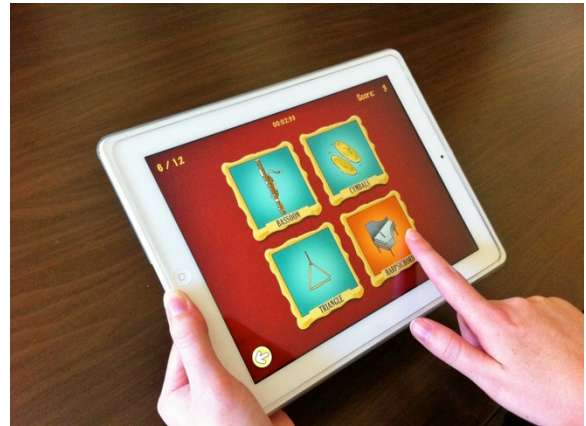
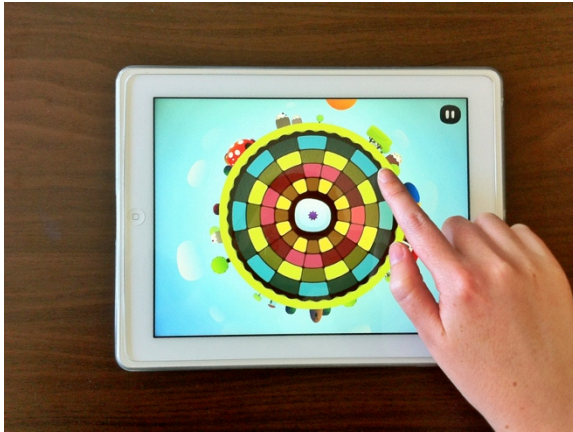


iPad Technology in the Music Classroom

*CMEA Conference 2015, Saturday July 11th @ 1:30pm
Winnipeg, MA*



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The Basics:

- The terms “**free**” and “**good**” are mutually exclusive, except in rare cases
- You can **sync an app to multiple iPads**, if they are all signed in to the same iTunes Account
 - I recommend enabling iCloud on all iPads, and syncing them to the same account
 - Enable “Automatic App Downloads” from Settings → iTunes & App Store
- **In-App Purchases:**
 - Within the app you may purchase more features, such as sounds, instruments, levels to a game, etc., or
 - The app may have limited capabilities until “full version” is unlocked via a purchase, or
 - The app may be supported by annoying ads that can be removed with a one-time purchase
- **App Updates:**
 - Apps are constantly updated. This can be a good thing, but you have to be prepared to adapt to change. Updates often introduce a requested feature, or fix a bug. Rarely it completely changes the app or introduces ads, for example.
- Need **Help**?
 - Google your problem in the form of a question. Most often, the first link is someone else answering your question with a step-by-step resolution. Apple has a fantastic user-generated support center.
 - Turn the device on, wait 10 seconds, and turn it on again. iPads are not meant to be turned on 24/7/365.
 - Ask a student. ☺ They will be more than happy to help, and will take pride in finding a solution.
- Why aren't there **more apps for classroom use** (e.g.: solfege)?
 - As stated at the start, most developers will churn out apps for profit, not for education. Most kids' music apps are:
 - Just a video game veiled in light educational content, meant to keep the kids busy in the back seat between soccer practices
 - Aimed at piano students studying for exams
 - Developed for individual, personal use. As such, there may not be chapters, but the user progresses through achievements and unlocks
 - Designed to create music without any musical knowledge
- It is up to **you** to find what resonates best with your **classroom**, your **teaching style**, your **unit plans**, and your **students' learning needs**.

Connectivity:

- There are many peripherals you can connect, such as **microphones, guitar inputs, and MIDI keyboards**. If the app supports such devices (GarageBand supports all three), then make sure you **connect in the peripheral first** then launch the app.
 - Quality is congruent to cost
 - Guitar inputs and microphones that convert the sounds to digital before sending the signal to the iPad have less or no noise or buzz
 - Apogee Jam for guitar
 - Apogee mic
- **Mirroring:**
 - You can mirror what is on your iPad's screen onto a TV display or a projector. You have two options:
 - **Apple TV**
 - This is fantastic for showing screen content, as mirroring is over wifi, and you're **free to move about** the room wirelessly
 - Swipe up from the bottom of the screen for AirPlay Mirroring options
 - If you need precise, on-time sound, there will be a miniscule **delay** in audio and video transfer, which, as Eric Whitacre put it, is "a lifetime in musical terms".
 - **Adapter Cable** (also called a dongle)
 - This way you need a dongle to connect the iPad (from the charging port), to a computer cable (called VGA) or HDMI cable (which stands for High Definition Multimedia Interface)
 - You will need a separate cable for audio. This is called a 3.5mm or 1/8" audio cable.

Lightning to VGA



image from cultofmac.com

Lightning to HDMI

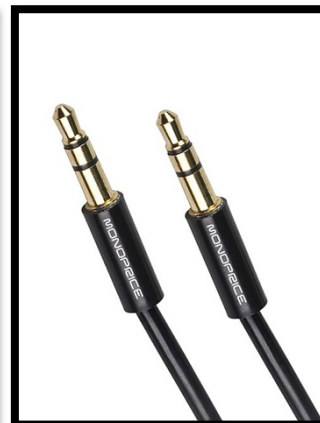


image from monoprice.com

3.5mm audio cable

VGA Cable



HDMI Cable

above images
from Wikipedia



Jazzy ABC and **Jazzy 123** – by The Melody Book

Devices: iPad, iPod, iPhone: \$1.99

Level: Kindergarten

General: Learn numbers or the alphabet, illustrated by musical instruments with high-quality sound.

Pros: Instrument sounds are not MIDI, but actual recordings.

Cons: Not much. This is a simple, straightforward app.

Notes:



Little Fox Music Box – by Shape Minds and Moving Images GmbH

Devices: iPad, iPod, iPhone: \$3.49

Level: Primary

General: Sing-along songbook with 100 interactive elements.

Pros: Karaoke version, interactive music studio, gorgeous artwork, engaging animations.

Cons: Only three songs, no record option for sing-along or music studio.

Notes:



LoopsequeKids – by Casual Underground

Devices: iPad: Free

Level: Primary, Intermediate

General: Four concentric circles each play a different category of sound. Each circle consists of sixteen segments that provide two bars of four subdivided beats. Light up the segments to add a sound on that beat to start looping and creating.

Pros: Three themes, each with different sounds. There are no goals like achievements, so the focus is simply on making music.

Cons: No recording option.

Notes:



Dr. Seuss Band – by Oceanhouse Media

Devices: iPad, iPod, iPhone: \$1.19

Level: Primary, Intermediate

General: Imagine Rock Band for iPad, but using an octave of notes laid out (colour coded) like on a xylophone.

Pros: Achievements encourage students to excel, students can apply what they learn directly to xylophone playing. Three difficulty settings.

Cons: In-app purchases, or unlock songs by achievements.

Notes:



Tune Train – by Jiyoung Lee

Devices: iPad: Free

Level: Primary, Intermediate

General: Student draw a melodic line for the train to pick up passengers (which play notes). Highly recommended tool for introducing guided composition. **Pros:** Many different themes

offer various backing tracks. Music notation visualizer!

Cons: Occasionally background music and melody get “off track”. Would be nice to have print and share options.

Notes:



Falling Stars – by Kraft New Services, Inc.

Devices: iPad, iPod, iPhone: FREE

Level: Primary, Intermediate

General: This organic, exploratory, composition experience allows students to draw vines of different textures, onto which stars fall.

Different sounds are created depending on two factors: what texture of vine it fell on (creating a bell, bass or percussion sound, for example), and how high or low the vine was drawn (creating higher or lower pitches, where applicable).

Pros: Gorgeous interface, easy to use, highly engaging. About a dozen templates can be saved locally. **Cons:** No recording available. Sharing only within the app.

Notes:



Piano Dust Buster – Song Game - by Joy Tunes

Devices: iPad, iPhone, iPod: FREE

Level: Primary, Intermediate

General: Dust the germs off the piano, before they hit the keys that correspond to the melody note, in time with the music.

Pros: Lots of songs available through in-app purchase, or achievements. Easy to use, engaging visuals, good accompaniment sounds and music. **Cons:** In-app purchases.

Notes:



Recorder Master - by Joy Tunes

Devices: iPad version is currently not available: it is now available we-based at <https://www.joytunes.com/master/>

Level: Intermediate

General: With this “video game”, learn how to play notes and songs on the recorder, with visual feedback on your iPad! Control characters with the sound of your recorder, as they move up and down depending pitch and length of note. Reinforces in-tune playing. Highly recommended.

Pros: Excellent for reinforcing melodic line, length of notes. You can engage the entire class at once, with all students playing along and trying for a high score!

Cons: Occasional minor visual glitches, but it’s gradually being improved.

Notes:



My First Classical Music App HD - by Naxos

Devices: iPad \$5.79

Level: Elementary, Middle School

General: A fully interactive and animated picture book describing the people, instruments, and performances of classical music.

Pros: Any words on the page are read aloud by a narrator. Clever illustrations. Highly engaging. All orchestral excerpts are of genuine instruments.

Cons: None.

Notes:



MadPad – Remix Your Live - by Smule

Devices: iPad (MadPadHD): \$3.49, iPhone, iPod: \$1.19

Level: Intermediate, High School

General: Record and loop environmental sounds and video to create recordable, exportable compositions.

Pros: Easy introduction into (drum) pads and looping. Fosters creativity and open-mindedness with music-making. Export your composition straight to Camera Roll.

Cons: None.

Notes:



Nodebeat - by AffinityBlue

Devices: iPad (NodeBeatHD): \$3.49, iPhone, iPod: \$1.99

Level: Primary, Intermediate, High School

General: Nodes of different functions float on screen and interact with each other to create rhythmic and melodic compositions.

Pros: Can be used simply - with the app doing most of the “work” through chance - or you can explore its depth and complexity to create very deliberate compositions.

Cons: No option to change chords during recording process.

Notes:



Loopseque - by Casual Underground

Devices: iPad: \$5.99, iPhone, iPod (Loopseque Mini): \$3.99

Level: Intermediate, High School

General: A significantly more advanced version of LoopsequeKids, Loopseque offers many sets of wheels that can be loaded with beats, manipulated (effects, filter cutoffs), and interchanged to create a final recording.

Pros: Recording, sharing to SoundCloud, excellent tutorials, wide version of sound packs. **Cons:** No sharing via e-mail.

Notes:



improVox - by MuseAmi

Devices: iPad, iPhone, iPod: \$4.59

Level: Intermediate, High School

General: Real-time vocal harmonizer, including auto-tune.

Pros: Recording, sharing (iTunes, SoundCloud, e-mail), 5 styles of 4 harmonic variations, 4 effects: stutter, reverb, echo and cavern.

Cons: Latency issues persist in overdubbing, making for recording over songs difficult. No full retina display support.

Notes:



SoundPrism - by Audanika GmbH

Devices: iPad, iPhone, iPod: FREE (serious Pro version: \$ 5.79)

Level: Intermediate, High School

General: Think of a hi-tech autoharp: with SoundPrism you can touch the screen and readily play all the chords found in diatonic tonalities. Options to play R, R-3, R-3-5.

Pros: Record and e-mail your compositions, reveal notes on keyboard. Basic version is enough to get you started. More sounds available through in-app purchase.

Cons: None.

Notes:



Launchpad - by Novation

Devices: iPad, iPhone, iPod: FREE

Level: Intermediate, High School

General: An emulated version of the launchpad that is essential for creating today's dance music.

Pros: Be the coolest teacher by letting the students create dubstep beats. Your creations can now be recorded.

Cons: In-App purchases for additional sound packs, but still functional at free.

Notes:



insTuner - by EUMLab of Xanin Tech. GmbH

Devices: iPad, iPhone, iPod: \$4.59

Level: Intermediate, High School

General: My go-to tuner

Pros: Very clean look, easy to see. Simple and advanced modes.

Cons: None.

Notes:



Basichords - by Tekartik

Devices: iPad, iPhone, iPod: FREE

Level: Intermediate, High School

General: Displays chords and their variations for guitar, ukulele (two tunings), cavaquino, bouzouki, mandolin, mandola, and banjo in C and G.

Pros: Many instruments and variations included, free, indicates each string as root, 3rd, 5th, etc. **Cons:** None.

Notes:



Fingering for iPad - by Patrick Q. Kelly

Devices: iPad: \$8.99, iPhone, iPod: \$8.99

Level: Intermediate, High School

General: Provides fingering and trill charts for all brass and woodwind instruments.

Pros: Sound feedback, concert pitch indicated, photographs of instruments with fingerings superimposed, all instruments included in instrument families.

Cons: Relatively expensive, sound feedback is only piano notes.

Notes:



Clarinet+ - by Obie Leff

Devices: iPad, iPhone, iPod: \$0.99

Level: Intermediate, High School

General: Provides fingering charts for the clarinet. By the same developer, you can purchase: recorder, flute, piccolo, violin, saxophone, trumpet, trombone, electric bass. **Pros:** Sound feedback is by the actual instrument, you can get a starter octave-and-a-half of notes in Lite versions.

Cons: Not all band instruments are included in this series, landscape mode only. No trill charts. **Notes:**



Music Reading Essentials – by Apricot Digital Publishing, LLC

Devices: iPad, iPhone, iPad: \$3.49

Level: Intermediate, High School

General: Quiz yourself on notes, rhythms, intervals, musical symbols, or a combination of the three across three levels.

Pros: Grand staff, bass, treble, and alto clef support. Wrong answers are reviewed. Fixed do solfege available. **Cons:** Quizzes are either timed or not: you cannot set it to a number of questions. No results displayed after each turn. Can't mix and match stages of notes and rhythms, for example.

Notes:



Flashnote Derby - by Neuratron Ltd.

Devices: iPad: \$3.49

Level: All

General: Identify notes on a musical staff to make your horse win the race! **Pros:** Option to choose bass clef or treble clef, as well as range of notes. Can be used as a quiz, as it displays number of correct responses. Video lessons. **Cons:** Video lessons are uninspired.

Notes:



NOTION Music Notation for iPad – by NOTION Music Inc.

Devices: iPad: \$16.99

Level: Intermediate, High school

General: Covers wind band, string and voice.

Pros: MIDI playback, large selection of notes, rests, accents, trills, glissandos, clefs, repeat signs, etc., text supported, lots of sharing (email, MusicXML, MIDI, PDF, Dropbox), and print function.

Cons: In-app purchases for some instruments (sax), no recorder, no full retina display support. Desktop versions more user friendly.

Notes:



GarageBand – by Apple

Devices: iPad, iPhone, iPod: \$5.79

Level: Intermediate, High school

General: Mainly geared towards rock musicians and guitarists, GarageBand has been a go-to program for musicians wanting to create backing tracks for decades, and now includes the option to record with on-board or external mic as well as guitar inputs.

Pros: Realistic experience in playing various Smart Instruments (strings, keyboard, guitar, drums). Excellent guitar effects and stomp-boxes. Ability to continue a project on a desktop version of GarageBand or Logic Pro. iCloud integration. 250 loops included.

Cons: Some features will only work with newest OS on the newest iDevice.

Notes:



Rockmate – by Fingerlab Studios

Devices: iPad: \$3.49

Level: All

General: A very accessible way for students to record drum patterns, guitar chords, and a programmable keyboard, in addition to their voices.

Pros: Up to four players may record simultaneously; simple user interface.

Cons: Occasional glitches and crashes.

Notes:



NanoStudio – by Blip Interactive

Devices: iPad, iPhone, iPod: \$14.99

Level: High school

General: A must-have for any electronic music enthusiasts. NanoStudio includes a virtual analogue synth, trigger (drum) pad, sequencer, sample editor, and a 16-channel mixing board with 4 effects each.

Pros: Very stable user experience, excellent support from developer. Features MIDI and export, sharing via SoundCloud. MIDI files as e-mail attachments.

Cons: 16-track mixer upgrade is through in-app purchase: \$4.99 (but worth it!).

Notes:



Discover Music - by Filter Squad Pty Ltd

Devices: iPad, iPhone, iPod: \$4.59

Level: Intermediate, High School

General: A quick reference guide to bands, artists and composers across all genres, including Biography (from Last.fm), songs to stream, blogs, reviews, tweets and links. Looking up a name results in suggestions of related artists by building a continually evolving inter-connected web of musicians.

Pros: Very polished, easy-to-used interface, accurate suggestions, good content.

Cons: None.

Notes:



iDoceo - by Bert Sanchis

Devices: iPad: \$11.99

Level: All

General: All-you-need teacher's assistant: grade book, calendar, daily planner, seating chart, email hub, report card generator, etc.

Pros: Extremely powerful and feature-rich program that can be adapted from K-12 and beyond. Excellent tutorials and developer support.

Cons: Advanced features will take time to master, but the rewards are well worth it.

Notes:
