

DEFINING UNDERGRADUATE MUSIC TECHNOLOGY COMPETENCIES AND STRATEGIES FOR LEARNING:

A FOURTH-YEAR FOLLOWUP-EXEMPLARS

CMS/ATMI St. Louis, 2014

- **Peter R. Webster, University of Southern California**
- **David B. Williams, Illinois State University, Emeritus**



Slides available at:

<http://peterrwebster.com>

<http://teachmusictech.com/resources.html>

NEED

- Help create national data on music technology competencies for undergraduate music majors in general
- This, despite the fact that technology now plays a critical role in music teaching, learning, performing, and composing
- Results of such a survey of music faculty and administrators in college/university/conservatory music units in the North America would prove useful in curriculum planning
- Help in guiding the preparation of professional, instructional, career guidance materials, etc.



BACKGROUND



- Discussion at CMS/ATMI Conference in 2010 that a listing of competencies may be useful; Webster study of faculty opinions at Northwestern
- NASM decision to relax requirement for a specific course
- Technology standards for state and national accreditation of teachers
- Long-term efforts by TI-ME to identify competencies at the K-12 school level
- Webster & Williams 2011 Richmond CMS/ATMI survey presentation defining a core set of undergraduate music technology competencies
- Panel discussion on competencies in Richmond
- Williams & Webster 2012 San Diego CMS/ATMI survey report looking at implementation by music disciplines and confirmation of 2011 key competencies
- Williams & Webster 2013 Cambridge CMS/ATMI survey probing new technologies and searching for suggestions on advocacy
 - <http://teachmusictech.com/resources.html>

2013 CAMBRIDGE SURVEY



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STRATEGY FOR 2013

- Confirmation of a modified set of 8 core music technology competencies from 2012 survey plus 3 additional competencies
- Looking for more open-ended responses to provide further insight into 2012 issues concerning implementation
- Seeking sense of direction with the impact of new technologies with cloud computing, social networking, MOOCs and distance learning, etc.
- Looking for suggestions for advocacy to promote these competencies and implementation strategies on a nationwide level

NEXT STEPS



- Focus on exemplars for music teaching that use competencies
- More in depth analysis and reflection on the 2011-2013 survey data and publication of the findings and directions
- Encourage a more proactive stance on music technology inclusion on the policy level perhaps in conjunction to real reform in how we teach music in college

2014 SAINT LOUIS SURVEY



COMPETENCIES



1. Enter and edit music using notation software
2. Understand the basics of digital audio and how to edit digital audio files
3. Record and mix a performance with digital audio software
4. Demonstrate an understanding of copyright and fair use
5. Create a music presentation with production software and appropriate hardware
6. Create a streaming audio file (sharing recordings)
7. Demonstrate an understanding of MIDI and its applications
8. Demonstrate setting up a computer music workstation/problem solve technical issues
9. Demonstrate an understanding of acoustics and audiology
10. Create and edit a simple music video
11. Use and manage a variety of social music sharing tools (e.g. iTunes, Spotify, Pandora)

PARTICIPANTS

- N=399 contacted across all sub-disciplines in music that participated earlier in the 2011, 2012, and 2013 surveys
- Responders could reply either by email return or by using a Survey Monkey link.
- N=5 responded via Survey Monkey
- N=17 responded via email
- Total of 22 respondents
- 20 seemed appropriate and their responses are summarized for today's presentation (see full spreadsheet at: www.peterrwebster.com or <http://teachmusictech.com/resources.html>)



SOME CONCERN ABOUT RESPONSE RATE

- Open ended request may seem daunting to some
- Not enough time to respond – too busy to do this
- Unwillingness to share strategies/projects
- Did not feel that projects that use technology fit with competencies
- Few professors think about specific competencies in designing projects that teach music with technology content
- OR.....



- Pissed off at Webster and Williams and are tired of filling out these stupid survey requests every year

OVERALL NATURE OF RESPONSES

see Handout for shortened version of results, full version online at:

peterrwebster.com or teachmusictech.com/resources.html

- Reasonable variety of sub-disciplines
- All eager to share
- All competencies represented except for
 - 8. Demonstrate setting up a computer music workstation/problem solve technical issues
 - 9. Demonstrate an understanding of acoustics and audiology
- Some very creative and personally engaging exemplars

NEED MORE PLEASE

HIGHLIGHTS

- Kim McCord, Illinois State University: use of notation software for creation of music based on chant



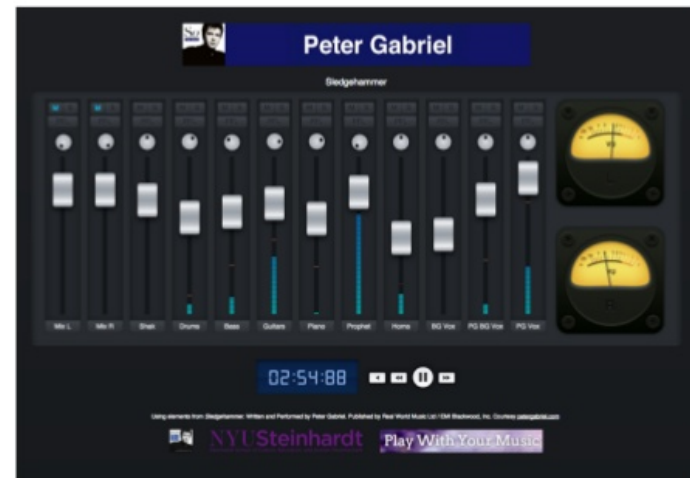
- Charles Menoche, Notation “performance”



- Alex Ruthmann, NYU: multitrack balancing and mixing- Peter Gabriel mixes; several projects within the Playwithyourmusic environment (www.playwithyourmusic.org/)

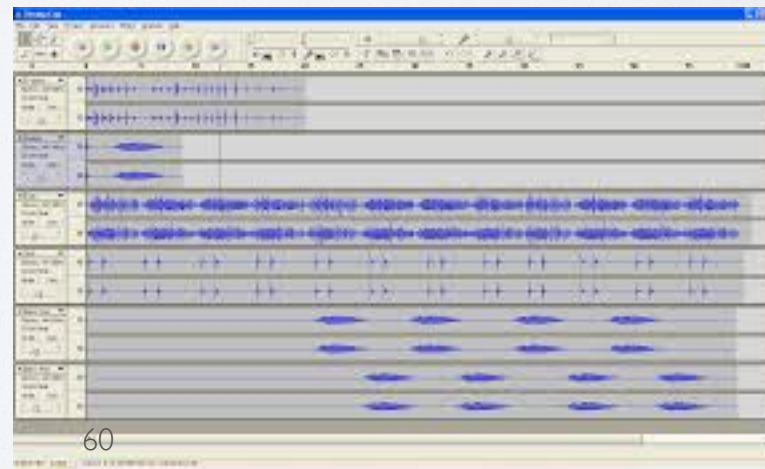
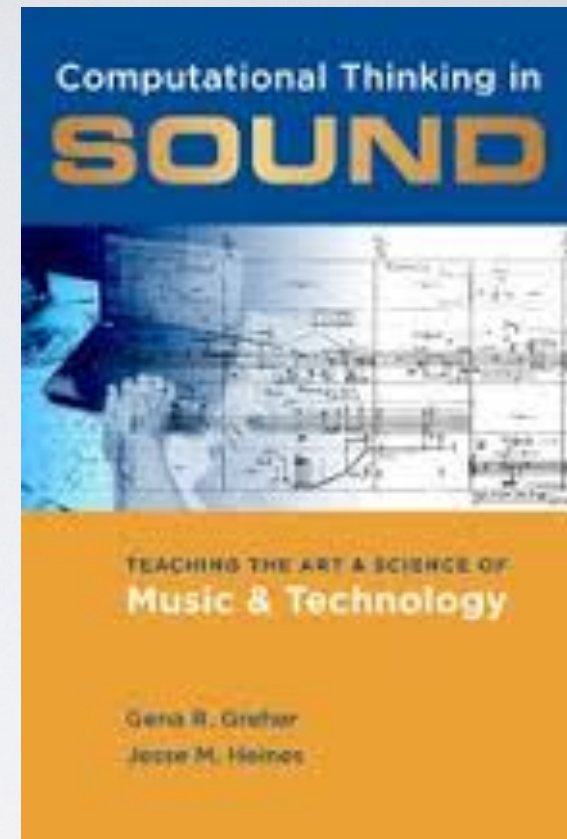


Multitrack Balancing & Mixing



Custom Online Multitrack Interface

- Gena Greher, Umass Lowell, Audio-ethnography



- Rick Dammers, Rowan University: iPad compositions and Video Clips of Students doing Rehearsals



- Sandra Stauffer, ASU: Hybrid ensembles of acoustic and digital "instruments"...(iPads, phones, laptops and various apps or software) to create new arrangements of familiar tunes



- Timothy Nord, Ithaca College: music composed to accompany story



- Ray Riley, Alma College: Petrucci Music Library and work with MIDI file data



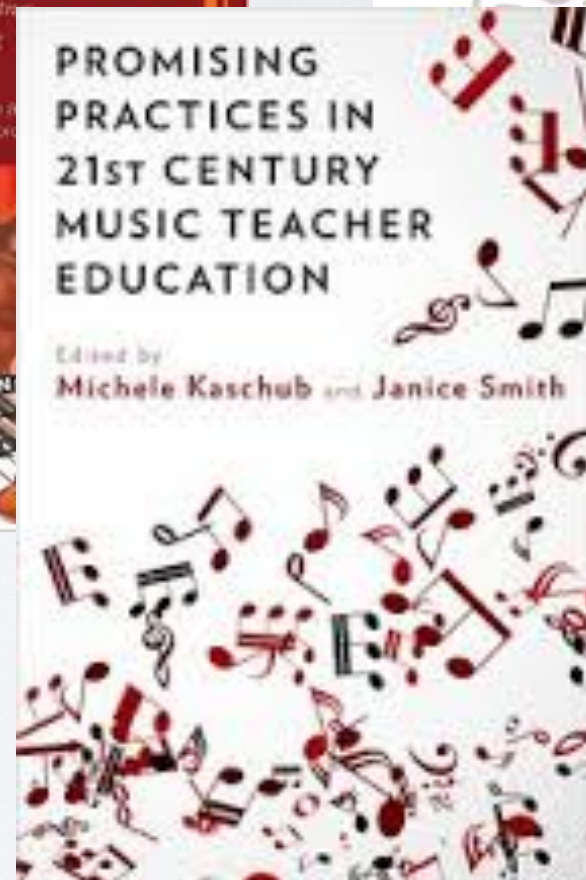
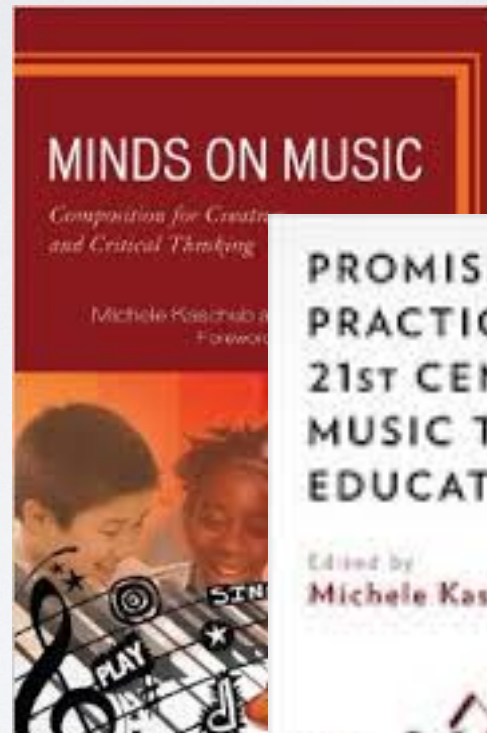
- Jennifer Amaya, Cal State Polytechnic: in-service work with college students working in schools



- Francesca Arnone, Baylor: Record rehearsals, practice sessions, performances, teaching demonstrations



- Michele Kaschub, University of Southern Maine: Pop song composition/Social Media



CONCLUSIONS

- Reasonable start toward a showcase of exemplars but more variety is needed -- Ready to receive more ideas
- Embedding technology within courses and rehearsal/studio experience can be an exciting and AUTHENTIC WAY to engage college students in gaining the kind of competency for which he all hope
- Still a case can be made for a more focused course on music technology, but with music making as a focus and perhaps in shorter, more focused time frames such as 2, 4, or 8 week courses
- Room for continued thinking about core technology competencies that make more effective use of multimedia, distributed learning, social media,

NEXT STEPS

- Publication of the complete series of survey studies as a Monograph published by CMS (we hope this will be approved)
- More focused articles in the Instructional Strategies and Methodologies section of the CMS Symposium
- Core incorporation of work into a new edition of *Experiencing Music Technology*, 4th edition
- OR

NEXT STEPS

- Really retire to a Santa Barbara winery with frequent trips to St. Johns in the American Virgin Islands where sailboats and nice scenery will be found in some abundance.



DISCUSSION

