

Welcome to MIDI in the Music Classroom

*MMEA Conference
May 20, 2011*



This is your
“Ticket In”

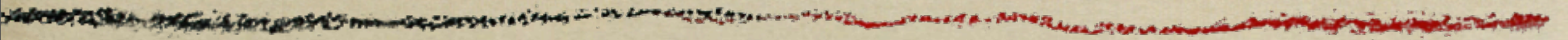
☞ *Think of one thing you know about MIDI*
(this is not a test!)

What is it?

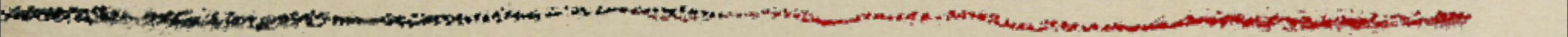
I think I know, but...



Think of this...

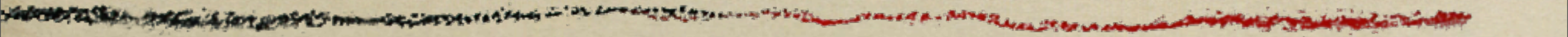


Think of this...



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- Think of MIDI as being like sheet music.
- Sheet music is a method for conveying information about how a song should be performed. In order to hear a piece of sheet music, you must give it to a musician to play on an instrument.
- Similarly, before you can hear a MIDI file, you must send it to a device that is capable of generating sound. This device, whether a synthesizer, soundcard or external sound module, 'sight-reads' the MIDI instructions and plays the appropriate notes.

How can you use MIDI in your classroom?



Image retrieved: (Anzalone, 2010)

How to Use Sequencers in Your Music Classroom

There are three great examples which every music teacher can use MIDI Sequencers in their classroom:



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There are three great examples which every music teacher can use MIDI Sequencers in their classroom:

•🎵• Accompanying



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- 🎵• Accompanying
- 🎵• CAI (Computer Assisted Instruction)



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- 🎵• CAI (Computer Assisted Instruction)
- 🎵• Composition



Sequencers & Accompanying

Every music teacher has programs or pageants to present. You can record the program on a MIDI Sequencer. Then you can play it back for rehearsals and the performance. You could also make a tape recording for your students to practice at home.

If you are using a piano accompaniment, you can add other sounds when you record it for a program. You can also add other instruments like percussion or sound effects to spice up the accompaniment.

If you are using a composition that is well known, it will be on the internet as a MIDI file. You can download the MIDI file of this song and use it for your concert.

If you have some piano skills you can record it yourself instead of paying someone else to play for you.

Sequencers vs. CDs

There are many advantages that a MIDI Sequencer has over a standard CD player.

A MIDI Sequencer can cut out parts from a sequence, it can change tempo, it can transpose parts, it can change instruments, it can add or take out sections of music and it can record your own music for a program or concert.

You can't do any of these on a standard CD player!

Sequencers & CAI

(Computer Assisted Instruction)

You can teach form using a MIDI Sequencer. If you wanted to teach form you could have one student play an A section then have another student record a B section then you could copy and paste the A section after the B section.

The MIDI Sequencer can help you teach aural skills. You can record scales, intervals and chords in the MIDI Sequencer. You could copy and paste any of these and have a virtual aural skills teacher play them back for your class or with headphones for an advanced student.

Sequencers & Composition

One of the best ways to teach composition is to improvise. I have used a MIDI keyboard connected to my computer sequencer. I teach my students how to use the "black notes" of a piano to play a pentatonic scale.

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Image retrieved from: www.theguitarlesson.com

How does MIDI relate to the National Standards?

Standard 1

Singing, alone and with others, a varied repertoire of music

- MIDI is a very powerful tool to help students with singing because a MIDI track can serve as a guide to a vocal line and can be turned on or off and adjusted in volume, depending on how much help a student needs.
- You can compose harmony parts yourself and teach students to sing them.



Standard 1

Singing, alone and with others, a varied repertoire of music

- If you wish to have students sing multiple parts, you can add additional parts to a sequence or adapt existing parts.
- For example, in a given sequence you may choose to turn off all but the lead and bass line parts. Then you can transpose the bass line to a more suitable octave for singing. By turning tracks on and off, you can help one student learn to sing the lead and another the bass line.
- When students are comfortable with their parts, turn off the MIDI guide tracks.

Standard 1

Singing, alone and with others, a varied repertoire of music

- A MIDI project can be based on a well-known song.
 - Find a suitable musical part for singing
 - Write lyrics with the help of the class,
 - or sequence a melodic line over a favorite groove section.



Standard 2

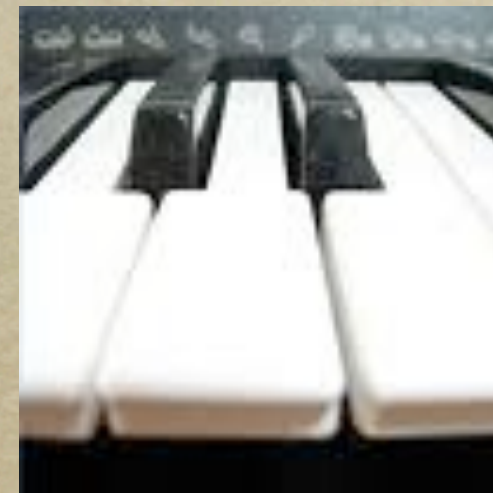
Performing on instruments. alone and with others, a varied repertoire of music.

- 🎵 To teach students a sequenced bass line:
 - 🎵 turn off the other tracks and instruct students to study the bass line in the notation window as they listen.
 - 🎵 When students are able to play the bass line themselves (either on a real bass or on a record-enabled track assigned to a suitable bass tone color), turn off the pre-sequenced bass line, and let students play along with the sequence (with all other tracks turned back on.)
- 🎵 Students can play accompaniment parts by locating a section of the sequence that has suitable harmonic activity.
- 🎵 You can also turn off as many MIDI tracks as necessary to increase the variety of possibilities. For example, if all but the bass line and percussion tracks are turned off, then a wide palette of harmonic accompaniment options exists.

Standard 3

Improvising melodies, variations, and accompaniments.

- 🎵 One way to encourage improvisation is to have students echo-respond a pre-sequenced call.
 - 🎵 They can gradually transform their responses into improvisations by:
 - 🎵 changing the last note of a phrase
 - 🎵 modifying the rhythm slightly
 - 🎵 redefining the melodic contour
- 🎵 Keep in mind that sections of the sequence can be loop-played and tracks turned off at any point while the sequence is playing. This allows you to loop-play a specific call idea and have students echo-respond and then improv-respond.
- 🎵 While the sequence is still playing, you can turn off the call track and let students improvise fluidly and constantly.



Standard 4

Composing and arranging music within specified guidelines

- Use the Pentatonic scale as a basis. Expand on a composition unit, normally done on paper and provide MIDI based projects instead.
- Activities that involve remixing also offer arrangement opportunities.



Standard 5

Reading and Notating Music

- Using notation or sequencing software, you will find many opportunities to work with music notation.
- Challenge students to make a notation of something they observe in the piano-roll window or in the soundwave window to reinforce reading and notating skills .



Standard 6

Listening to, analyzing and describing music

- 🎵 Students can identify form in a sequenced example
- 🎵 Finding the right tempo - analyze what tempo is “too fast” for accurate singing
- 🎵 What kind of action might be happening in a movie by the sound of this loop?
- 🎵 Describe the instrumentation that you hear. What kind of situation would it be suitable for?

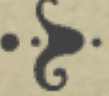

Standard 7

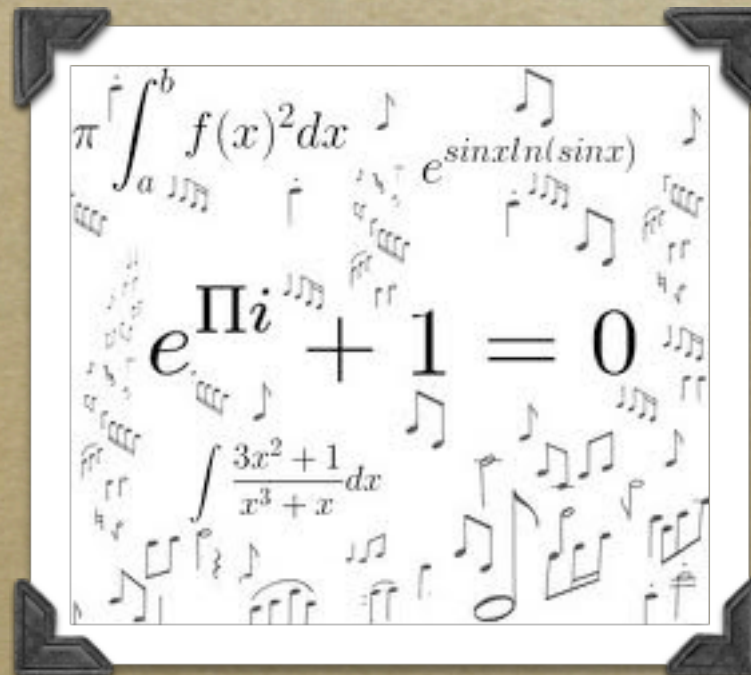
Evaluating music and music performances

- Because any MIDI performance can be recorded, it is quite easy to evaluate the performances.
- If your sequencer allows you to record digital audio as well as MIDI-or if you have a multitrack recorder integrated with your MIDI system- then you can record performances on non-MIDI instruments as well.
- **Call and Improv Respond** and other related performance activities offer excellent opportunities to record and evaluate performances.

Standard 8

Understanding relationships between music, the other arts, and content areas outside the arts

-  Drama- and movement-oriented activities help integrate other aspects of learning with music education.
-  Relate the aspects of math to the length of sections



Standard 9

Understanding music in relation to history and culture

- 🎵 MIDI projects cover a wide variety of styles from a range of places, cultures, and times.
- 🎵 As you experiment with alternate tone colors in a MIDI project, consider using tone colors from other cultures, such as those located in patches 105 through 112.
- 🎵 Locate images of the original instruments so that students can visually relate the picture of the instrument with the MIDI tone color emulation they are working with.
- 🎵 The realism of tone colors depends largely on the sound module your MIDI system uses.

Links

<http://www.midi.org/aboutmidi/tutorials.php>

<http://tinyurl.com/29fflw7>

http://www.pgmusic.com/tutorial_midi2.htm

<http://www.hickorytech.net/~cshirk/k-12music/midi.html>

<http://tinyurl.com/ywmxd>

<http://tinyurl.com/25cj5l5>

<http://www.1manband.nl/>

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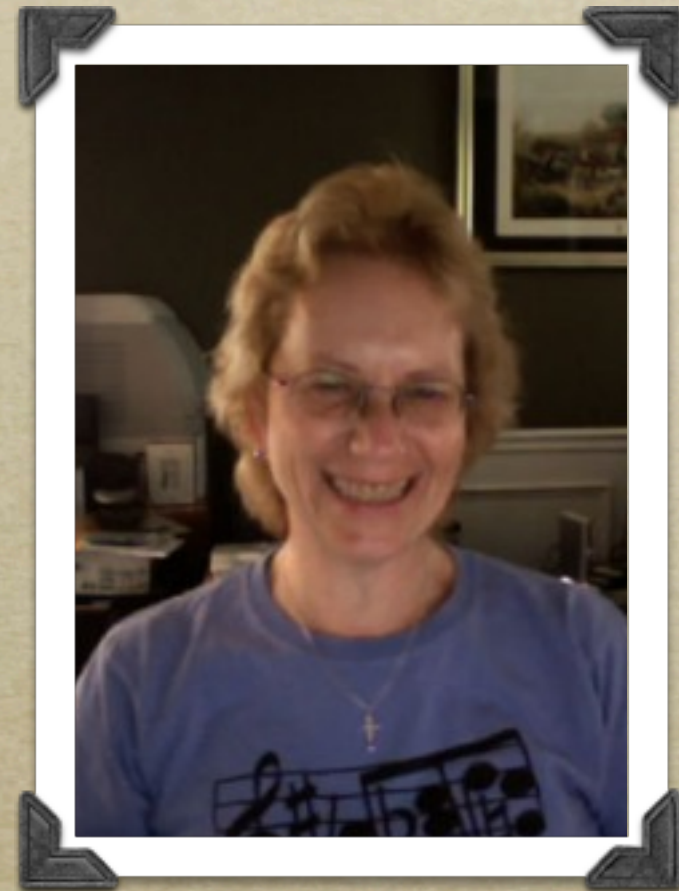
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Thank You!

This session and others can
be downloaded from:

bbpackales.wordpress.com



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