musical works, while those who may be less familiar have the opportunity to learn and develop these skills. As the most advanced of the Higher Order Thinking Skills, creating an original musical composition highlights an extremely developed musical skill set and provides students with a comprehensive skill set that can be applied to a multitude of additional subjects.



In addition to the composition software, another essential component to the proposal was to install state-of-the-art recording and audio equipment in the Middle and Upper School Music Studio, Almy



82. This included the installation of technologically-advanced speakers, an amplifier, a high-lumen projector, microphones, and a digital recorder. In combination with both *Notion* and *GarageBand* this allows students to analyze, revise, and perform music in a much more advanced and nuanced manner, which serves to accelerate their listening

and compositional skills. This also allows Brimmer's performing ensembles to watch, listen to, and analyze performances for attributes that were successful as well as elements that should be changed in future performances.

Project Implementation

As the music software was able to be distributed quickly, I was able to implement a significant composition unit in the Middle School's Global Connections Unit immediately upon receipt of the grant. Students in grades six, seven, and eight primarily utilized *GarageBand* to further understand the stylistic tendencies of the music of Asia, which was the focus of the unit in the Fall 2015 semester. Students created their projects in layers, exploring the pre-recorded loops that the software provides, as well as creating original



melodic and rhythmic elements. The final element of this project included a combination of the skills that the students developed. As one can see in the example above, students created a multi-layered composition, which included both pre-recorded and original elements. This was an Asian-inspired work, which included authentic styles, instruments, and loops from China, Japan, Singapore,



India, and many others. Selected students then presented their works, along with a composer's forum, at the Global Connections exhibitions in December.

As the year progressed, students in grades four through eight learned the basic music literacy skills necessary

to complete a composition assignment using *Notion*. This included solfege skills, rhythm syllables, and other tools which are used to access notation. The projects completed by students were approached in a layered fashion, with students in grades four and five focusing on melody and rhythm, while students in the Middle School focused not only on those concepts, but that of harmony and chord structure as well. The pictures below highlight the scope and sequence of this project, beginning with a fifth grade composition to that of a sixth grade student, and finally to that of an eighth grade students with harmony, chord symbols, melody, and rhythm. Again, this highlights the progression of skills as students' skills develop throughout their time at Brimmer and is among the most technology-focused and rigorous general music curricula.

Edan's Composition
In G Major Edan Zim, May 2016

The image shows a musical score for a piano piece titled "Edan's Composition" in G Major, composed by Edan Zim in May 2016. The score is written for piano (Piano) and includes a melody line and a bass line. The key signature is one sharp (F#), and the time signature is 4/4. The score includes dynamic markings such as *p* (piano) and *mp* (mezzo-piano). There are also some unusual markings like "5-Gods" and "D.C. of Gods".

Example One: Grade Five

Music Composition
Subtitle Composer

The image shows a musical score for a piece titled "Music Composition" with a subtitle and a composer's name. The score is written for Part and Piano (Pc.). The key signature is one sharp (F#), and the time signature is 4/4. The score includes chord symbols: G, A7, D, Bm, and D. A section of the bass line is highlighted in green.

Example Two: Grade Six

The image displays a musical score for a piece titled "Example 3: Grade Eight". The score is written in 4/4 time with a key signature of one sharp (F#). It consists of four systems of staves:

- System 1:** Labeled "Part" and "Chord". The "Part" staff begins with a tempo marking of ♩ = 100 and a dynamic marking of *fff*. The "Chord" staff provides accompaniment. Chord symbols above the first staff are Bm, G, A, Bm, G, G, F#m, and D.
- System 2:** Labeled "Pt." and "Chords". The "Pt." staff starts at measure 5. Chord symbols above the second staff are G, D, A, Bm, Bm, and D.
- System 3:** Labeled "Pt." and "Chords". The "Pt." staff starts at measure 8. Chord symbols above the third staff are Bm, D, and D.

Example 3: Grade Eight

In addition to the general music curriculum, the choral ensembles, May Chorale and Greenline, offered a record number of performances throughout the 2015-2016 school year. This included performances at Brimmer's Homecoming games, Thanksgiving Concert, Holiday Concert, The Prudential Center, and Spring Concert, among others. In addition, May Chorale won first place in



their division at the Music in the Parks competition; a first for this ensemble in School history. Much of this is thanks to the installation of state-of-the-art sound equipment that allowed for a thorough and rigorous evaluation of performances throughout the year. Although

evaluation has been the keystone of the pedagogy during my tenure at Brimmer, this equipment has allowed a much more in-depth study and has made Almy 82 into a technologically-sophisticated and acoustically-enhanced music performance space. Due to the specialized nature of the equipment, the recording technology will need to be installed in the summer of 2016, but will allow for the immediate recording and playback of any performance in the space. This will allow for an even more nuanced and thorough level of evaluation and will serve the more than 120 students in the choral department exceedingly well.

Project Impact

The 2015-2016 Innovation Grant has truly revolutionized how music is taught at Brimmer. In the nine months since the Grant's implementation, it has impacted nearly 200 students in all three divisions of the School. The scope and sequence of the implementation will allow this pedagogy to remain at the core of music literacy development and will serve as a bridge between the Lower and Middle Schools.

Additionally, Brimmer will offer two new courses in the 2016-2017 School year, thanks to the goals accomplished through the Innovation Grant this year. These offerings will be collaborative classes that connect music, technology, and global studies. The course *Innovation in Music Theory, Composition, and Technology* in particular, will benefit from a completely electronic and interactive textbook, as well as the use of *Notion* and *Garageband*. This is yet another factor in what sets Brimmer apart from any other institution in the country as one of the most innovative and cutting-edge music programs. Since the project was able



to be quickly implemented into the curriculum, I have already seen significant results from the Grant, and look forward to the continued development of the curriculum in the years to come.

Grant Expenditures

Item	Cost Per Unit	Total Cost
<i>Garageband</i>	\$2.49	\$49.80
<i>Notion</i>	\$7.49	\$1,198.40
Projector	\$999.00	\$999.00
Speaker	\$179.00	\$358.00
Amplifier	\$349.00	\$349.00
Case	\$641.00	\$641.00
Mixer	\$249.00	\$249.00
Installation	\$250.00	\$250.00
Shipping	\$200.00	\$200.00
Audio Cable	\$53.00	\$53.00
Recording Microphones	\$349.00	\$698.00
Digital Recorder	\$739.00	\$739.00
<u>TOTAL</u>	<u>TOTAL</u>	<u>\$5,784.20</u>

Respectfully Submitted,

Frank Van Atta
 Director of Middle and Upper School Music
 The Brimmer and May School