

## *Multimedia & Composition in the Music Classroom*

Barbara Freedman

Author of *Teaching Music Through Composition: A Curriculum Using Technology*

Oxford University Press, 2013

<http://MusicEdTech.com>

“Teach music. The technology will follow.”



MUSICEDTECH.COM

### **Definitions:**

- **MIDI** stands for Musical Instrument Digital Interface. It is a standard digital code developed by instrument manufacturers that allows electronic instruments to communicate with each other and with a computer. Today's sequencers can convert MIDI information into audible sounds, standard music notation and even into a sound wave (audio).
- **Audio** is a recording of a live instrument, voice or any sound.
- A **region** is an encapsulated area where musical information, MIDI, or audio can be captured and then copied, pasted, moved, manipulated and looped.
- **Loops** are prerecorded regions that come with software or are user created.
- **Looping** is a programs ability to automatically copy and paste regions

### **Audio Tools and Mixing Basic Definitions:**

- Panning: moving sound across a linear spectrum, right to left ear
- EQ: equalization: manipulation of specific frequencies or ranges of frequencies
- Frequency: how often sound waves per second, measured in Hertz or kiloHertz (Hz or kHz), pitch
- Amplitude: Height of the sound wave, volume
- Compression: reduction of amplitude (volume) of sound waves above a specified level. Reduces dynamic contract so louder sections can be made softer and softer sections can be made louder.
- Reverb (reverberation): as an effect, simulates a room

### **Digital Resources for Projects:**

- Movies and video: <http://archive.org>
- Audio and Speeches: [www.americanrhetoric.com/](http://www.americanrhetoric.com/)
- Library of Congress: <http://www.loc.gov/library/libarch-digital.html>
- World Digital Library: <http://www.wdl.org/en/>
- Poetry 180: <http://www.loc.gov/poetry/180/>

### **Articles:**

- Blog with lots of info and resources! Great for students, too: <http://flypaper.soundfly.com>
- Tips on Clarifying Your Sonic Imagery: [http://tweakheadz.com/pan\\_control.htm](http://tweakheadz.com/pan_control.htm)
- The Music Mixing Process: <http://www.music-production-guide.com/music-mixing.html>
- The Art of Panning: <http://www.teachmeaudio.com/production/mixing/4-techniques/11-art-of-panning>
- Basic Guide to Understanding EQ: <https://www.bhphotovideo.com/c/find/newsLetter/Understanding-EQ.jsp>
- Learn EQ by PreSonus: <http://www.prenonus.com/community/Learn/Equalizer-Terms-and-Tips>
- Dynamics Processing by PreSonus: <http://www.prenonus.com/community/Learn/Dynamics-Processing-Terms-and-Tips>

**Books:**

- *The Craft of Contemporary Commercial Music* by Greg McCandless and Daniel McIntyre published by Routledge
- *Recording Tips for Music Educators* by Ronald E. Kearns published by Oxford University Press
- *Mixing and Mastering in the Box: The Guide to Making Great Mixes and Final Masters on Your Computer* by Steve Savage published by Oxford University Press
- *The Art of Mixing: A Visual Guide to Recording, Engineering, and Production* by David Gibson published by ArtistPro Publishing
- *Audio Mixing Boot Camp: Hands-On Basic Training for Musicians (Book & DVD)* by Bobby Owsinski published by Alfred Publishing

**Courses:**

- Berklee School of Music: <http://bit.ly/10PJvJ5>
- Dubspot: <http://www.dubspot.com/>
- Point Blank: <http://www.pointblanklondon.com/>
- Macprovideo.com: <http://www.macprovideo.com>

**Other Resources for Technology in Music Education:**

- TI:ME: Technology Institute for Music Education <http://www.ti-me.org/>
- Midnight Music (Katie Wardrobe) <http://midnightmusic.com.au>
- Music Teachers Facebook Group: <https://www.facebook.com/groups/musicpln/>
- Teaching Music Through Composition Facebook Group: <https://www.facebook.com/groups/597014760343702/>
- Artist House Music <http://www.artistshousemusic.org/>

**Download the resources from this session at:**  
**<http://musicedtech.com/tmea-2018/>**

**Please contact me for the following services:****Consulting:**

- Curriculum development
- Building and outfitting labs & studios

**Professional development, faculty workshops, and online courses:**

- Technology integration training for general education teachers including Google products integration and Learning Management Systems including Schoology, Canvas, Moodle, and Blackboard
- Technology integration and training for music teachers including specific software
- Music composition for 5 – 12 educators
- Audio engineering for music educators
- Please ask me to develop a workshop for your district's needs