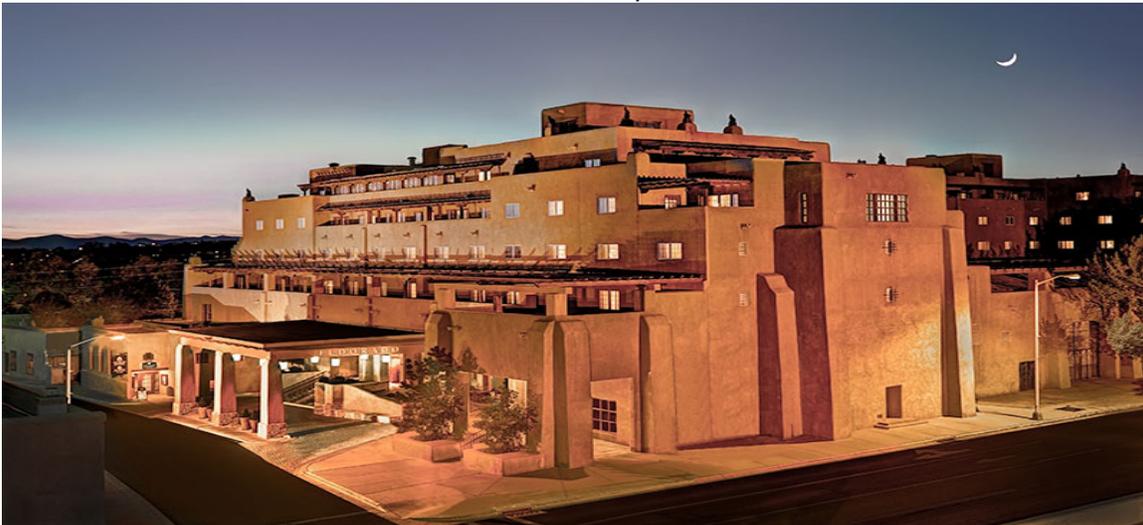




THE COLLEGE MUSIC SOCIETY

**Fifty-Ninth National Conference
October 27-29, 2016**



Showcase: Utilizing the iPad Multi-Touch Linear Keyboard: A Hands-on Vehicle for Improvisation Opportunity!

PRESENTER: Dr. Fred Kersten

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Showcase online at:

<http://fredkersten.com/Showcase16Webpage/Showcase16.html>



**CMS Pre-Conference Workshop
Technology's Role in Achieving Creativity
Diversity, and Integration
in the Undergraduate Music Curriculum
Wednesday, October 26, 2016
Hilton Santa Fe Historic Plaza
Santa Fe, New Mexico Mesa Ballroom**

Utilizing the iPad Multi-Touch Linear Keyboard: A Hands-on Vehicle for Improvisation Opportunity!

Need For Showcase

The report of the Task force on the Undergraduate Music Major (TFUMM) indicates a lack of opportunity for students to engage in improvisation activities during undergraduate years.

“One of the most startling shortcomings in all of arts education is that too many music students graduate with little to no experience or significant grounding in the essential creative processes of improvisation and composition. In contrast, students majoring in the visual arts could not gain a degree without producing a portfolio of original creative work. Yet for music graduates, a lack of skill or even cursory experience in composition and improvisation is the norm rather than the exception.” (COLLEGE MUSIC SYMPOSIUM online, TFUMM Copy Edited Version: January 2015, p. 4.

The iPad multi-touch linear keyboard provides an exciting opportunity for any music major as a vehicle for practicing and experiencing improvisation activities in real time. It does not matter what instrument the person plays proficiently, indeed if any! Overt activities can be accomplished through the availability and usage of the multi-touch linear keyboard and then conceptually transferred to the person’s own major instrument. The person does NOT have to have piano keyboard abilities or proficiency on the traditional 12-tone keyboard to be able to improvise professionally and musically.

A multi-touch linear keyboard allows visualization of many scale possibilities, and works nicely with MIDI or audio backgrounds provided through the use of a monitor computer or loops that are played through apps on the iPad itself.

This showcase will illustrate how students can practice and develop improvisational skills as they experience improvisation activities with the iPad. Using numerous apps, including ThumbJam and iReal Pro, examples of how the linear keyboard can be utilized and improvisation activities can be illustrated.

How this Session Fits With Ideas Presented In The Task Force Report

“TFUMM” indicates a lack of opportunity for students to engage in improvisation activities during undergraduate years. This can be because of limited practice room space, or opportunity for group ensemble experience for improvisation interaction. Mobile devices such as the iPad can do much to alleviate this problem, providing optimum opportunity for musical and continual improvisation performance activities.

This focused showcase illustrates a means to bridge the TFUMM mentioned barrier allowing for more time and opportunity in addition to a convenient and continually accessible musical venue for practice of improvisation. The showcase will illustrate the iPad as a venue platform for improvisation. A “real time” explanation and illustrations will be provided of how the iPad can provide and support this activity.

Over the past years improved technology has resulted in new codec formats for file conversion. Advanced compression techniques allow for better reproduction quality with smaller file-size downloads. Knowledge of the development of these files, and when/where to use them can be an advantage for both transmission of data and better quality of production. Conversion between formats can become a problem and

knowledge of development and conversion possibilities are important for sharing and quicker download.

The linear keyboard will allow you to play any type of scale needed for improvisation. You can regulate the span of the key so that if you have large fingers you can accommodate size.

By changing the settings you can adapt the keyboard to any type of scale from full chromatic to unusual scales for exotic or multi-cultural music.

Thumb Jam will also allow for various type of real time physical adaptations of the music by moving the pad to add vibrato, tremolo, note-bends, and glissandos to naturalize the music performed.

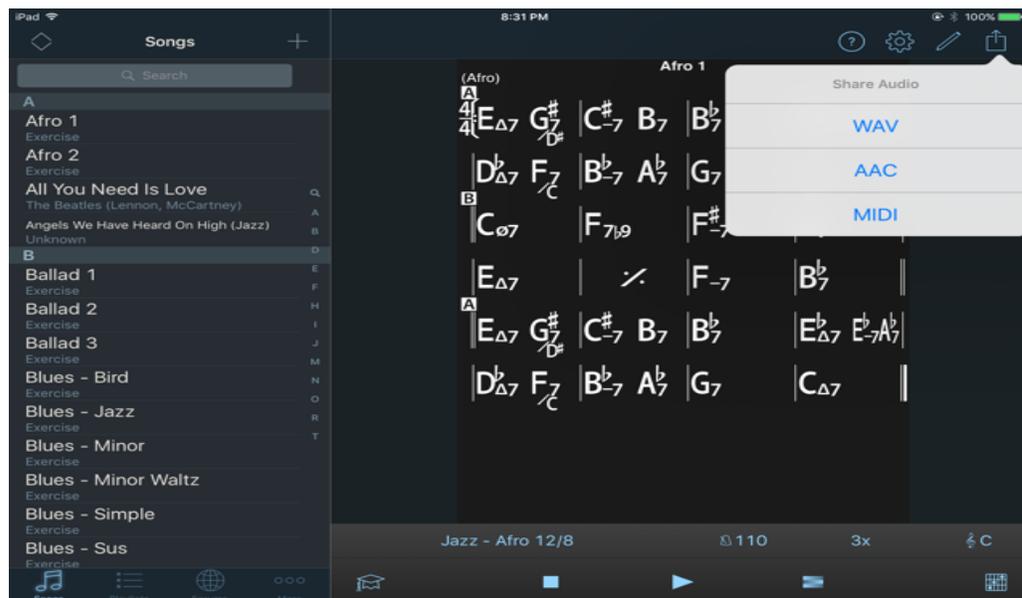
The linear keyboard can also become more extensive updating to over two or more octaves if needed. The keyboard is also designed so markers will be found for octave, fourth and fifth from the tonic.

Problems, no raised keys to illustrate sharps and flats tactually, and provide a physical guidepost on the keyboard.

Because the iPad is multitasking limited, performance to backgrounds played on the pad is limited. You can play to background loops that can be entered. Or on some instruments you can play to background midi inclusions.

Group Improvisation Accompaniments

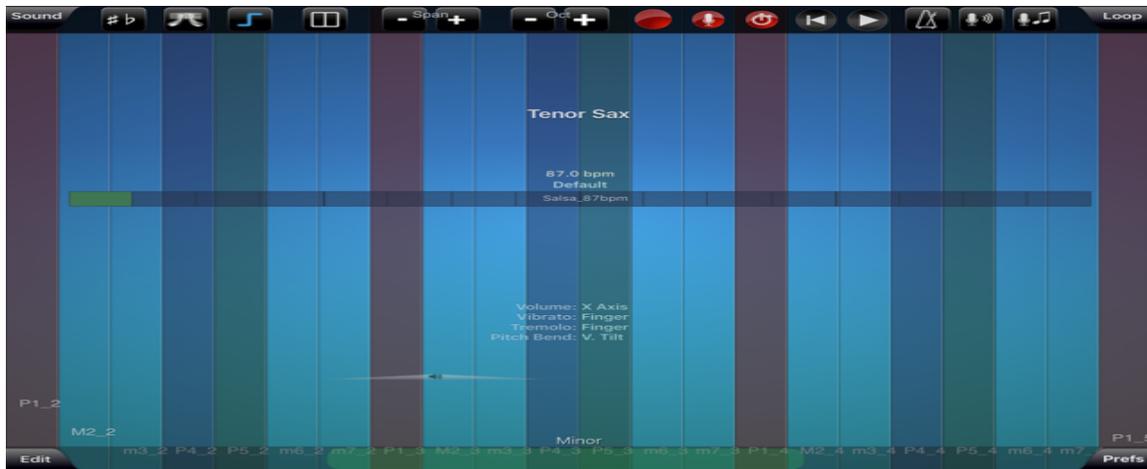
Accompaniments can come in the format of midi files that are available on other computers. iRealPro is a great app that will allow you to create harmonic structures that can be developed by the professor and exported out as midi, .wav or aac. And can be played by another student on a separate iPad allowing group collaboration. Or

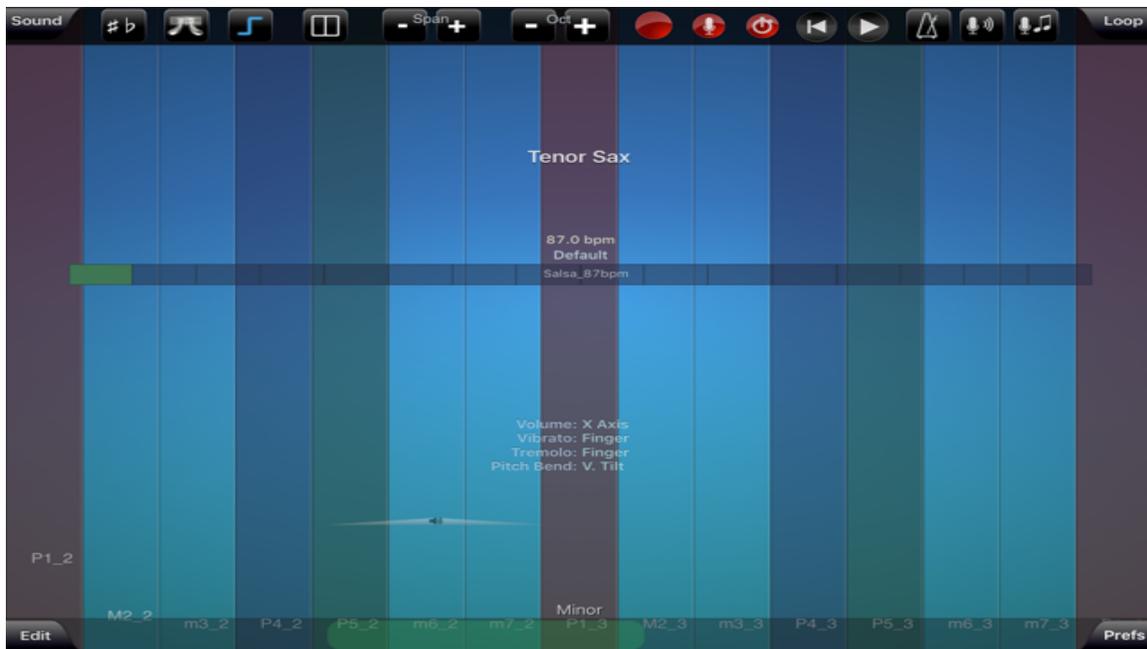


Thumb Jam Settings. Scale settings can be varied to adapt to the type of harmonic improvisation structure assignment needed.

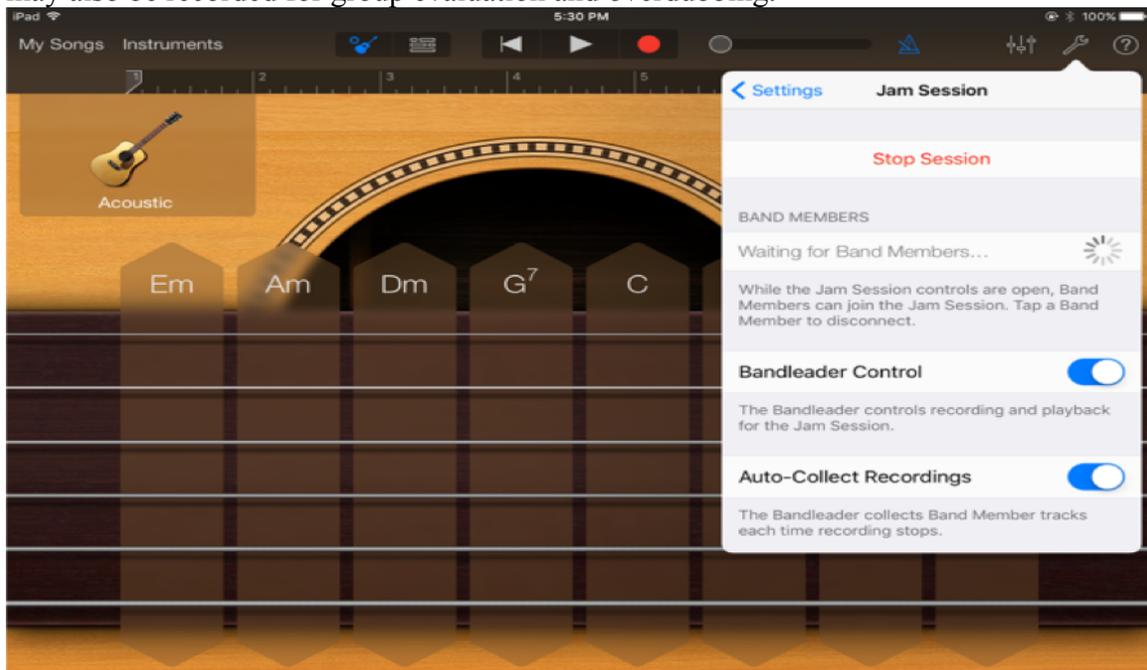


Gap size may be changed to accommodate finger width.





Jam Session using Garage Band allows a group of players to work together with one performer as leader. They can then communicate via Bluetooth and perform as a group with basic chord progressions or group improvisation. Utilizing the many sounds available through Garage Band performances may be of any or many styles. Keyboard, Percussion and string icons maybe utilized for individual note performances. The session may also be recorded for group evaluation and overdubbing.



Resources

*ThumbJam <http://thumbjam.com> New playing app. Check this out. You need this one!!

*Touch from the University of South Florida. iPad Ensemble video at <https://www.youtube.com/watch?v=wYoEAjt27yc> David A. Williams, music education faculty member explains performance of this ensemble and provides a great example of how the music technology is utilized. Also read his article *Another Perspective, The iPad Is a REAL Musical Instrument*. Article is in MEJ, September 2014, Volume 101, Number 1, pp. 93-98.

*iReal Pro <http://irealpro.com> Great creativity software for producing background chord progressions for songs. Very user-friendly for the iPad.

About the Presenter

Dr. Fred Kersten is currently and has been for eight years an Online Graduate Facilitator for Boston University. He works with graduate music education majors around the world who are completing their master's degrees in music education.

Fred holds five degrees in music, education, administration, and music education. He received the B.S. and M Mus degrees from Crane School of Music in Potsdam, New York. His M.S. in Elementary Education and Certificate of Advanced Study in School Administration are from SUNY, New Paltz in New York. The Doctorate (D Ed) in music education/administration was awarded by The Pennsylvania State University.

