

**TI:ME/TnMEA**

**Clinic/Convention**

**Thursday 4/16, 1:00PM**



**Chromebook/Cloud Inclusion in the Music Classroom!**

**Presentation online at:**

**<http://fredkersten.com/TnMEA2020/TnMEA2020%20B.html>**

**Presenter:**

**Dr. Fred Kersten**

**Online Graduate Music Education Facilitator**

**Boston University**



**e-mail address: [fredkers@fredkersten.com](mailto:fredkers@fredkersten.com)**

**Home Page: <http://fredkersten.com>**

### Clinic Focus:

Practical immediately applicable suggestions on how to include the Chromebook (CB) and Cloud in the music classroom and curriculum. Kersten will offer practical strategies for incorporating Chromebook and Cloud connections into the music classroom and curriculum. He will share immediately applicable information through technology examples and illustrations.

Valuable relevant information will include:

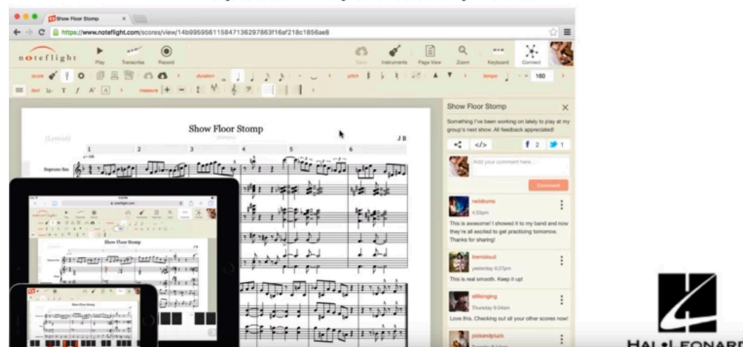
- How notation, audio editing, recording, music theory and ear-training can be accomplished on the CB through the Cloud.
- Curriculum integration with CB/Cloud focus.
- Using a CB for video access, creation, and editing.
- Selecting a CB for purchase based on your classroom needs.
- How to replace traditional classroom computers with CBs.
- How to locate and select apps that you can immediately integrate into your music curriculum.
- A Location Library for app selection and quick retrieval will be provided.
- Considerations on how in-cloud apps can substitute for standard music software that cannot be loaded on a CB.

### How Google Took Over the Classroom

*Today, more than half American primary/secondary students (30 million children) use Google apps.
*Chromebooks are now powerhouse in America's schools.
*More than half mobile devices shipped to schools.
*Google prioritizing training children in team work in schools.
*Google makes \$30 per device by selling services for millions of Chromebooks for schools.
*Kids start with school accounts and graduate to personal gmail.
*If you get someone on your operating system early then the potential for LIFE following.
*Teacher help provides the initiative for adoption of Google!
*Google part of Alphabet a \$652 billion-dollar company.

## Notation Opportunities for Cloud/Chromebook Users NoteFlight Learn

Every Child. Every Score. Every Device.



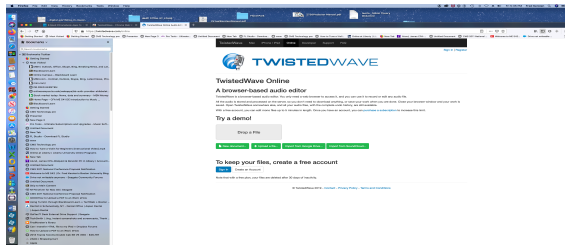
- \*NOTEFLIGHT LEARN-more than basic notation site!
- \*Exciting New NOTEFLIGHT Collaboration Advances!
- \*Collab -teachers and students interact, create share, listen.
- \*Activity templates- students/teacher see all assignments as students develop.
- \*Live audio recording: performance assessment and feedback.
- \*Direct Integration with other LMS.
- \*Teacher sees notation and listens!
- \*Performance Assessment-Can constantly send comments to students!
- \*Students can send information back.

### FLAT

- \*Flat is being integrated with Google Classroom.
- \*Classroom composition collaboration.
- \*One Chromebook per student.

### Audio and Audio Editing

- \*Audio-Joiner. Available online. Merge and edit audio files.
- \*Twisted Wave Online Edit Audio Files.



### SOUNDATION

- |   |
|---|
| *Thousands of sounds, loops, effects and instruments. |
| *Lives entirely in the cloud.                         |
| *Record directly into Soundation.                     |
| *Automation of track volume, panning, reverb.         |
| *Audio loops from an extensive built-in library.      |

\*Mix and add effects (reverb/EQ/compression).

### SOUNDTRAP

\*Soundtrap-online music recording studio (DAW).

\*Similar to Garageband - easier to work with.

\*All Devices-around World Collab!! Easy-to-use cloud-based system.

### Music Theory

\*Teoria-Super Music Theory Website <https://www.teoria.com/>

\*Hookpad-music theory and choard sketching in the cloud tool-  
<https://www.hooktheory.com/hookpad>

### Auralia, Musition

online at <https://www.risingsoftware.com/cloud>

**CLOUD EDITION**  
CONNECT ANYTIME, ANYWHERE

Auralia & Musition Cloud allows your students to use this remarkable ear training and theory software at school or at home, on any device.

Easily set tasks, deliver curriculum and assess your students, without grading a single paper!

Free Trial iPhone, Android, iPad, Chromebook Support

**CLOUD HIGHLIGHTS**

**TEACHERS**

- Excellent content & curriculum
- Quizzes, worksheets, exams
- Student tracking & grading
- Cost effective
- LMS integration

**STUDENTS**

- Practice aural & theory on the go!
- Complete tasks on and off campus
- Teacher monitoring & advice
- Awesome curriculum linked content
- iPhone, Android, Chromebook

Home Laptop School

### Hookpad-Chord and Notation Creator

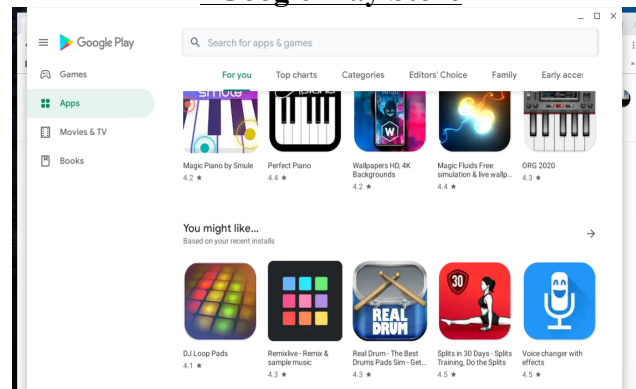


### **Purchasing a CB based on your needs. What should you look for?**

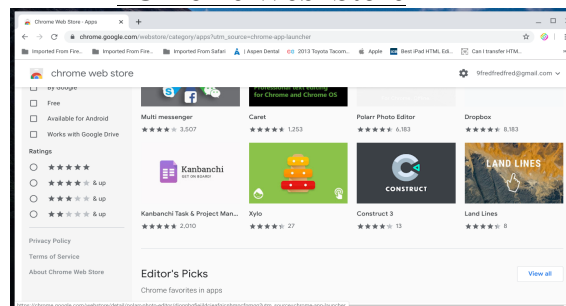
1. Memory storage -look for 64GB solid state.
2. RAM Common 4G. Try to get 8G.
3. Size, weight -student age to consider.
4. Durability, Ruggedness (home school transportation).
5. Ease of Use, Light and Cheap. Browser-based design. No OS.
6. Look for Google Play Store Support. Access Android apps. Some have this. Some do not.
7. Disadvantages, Very-limited without internet access. (Google apps have an offline mode)
8. Speed of internet can be frustrating when working with large files and editing audio/video.

### Locating and Select Apps you can integrate into your Music Curriculum.

#### **\*Google Play Store**

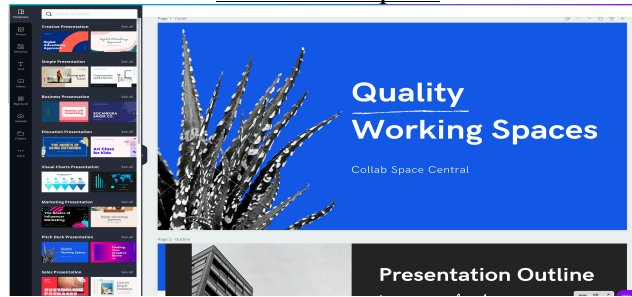


#### **\*Chrome Web Store**



\*Both Google Play Store and Chrome Web Store are excellent sites for locating Music Apps for working with curriculum aspects of teaching at your school utilizing Chromebook.

\*Canva - Produce Slides, .pdf,  
and video export.



## ScreenCastify-Screencasting online tool

ScreenCastify

Features For School For Work Pricing My Account [OPEN CHROME TO INSTALL](#)

**Screencasting for all.**  
More than 12 million people use ScreenCastify to record, edit, and share videos. Try it out and see what the hype's about.

[OPEN CHROME TO INSTALL](#)

LOVED BY LEADING COMPANIES AND 75% OF US SCHOOL DISTRICTS

Google iFT Spotify verwork twitter Deloitte nichen

**So simple.**  
You'll get the hang of ScreenCastify in the time it took you to read this very sentence.

**Farewell, pricey software.**  
ScreenCastify is a free Chrome extension that lives in your browser. Hooray!

## Chrome Play Music-add music to your Google Play Library.

It only takes a few minutes to get started with uploading your music collection to Google Play.



Keep up to 50,000 songs in Google Play for free.



Add your collection from iTunes, Windows Media Player, or folders.



Listen on the web or your mobile devices without the hassle of wires or syncing.

To get started, download Music Manager below. Music Manager is a simple application for adding the music files on your computer to Google Play.

[Learn more.](#)

**Music Manager is downloading...**

The installation should start automatically in a few seconds. Need help?

**Installation directions**

Need help adding music from a computer where you've already installed the Google Play Music Manager? [Learn more.](#)

## How to Replace Traditional Classroom Computers with CBs

Suggestion: Allow Both for their strengths!!

- \*Consider: Advantages/Disadvantages and play to the strengths of the machine.
- \*Decide what power you need for your project. large hard drive computer and advanced software may be necessary.
- \*Finale, Sibelius, Logic, ProTools have sophisticated interfaces for advanced editing that online tools may not have.
- \*Good teaching will focus students to the software/computer for a specific project.

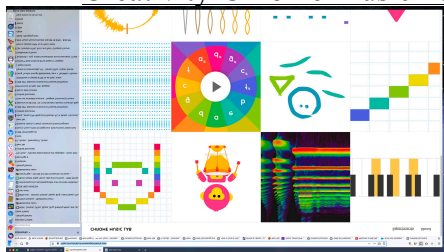
### Cloud Opportunities to substitute for Hard Drive Applications

- \*\*Audio-Twisted Wave, Audiotool HTML5 Audio Editor (<http://plucked.de>)
- \*\*Ear Training-Chords Free, DoReMi Free, Sight Reading Factory (website)
- \*\*Tuners-CifraClub Tuner, LeshyLabs Tuner ([www.leshylabs.com](http://www.leshylabs.com))
- \*\*Sheet Music-Chromatik, NeoScores.
- \*\*Metronomes, Cool Metronome, Dr. Beat.
- \*\*Compositions, Jam, Notessimo.

### Chrome & Traditional uses:

1. Individual Composition lessons.
2. Research a specific composer. Use Google slides to develop presentation to send in.
3. Record instrumental lesson exercises for assessment by teacher.

### Creativity-Chrome Music Lab



Chrome Music Lab is an experimental music creation website made by Google. This site features a series of applications that allow users to learn about and play with sound, rhythm, melody, composition and more. <https://musiclab.chromeexperiments.com/>

### Substitute Chromebook/Cloud for Standard Music Software

- \*In-cloud tools can substitute for standard music software that cannot be loaded on a CB.
- \*USE NOTEFLIGHT AND FLAT.IO FOR MAJOR NOTATION APPLICATIONS SUCH AS SIBELIUS AND FINALE.
- \*USE Soundation and Soundtrap for Audio editing instead of Garageband, Logic, Protools.
- \*You might experience slowness of activity dependent on your server and service. 5G is going to be awesome as it starts to be implemented. Once they get the bugs out.

### WebM

*WebM is a video file format developed to be used for delivering online videos using the HTML5 video tag, as a royalty free alternative to the proprietary h.264 and MPEG4 technologies.
*WebM is an open source/royalty free format while MP4 is non-free and patented.
*WebM has a better compression ration as compared to MP4.
*WebM video downloaded from YouTube will be 47% smaller in size as compared to MP4.
*WebM has high bandwidth and is supported by a number of browsers.

### What is a Google Drive?

*Google Drive is a storage service that lets you save various files to the cloud and then access them from your smartphone, tablet, or computer.
*Can access your drive from any place on web by going to <a href="https://drive.google.com/drive/u/0/my-drive">https://drive.google.com/drive/u/0/my-drive</a>
*Google Drive is free of charge and goes head-to-head with services like Dropbox.
*Google Drive makes it easy to transfer files from one device to another without having to email them to yourself. It also lets you share documents with others and will make sure your files are safe if your PC stops working.

### App Substitution

*USE NOTEFLIGHT AND FLAT.IO FOR MAJOR NOTATION APPLICATIONS SUCH AS SIBELIUS AND FINALE.
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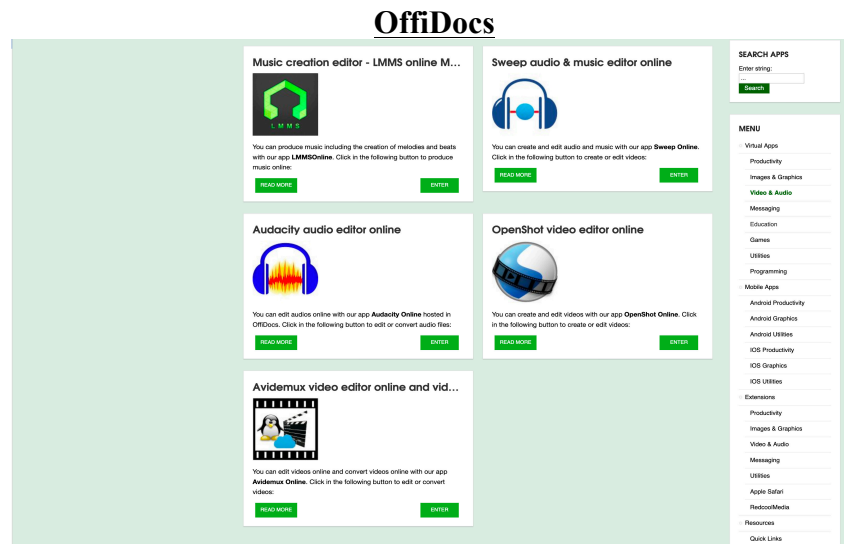
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OffiDocs is a flexible and powerful platform that allows you to work online with desktop apps from everywhere at any time using only your web browser. OffiDocs gives you all these apps online, without needing local disk space or computing requirements. <https://www.offidocs.com/?service=lang-en-en> Access Audacity, Word, and many more.

#### Location e-Library

\*This Library will provide you a solid reference source of locations where you may find out about the Chromebook, apps, sources and materials to support your quest of information for including the Chromebook in your classroom.

\*How Google Took Over The Classroom. Awesome article to read and realize how powerful Google and the Chromebook are as educational influences on our children. <https://www.nytimes.com/2017/05/13/technology/google-education-chromebooks-schools.html>

\*A good source on information for including the Chromebook in the classroom. Includes videos as reference sources!

<https://www.bing.com/search?q=how+to+include+chrome+in+the+music+classroom&form=PRUSEN&mkt=en-us&httpsmsn=1&refig=02e7e328e234433d87e87a94294e7d80&sp=1&pq=how+to+include+chrome+in+the+music+classroom&sc=1-44&qsn=&sk=&cvid=02e7e328e234433d87e87a94294e7d80>

\*Connecting between a Chrome and Mac/PC

<https://www.google.com/chromebook/switch/>

\*Connecting your Chromebook to a MIDI keyboard. Good step by step information

<https://www.musicrepo.com/how-to-connect-midi-keyboard-to-computer/>

Keyboard commands for a Chromebook <https://www.makeuseof.com/tag/chrome-os-cheat-sheet/>

\*Voice Recognition setup on your Chromebook. Helpful for audio recording and voice to text input.

<https://www.bing.com/search?q=Audio+recognition+on+chromebook&form=PRUSEN&mkt=en-us&httpsmsn=1&refig=e1a751ff60e249e7b8d8fb7037695278&sp=-1&pq=audio+recognition+on+chromebook&sc=0-31&qsn=&sk=&cvid=e1a751ff60e249e7b8d8fb7037695278>

\*Google Drive apps [https://chrome.google.com/webstore/category/collection/drive\\_apps](https://chrome.google.com/webstore/category/collection/drive_apps)

\*MIDI connection information for Simply Piano. Good source for other app connections to the Chromebook. <http://welcome.joytunes.com/android-midi-page/>

\*Piano Apps for the Chromebook. Good source of android apps for your Chromebook.

<https://play.google.com/store/search?q=Simply%20piano%20for%20chromebook&c=apps&hl=en>

\*Audiotool. Super powerful online DAW. Devices can be selected and connected with virtual connectors.

<https://chrome.google.com/webstore/detail/audiotool/bkgocjhfjgjedhkiefacppgbmoobnk>  
Audiotool main page allows for studio work and also online collaboration.

<https://www.audiotool.com/>

\*Setting up your Chromebook. <https://chromeunboxed.com/got-a-new-chromebook-10-things-you-need-to-know-video/>

\* Chromebooks Explained in Simple Terms - Is a Chromebook for you? - Chromebooks

101 – YouTube <https://www.youtube.com/watch?v=iNPkvr7F82Q>

\*How to replace your PC with a Chromebook

<https://www.bing.com/videos/search?q=How+to+replace+your+PC+with+a+Chromebook+-+YouTube&&view=detail&mid=817F8A61961B760260CA817F8A61961B760260CA&&FORM=VRDGAR>

\*GooglePlay-Simply Piano. Awesome play for piano lessons. Well designed and connects with MIDI. Audio connection is temperamental.

<https://play.google.com/store/apps/details?id=com.joytunes.simplypiano&hl=en>

\*Best Chromebooks 2019. Just updated. Comprehensive examination of the best and most economical machines. <https://bestreviews.com/best-chromebooks>

\*Meet the Google Pixelbook. Top price in the field and also a most powerful machine with lots of RAM 512 harddrive and i7 processor.

\*Poin2 Chromebook 14 Review: Best Sub-\$300 Chromebook With A Catch-Good review which can give you an opportunity for looking a pointers needed to select a new Chromebook.

<https://www.youtube.com/watch?v=qlRFIndQtfc>

[https://www.amazon.com/gp/product/B075JLPLBL/ref=as\\_li\\_tf\\_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=B075JLPLBL&linkCode=as2&tag=bestprodtag300-20](https://www.amazon.com/gp/product/B075JLPLBL/ref=as_li_tf_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=B075JLPLBL&linkCode=as2&tag=bestprodtag300-20)

\*Are Budget Chromebooks Still Worth It? Good overview of price aspects in purchasing a Chromebook.

<https://www.bing.com/videos/search?q=Are+Budget+Chromebooks+Still+Worth+It%3f+-+YouTube&qpv=Are+Budget+Chromebooks+Still+Worth+It%3f+-+YouTube&FORM=VDRE>

\*Switching from Mac to Pixelbook. A look at problems and possibilities of switching to Chrome from Mac.

<https://www.bing.com/videos/search?q=Lifetime+Mac+user+switches+to+Google+Pixel+book+for+a+week!+-+YouTube&&view=detail&mid=8C948D51C72F238034A88C948D51C72F238034A8&&FORM=VRDGAR>

\*Wakelet App online. Collectable and web sharing opportunity

<https://www.youtube.com/watch?v=nasNcJy7RaA>

Fred main site <https://wakelet.com/wake/6e56db65-c199-4f00-a3bc-9eef57bc1839>

<https://wakelet.com/wake/6e56db65-c199-4f00-a3bc-9eef57bc1839>

\*POWER POINT ON LINE.

<https://www.office.com/launch/powerpoint?auth=1> Hook into powerpoint for free.

\*All types of office apps online with <https://www.office.com/> Good to use with Chromebook Presenter Coach is a tool that is available in the [online version of PowerPoint](#). Anyone who has an email address can use the online version of PowerPoint. No Microsoft subscriptions or purchases are required to use the online version of PowerPoint. Of course, if your school has Microsoft accounts for students, they can use those to access Presenter Coach within PowerPoint.

\*Hookpad <https://hookpad.hooktheory.com/> Good online opportunity for adding chords and working melodies off the Chromebook

\*Noteflight Learn <https://www.noteflight.com/learn>

\*FLAT <https://flat.io/> Online Notation creator.

\*Soundation <https://soundation.com/studio> works well on Chromebook.

\*Soundtrap <https://www.soundtrap.com/> Popular DAW

\*Screen-O-Matic <https://screencast-o-matic.com/> Develop Screencasts with this tool.

\*Powtoon <https://www.powtoon.com/index/> Build mp.4 and .ppt files with lessons for your students.

\*Audio Joiner <https://audio-joiner.com/> Simple editing and merging of audio files with in-the-cloud tools.

\*Free Tech for Teachers, Richard Byrne Good source for information on in the Cloud content that is applicable to Chromebook.

<https://www.freetech4teachers.com/>

\*Canva <https://www.canva.com/> Free and then Pay . Opportunity for making and sharing slide shows and exporting these out as mp4 videos.

\*13 must have Chrome apps for Music Teachers

<https://www.educatorstechnology.com/2015/03/13-must-have-chrome-apps-for-music-teachers.html> Must have page with great apps to view.

\*Katie Wardrobe, Midnight Music How Do I Get Started With Chromebooks in Music Education Free Guide <https://midnightmusic.com.au/2018/10/how-do-i-get-started-with-chromebooks-in-music-education-free-guide/>

\*Midnight Music great site and opportunities for webinars and assistance

<https://midnightmusic.com.au> Katie Wardrobe has so many valuable opportunities for learning technology on her site and through her webinars.

\*Amy Burns, <http://amymburns.com/> Super and valuable information from a teacher who is using technology currently and. Past president of TI:ME. Go to her sessions! She is so valuable to Music Education and Technology!



\*Chrome Music Lab Chrome Music Lab is an experimental music creation website made by Google. The site features a series of applications that allow users to learn about and play with sound, rhythm, melody, composition and more.

<https://musiclab.chromeexperiments.com/>

\*MUSIC PRODIGY. Students can practice and their results can be tracked.

<https://www.musicprodigy.com>

\*wevideo provides opportunity for online video recording both in free and purchased formats. <https://www.wevideo.com/> You can work greenscreen with this to and with any device including Chromebook.

\*Understanding WebM video WebM is a Google designed for the web format. Files are compressed with VP8 or VP9 codec, audio compressed with Vorbis or Opus audio codecs. File format is somewhat inferior in quality but downloads much quicker than MP4. Used by Google extensively and upcoming as more and more web video is developed and included. <https://www.macxdvd.com/mac-dvd-video-converter-how-to/webm-vs-mp4.htm>

\*WebM is a video file format developed to be used for delivering online videos using the HTML5 video tag, as a royalty free alternative to the proprietary h.264 and MPEG4 technologies. Great pages for understanding WebM video technologies

<https://www.macxdvd.com/mac-dvd-video-converter-how-to/webm-vs-mp4.htm>

<https://ezgif.com/cut-video> Awesome WebM site <https://www.webmproject.org/>

\*Screencastify, outstanding screen video capture tool for Chrome.

<https://www.screencastify.com/>

\*Online Video Cutter will allow you to simply edit WebM files. These are being exported more and more with the usage of Google Chrome. <https://online-video-cutter.com/>

\*NY Times article on Google Chrome and Chromebooks in the schools. A must read! <https://www.nytimes.com/2017/05/13/technology/google-education-chromebooks-schools.html>

\*You can access your drive from any place on web by going to

<https://drive.google.com/drive/u/0/my-drive>

\*Great Basics Page, good information about working with

Chromebooks <https://www.educatorstechnology.com/2018/10/10-important-chromebook-tips-for.html>

\*Commonsense selection of music apps. Great for reference and practical application.

<https://www.commonsense.org/education/top-picks/great-apps-games-and-websites-for-music-education>

\*Good Chromebook Apps for Recording and Editing Audio.

<https://www.educatorstechnology.com/2014/10/6-good-chromebook-apps-for-recording.htm>

\*Apps in the cloud: All-in-one online service to work with your desktop apps.

\*Cloud Convert will convert any file to mp4. Great for WebM

<https://cloudconvert.com/webm-to-mp4>

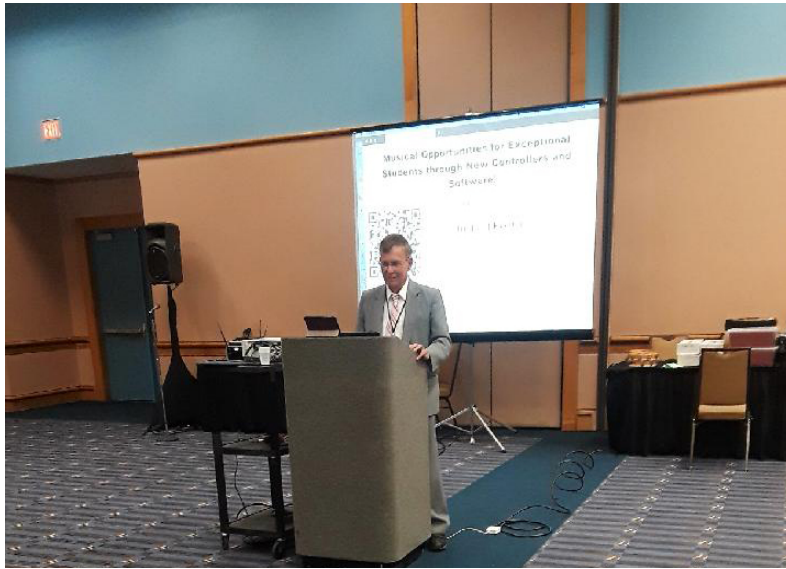
\*Band Lab won Best Classroom award by NAMM in 2018. <https://edu.bandlab.com>

\*Google Play Music Apps. Great studio apps for working on ChromeBook Go to Apps and type in FL Studio Mobile

<https://play.google.com/store/search?q=FL%20Studio%20Mobile&c=apps>



## About the Presenter



Dr. Fred Kersten is currently and has been for ten years an Online Graduate Facilitator for Boston University. He works with graduate music education majors around the world who are completing their masters and doctorate degrees in music education. Currently he is Instructor-In-Charge of online music technology courses offered by BU. Fred holds five degrees in music and music education.