

OPENING NEW DOORS TO MUSIC CREATIVITY

New Tools and New Strategies
University of Alabama-Birmingham
November 7th, 2008

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www.coach4Technology.net

The following are selected slides from the Keynote and follow-up session for the Music Technology Academy at the University of Alabama-Birmingham.

Please do not copy or use these slides in any form without my permission. Just contact me at www.coach4Technology.net.

Thank you. Dave Williams

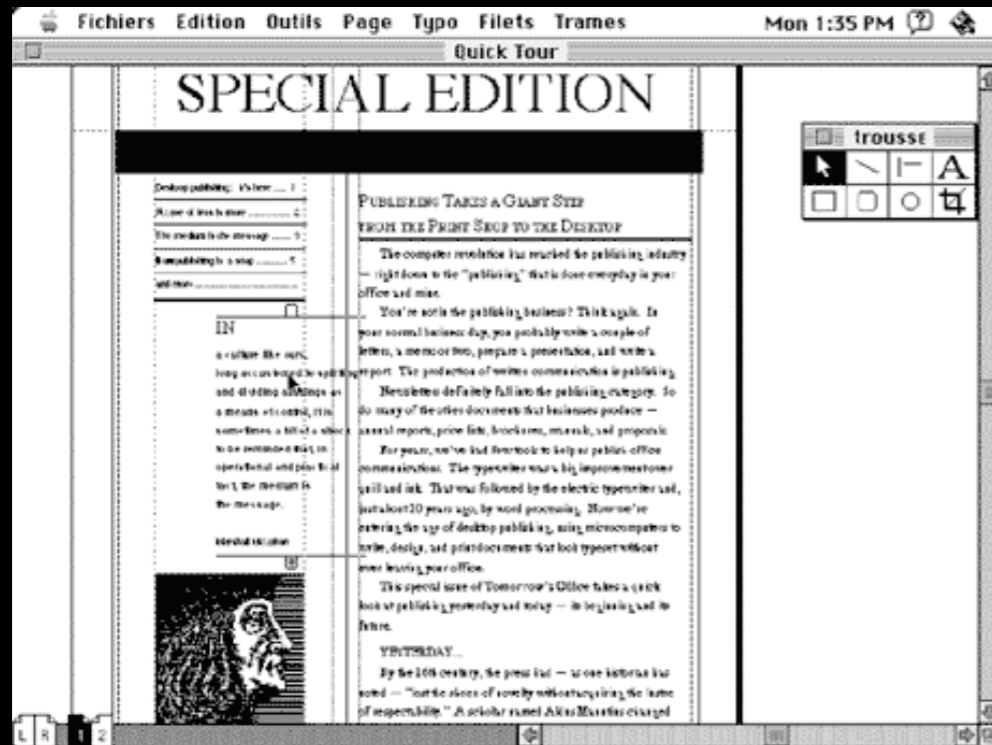
my biases

“Kids do tech,
you do music”

- let students take the technology lead and you, as the guide on the side, provide the aesthetic eye, ear, and hand in their music creative activities
- provide experiences for the “non-traditional music” (NTM) students, the students not enrolled in traditional performing ensembles, the other 80%

Reach out to the
other 80%

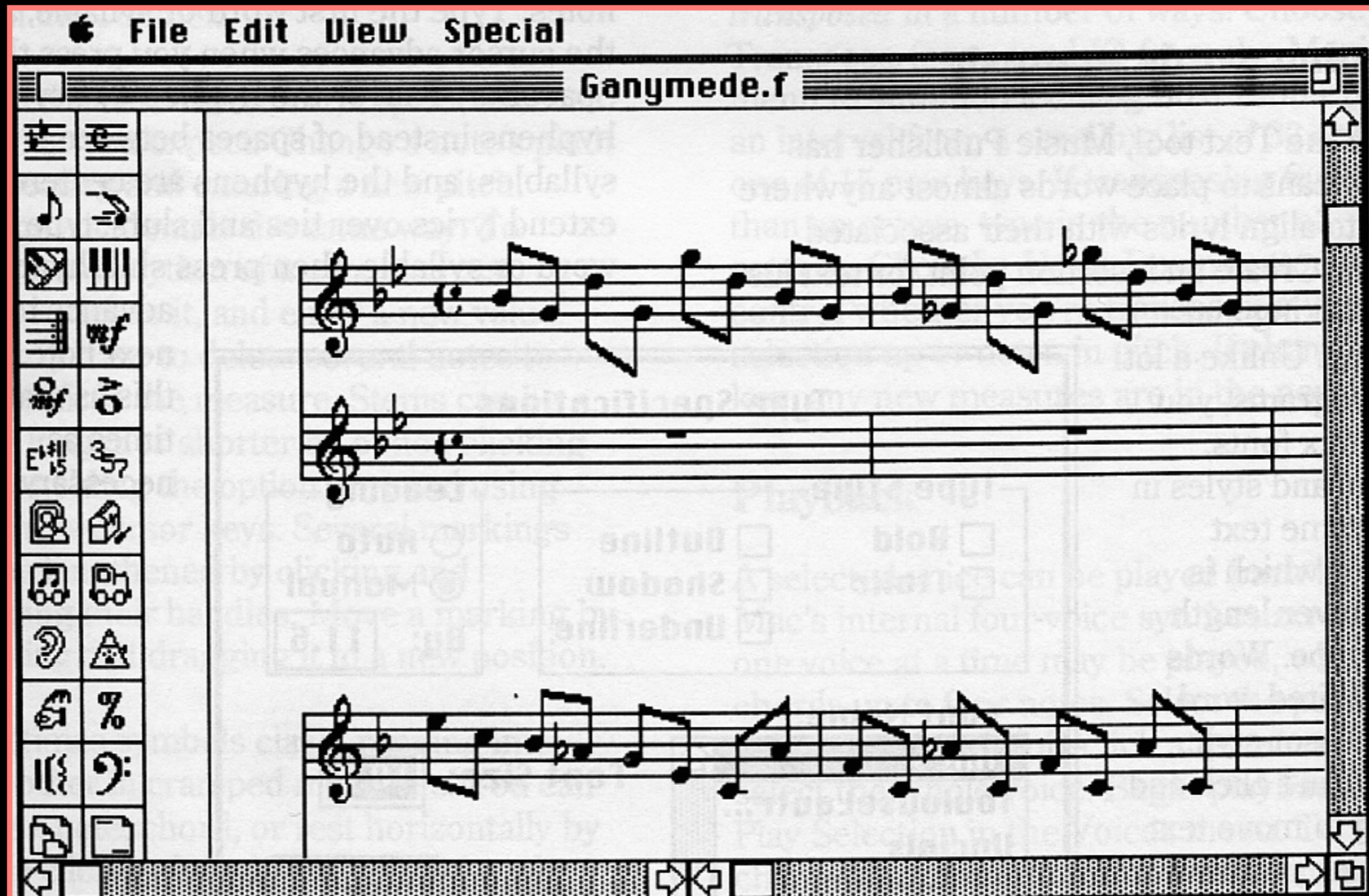
Printing Revolution



1984

Music Notation Revolution

MOTU Professional Composer 1985



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Music Creativity Revolution



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Monday, November 10, 2008

Music Creativity Revolution



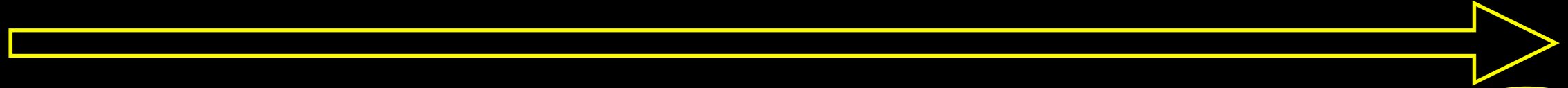
- Fast laptop computers with lots of storage
- Digital audio compression
- High resolution sound samples and loops
- Innovative, click and drag software: BIAB, ACID Studio, GarageBand, Groovy Music, and more
- Let Your Ear Be Your Guide Software: Freedom from music notation (WYHIWYG)
- New tools to interact musically with the computer



Computing is not about computers any more.
Its about living. Nicholas Negroponte



1983



MIDI sequencing

Multi-track audio

Audio editing

Looping

Effects processing

Virtual instruments

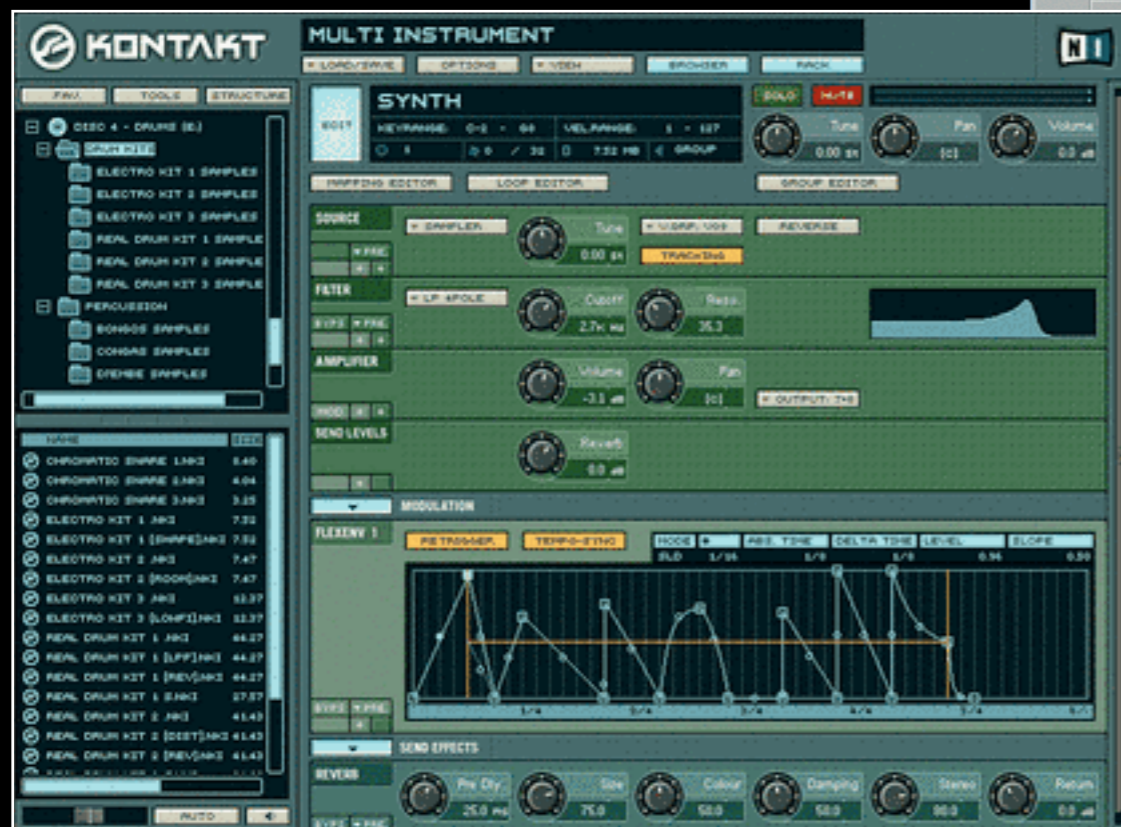
MP3/iPod Players

Sound programming



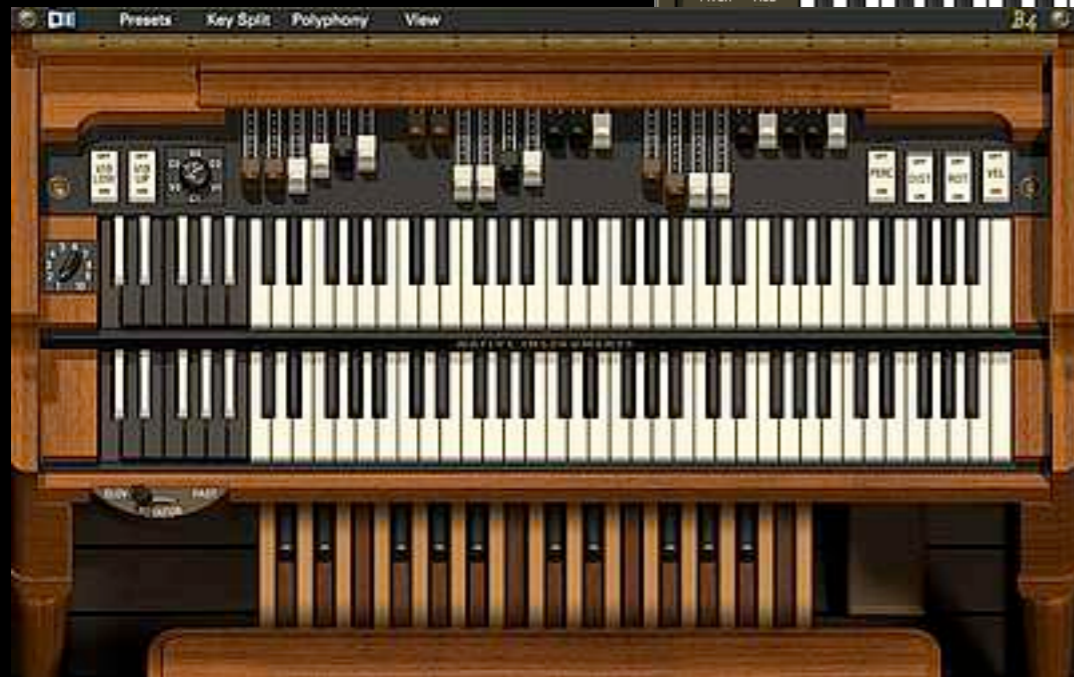
Virtual studios

Its all going soft....



The Virtual Music Studio

Analog is Back!



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Traditional Instrument Sounds



vienna instruments
VIENNA SYMPHONIC LIBRARY

[MP3 Demos](#) - [Discount Calculator](#) - [FAQ's](#) - [Video Tutorials](#) - [VSL Website](#)

The dream of the SYMPHONIC CUBE has come alive. This collection of ten Virtual Instruments (VIENNA INSTRUMENTS) has been specially designed by the Vienna Symphonic Library to orchestrate vast numbers of samples with an elegance and simplicity never seen in the history of orchestral music production. By simultaneously managing their own in-house sample development and software development, they have created a unique marriage of processes, inexorably linking samples and performance algorithms for stunning ease-of-use and

composing been s



Basic Music Hardware

- Digital Audio
- MIDI Control surface
- MIDI Keyboard
- USB



“What You Hear Is
What You Get”

MUSIC CREATIVITY REVOLUTION

WYHIWYG instead of WYSIWYG

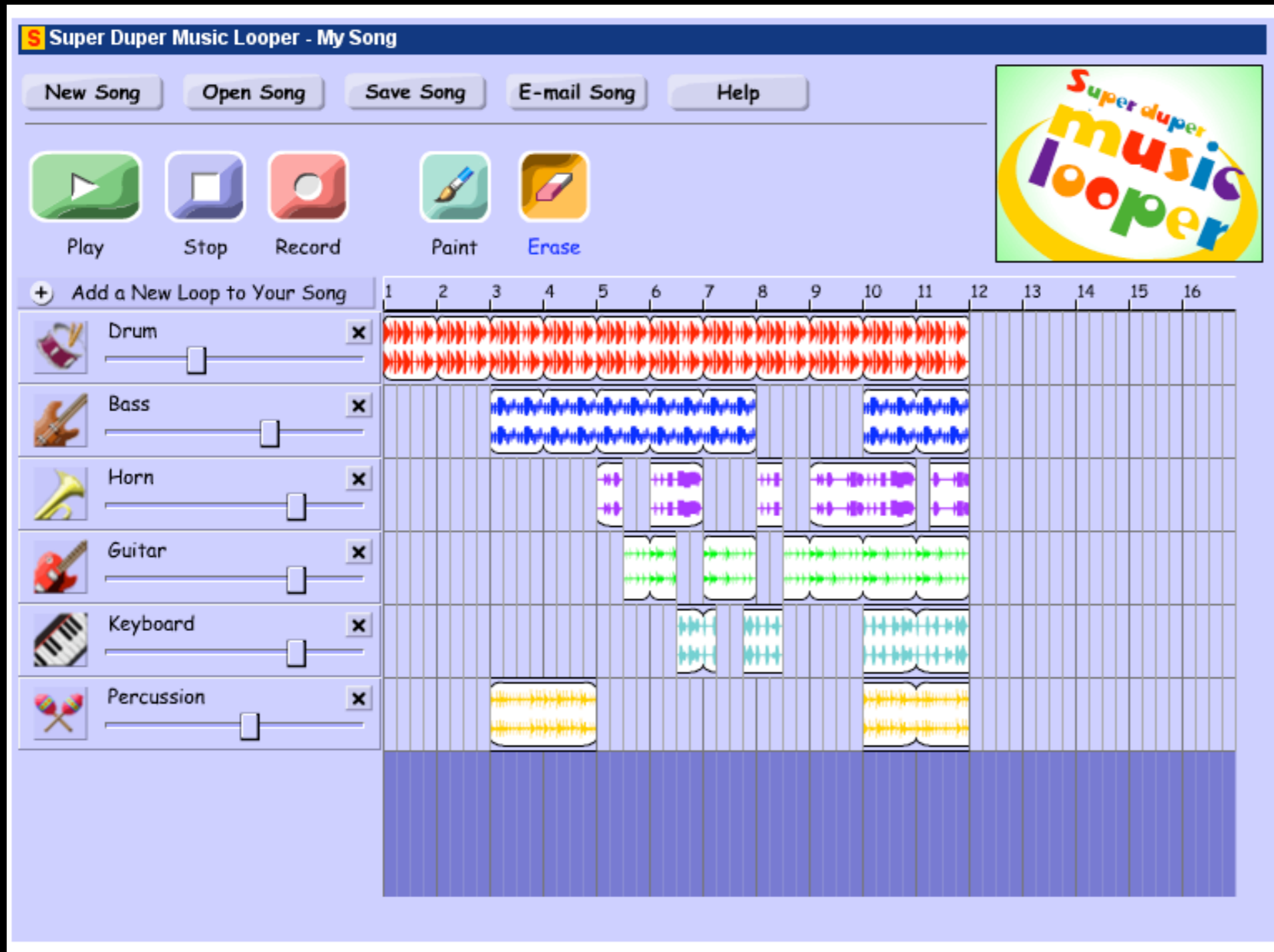
Let your ear be your guide...

The screenshot displays the GarageBand interface for a project titled "My Song". The interface is divided into several sections:

- Tracks:** A vertical list of tracks on the left, including Drum Kit, Acoustic Guitar, Shaker, Acoustic Bass, Saxophone, Electric Guitar, and Horn|Wind.
- Mixer:** A central section with volume and pan controls for each track.
- Timeline:** A horizontal axis at the top showing 15 measures. Various audio regions are placed along this axis, such as "Vintage Funk Kit 01.1", "Acoustic Noodling 02.1", "Cowbell Groove 01.1", "Funky Pop Bass 01", "Latin Horn Stabs", "3- Seventies Wah", and "RnB Horn Section 09.1".
- Control Panel:** Located at the bottom, it includes a play button, transport controls, a digital display showing "0:14.4.1.279" and "120 TEMPO", and a volume slider.
- Loops Browser:** A panel at the bottom right showing a grid of loops categorized by instrument and style. A table of the visible loops is provided below.

| Name | Tempo | K |
|---------------------|-------|---|
| Latin Horn Stabs 03 | 115 | |
| Latin Horn Stabs 04 | 115 | |
| Latin Horn Stabs 05 | 115 | |
| Latin Horn Stabs 06 | 115 | |
| Latin Horn Stabs 07 | 115 | |
| Latin Horn Stabs 08 | 115 | |
| Medieval Flute 03 | 71 | |
| Orchestra Brass 03 | 90 | |
| RnB Horn Section 05 | 120 | |
| RnB Horn Section 08 | 120 | |
| RnB Horn Section 09 | 120 | |

Super Duper Music Looper

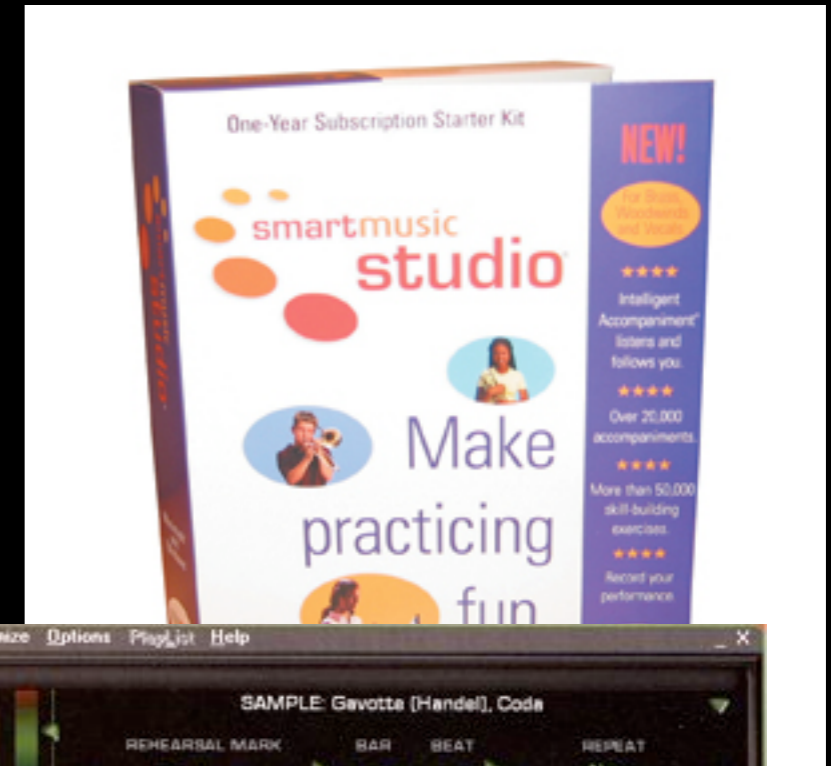
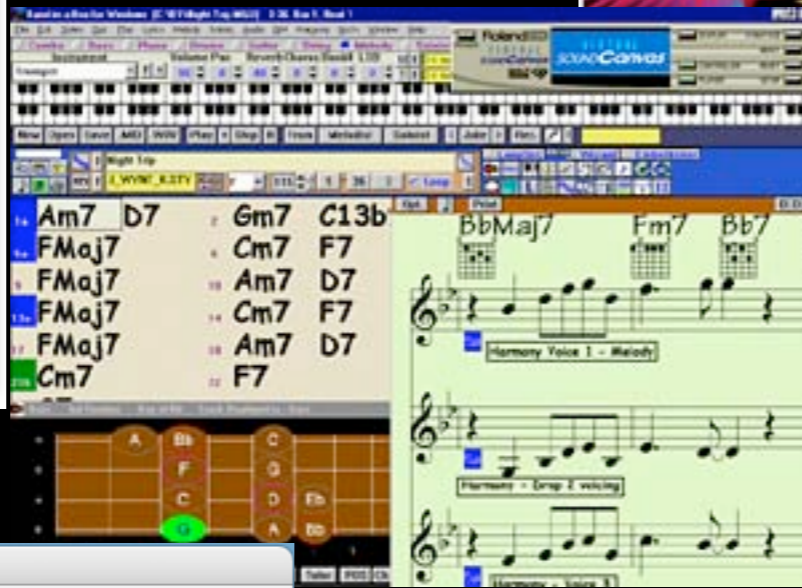
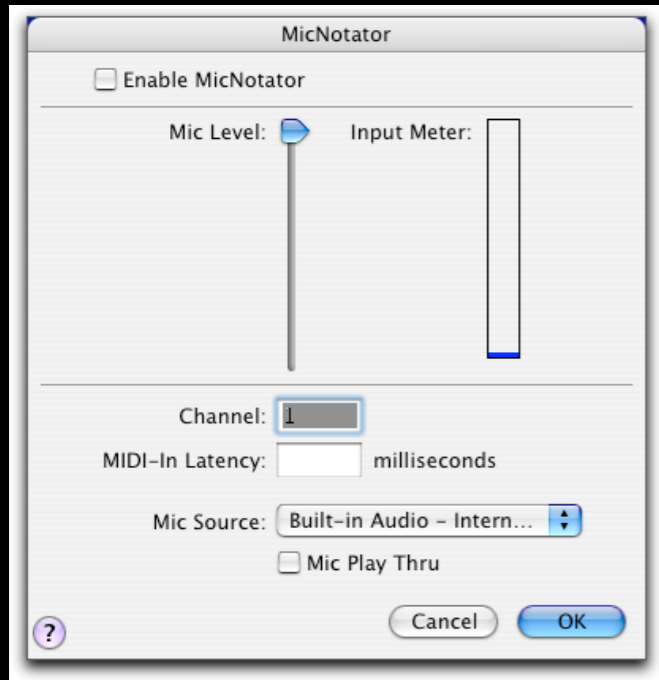


Free FLASH
web version
online
or newer
Jam Trax

Groovy Music



Intelligent Assistants



New Interactivity Tools

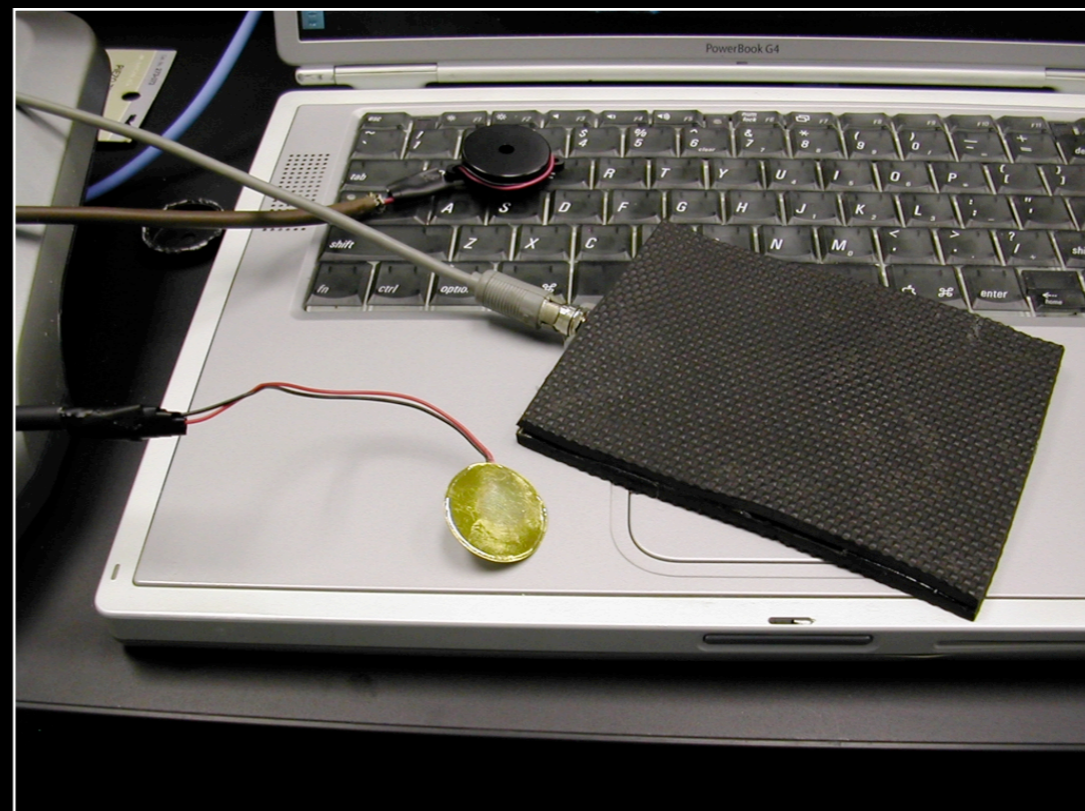
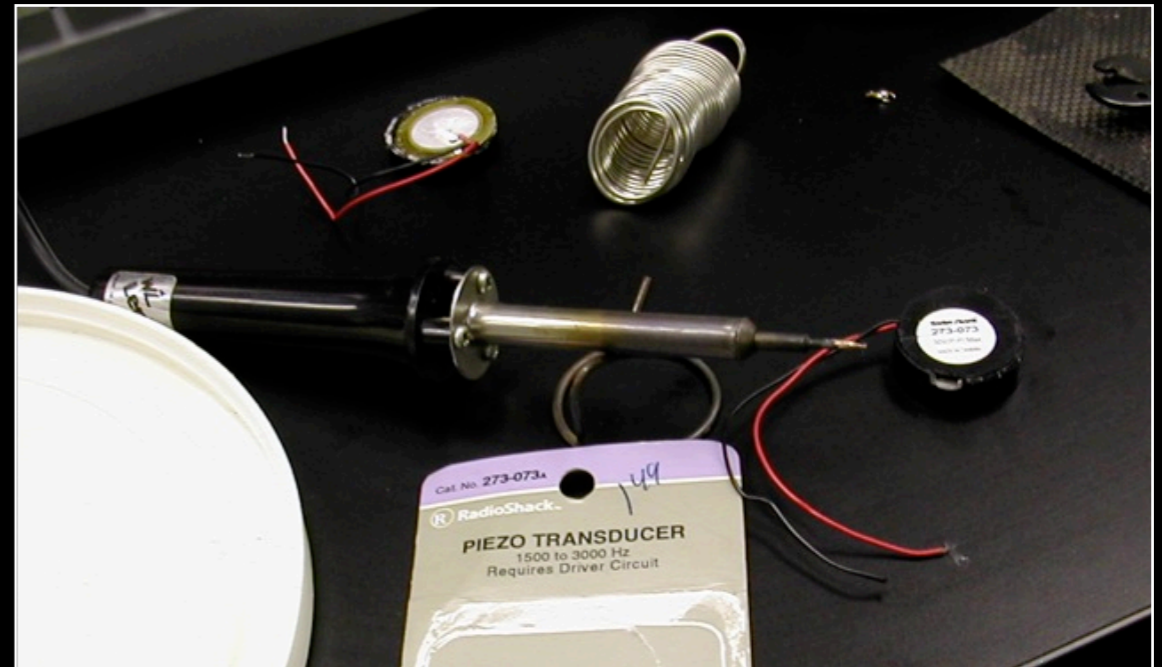
MUSIC CREATIVITY REVOLUTION

New Instruments

- USB microphones
- USB and MIDI Guitars
- Drums pads & surface controllers
- MIDI triggers from just about anything



Make your own MIDI devices



New Cell Phones Double as Musical Instruments



Response Devices

- TurningPoint Response Clickers for audience participation in music making
- Grassroots 2008 by T. Harding & D. Williams



NON-TRADITIONAL MUSIC (NTM) STUDENT?

Inverted Performance Pyramid



Elementary/
General Music
music for all

High School
music for a few



Estimate of % of Non-Performers (Grades 6-12)

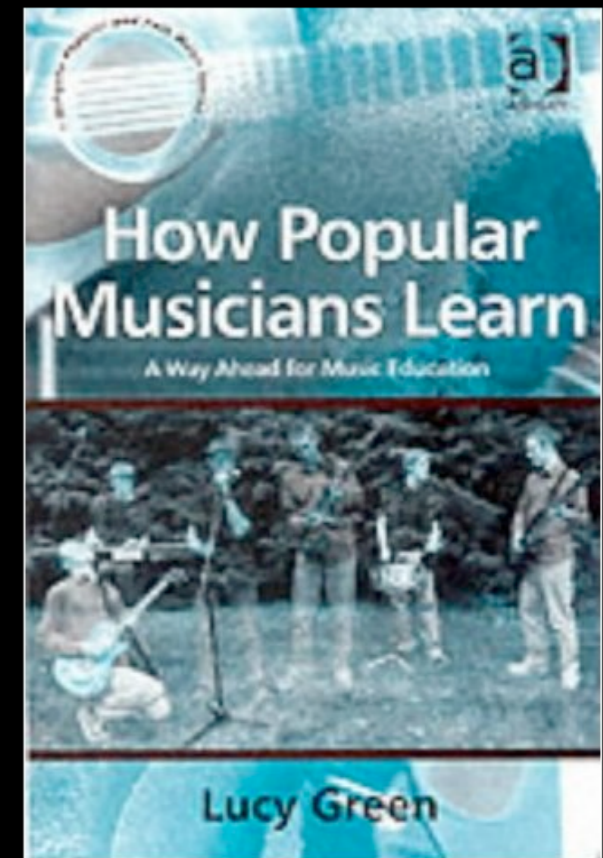
| State | Performers | Total Ss | Non-Performers |
|------------|------------|----------|----------------|
| Florida | .22m | 1.43m | 85% |
| New York | .46m | 1.78m | 74% |
| California | .41m | 3.44m | 88% |
| Ohio | .30m | 1.01m | 70% |
| Average | 1.39m | 7.66m | 82% |

Data compiled by Nathan Edwards, graduate project at Illinois State University, 2006
m=millions of students

Rethinking teaching strategies

Quotes from Lucy Green's "How Popular Musicians Learn" (2002).

- "...Music educators should examine...the informal learning practices, attitudes, and values...of popular musicians...in relation to the changing position of popular music in education over the last forty years or so.. Otherwise, we could be deprived of the means of acquiring the skills and knowledge of some of the very music that is purported to be represented in formal music education; we could continue to bypass those children and young people who are nonetheless highly musically motivated and committed in their lives outside the classroom; and we could ignore a potentially worthwhile, accessible and inspiring repertoire of approaches to music learning." (p. 17)
- "...Popular musicians rarely use music notation, and whether they use it or not, they must be able to play without it, on the basis of what has been learnt through listening." (p. 29)
- "Although...notation in one form or another plays a role in learning for many popular musicians in the early stages , it is always heavily mixed in with aural practices, and used as a supplement rather than a major learning resource." (p. 38)



Non-Traditional Music Student (NTM)

- 6th-12th grades
- do not participate in traditional performing ensembles
- many have a music life completely independent of school music
- may or may not play and instrument (if so, likely drums, guitar, or sing)
- may or may not read music notation
- some unmotivated academically or discipline problems
- some claim to “hate music”



These attributes are based on my research and discussions with classroom teachers over the past 4+ years. DBW

New Jersey Music Tech Study

- Richard Dammers, Rowan University
- Survey of two groups: H.S. Principals (n = 175) and H.S. Music Tech Teachers (n = 36)
- 28 % of schools offer some form of music technology courses
- Publication of survey results forthcoming by Dr. Dammers

New Jersey Music Tech Study

- 67 % of the students NTMs
- 80 % of classes designed for NTMs as grassroots effort by a tech-devoted teacher
- Listening and creating with sequencing and recording emphasized more than notation, theory, performance skills
- Wide variety of music styles of genres

PROFILES

Reaching out to NTMs

- Ladue MO high school NTM students
- Rick Dammers, music teacher (now at Rowan University, NJ)
- Students compose in various music styles using technology
- Students could not read music but most had an “active music life” outside of school

Reaching 40% of students in high school

- Ken Simpson
- Brookwood High School music students
- Labs, classes, recording studios (over 1400 students involved, 900 of them NTM's)
- Full-time music tech instructor
- Full budget support from school board
- Brookwood H.S., Snellville, Georgia

Sunset Hill School

- Carol Broos
- Sunset Ridge School
- Winnetka, Illinois
- Using a variety of music creativity software with grades 4-8



1995-2008 Vermont MIDI Project marks 13 years of infusing music composition into the curriculum.

The purpose of the Vermont MIDI Project is to encourage and support students in composing and arranging music. A community of professional composers, teachers, pre-service educators, and students engage in mentoring and online discussion of student work. [Learn more.](#)

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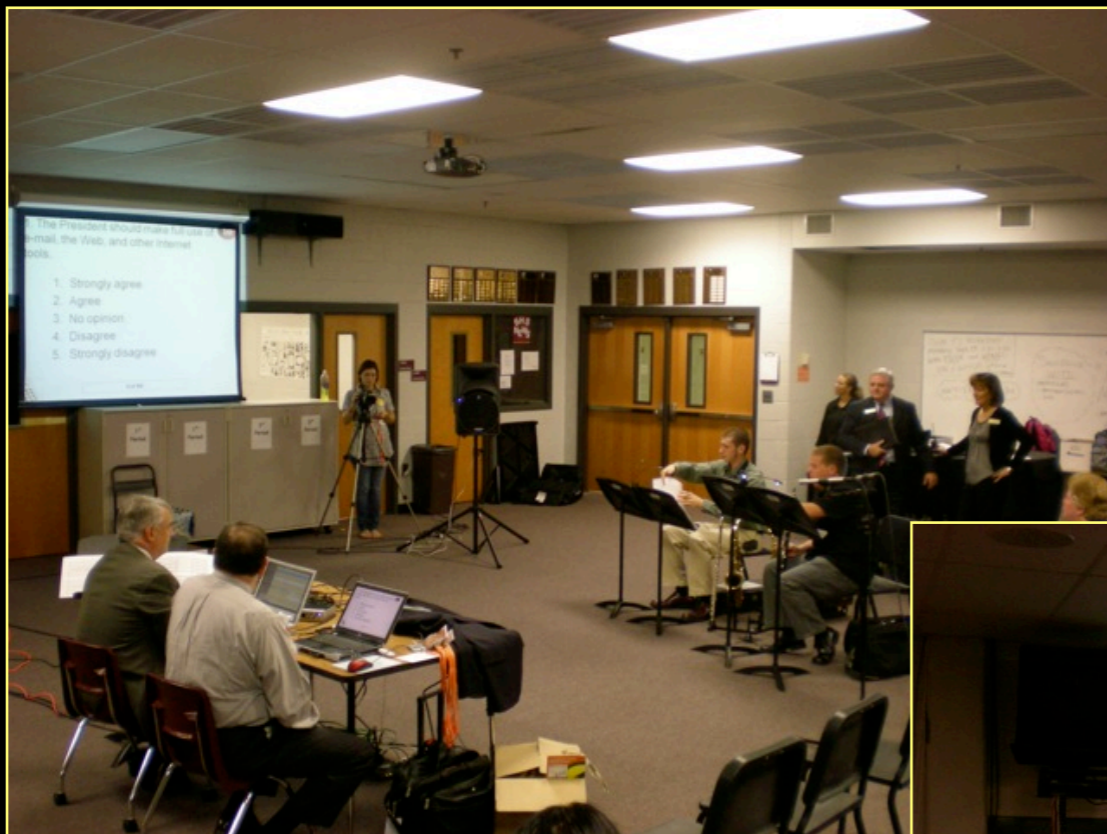
NEW! Opus 16 Multimedia
Content Available Now... [Opus 16](#)
Flash Files

"Well now that I'm a composer..."

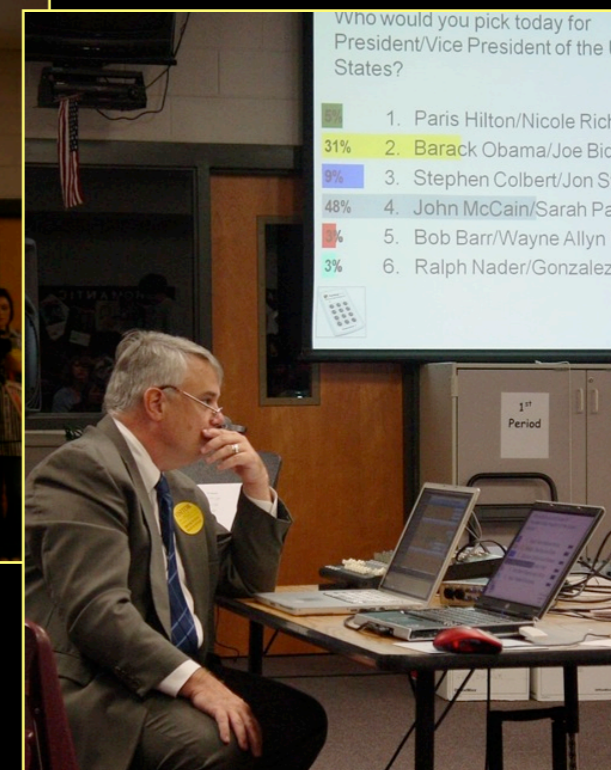
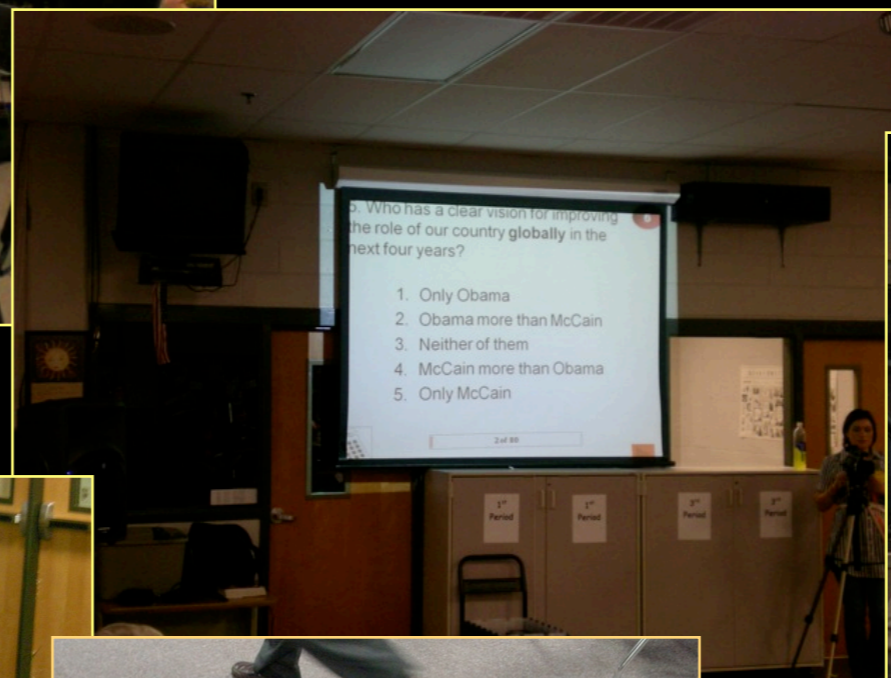
*I do a lot more with music.
Last year when I started
composing
it kind of opened up this new
world to me."*



Grassroots 2008



Views from the performance of Grassroots 2008 by Tayloe Harding & David Williams at Brookwood H.S., Sept 25, 2008. Scored for wind players, 2 computers, and the audience using response clickers.



GETTING STARTED

Exploring Inside Creativity Doors..

- Review Poor Person's Software & Hardware Options
- Demos
 - Groovy Music
 - Sibelius Worksheet Creator & Arranging Tools
 - MIDI Triggers
 - Making of Grassroots 2008 (PowerPoint, GarageBand, Flash, TurningPoint Clickers)
- Lots of Time for Q & A and Use the Clickers

What good is music technology?

- Drill and practice
- Multimedia experiences
- Alternatives for instrumentation
- New forms of musical expression
- Intelligent accompanist/arranger
- Aid to music creativity: sequencers, notation, and digital audio editing

Dave's Poor-teacher's Software List

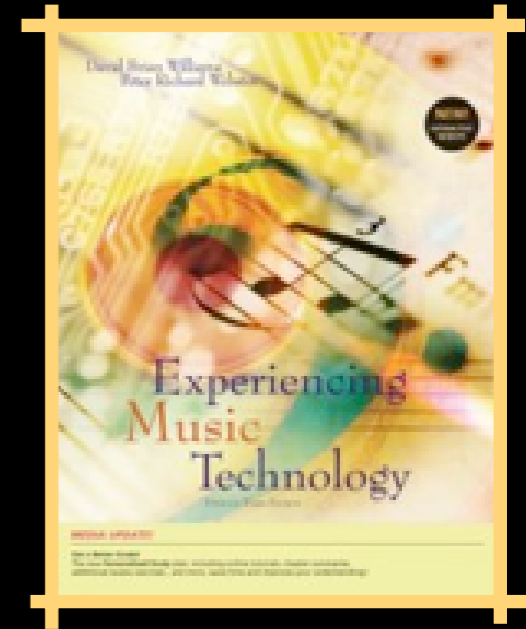
- Finale NotePad (\$10) or Sibelius Student Edition (\$80) for notation
- Cubase Essential 4 for Education for digital audio/MIDI sequencing (\$75)
- SourceForge Audacity for wave editing (free)
- Band-in-a-Box (\$90)
- AcidXpress/ACID Music Studio (free/\$45 for PC) or GarageBand (Mac, included w/Mac) for loop sequencing
- Super Duper Looper or JamTrax for young children (\$20)
- Making Music or Groovy Music (\$15-\$60)
- SmartMusic (\$100 teacher down to ~\$20 per student)

These are best-guess academic prices!

Almost all cross-platform!

Resources

- Resources on Dave Williams' Website including Guidesheets and files for today's inservice: www.coach4Technology.net/resources.html.
- Williams & Webster's Experiencing Music Technology (3rd Edition Updated) textbook: See www.emtbook.net
- Sibelius websites: www.sibelius.com
www.sibeliusmusic.com
www.sibeliuseducation.com
www.groovymusic.com
- Technology Institute for Music Education (TI-ME) website: www.ti-me.org. This is a great organization to join for technology resources, training, and help



coach4Technology.net

— Guidance in achieving your technology goals



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Welcome to coach4Technology.net

This site is a resource center for professional coaching services that I provide in three specialized areas:

- Music education and music technology (tech4music.net)
- Personal desktop technology and website design
- Instructional technology and college technology administration

Typical coaching clients are:

- professionals seeking one-on-one assistance in making more effective use of personal technology (a computer, cellphone, iPod, etc.)
- music teachers looking for ways to integrate technology into their classroom activities
- private musicians and music teachers wanting assistance with current music software and hardware
- organizations or individuals seeking to establish a basic web presence and identity
- educators and administrators needing assistance with implementing academic computing projects and technology curriculum integration

I invite you to visit the sections of the website where you will find information and support materials. I'd be happy to discuss your needs. Feel free to contact me at dave AT coach4Technology.com.

What's new?

Check out the Grassroots 2008 performance multimedia piece that Tayloe Harding and I created based on the Presidential election campaign. [Video and info on the Grassroots page.](#)

Out and about...

CMS/ATMI National Conference, Atlanta, GA. September, 2008.

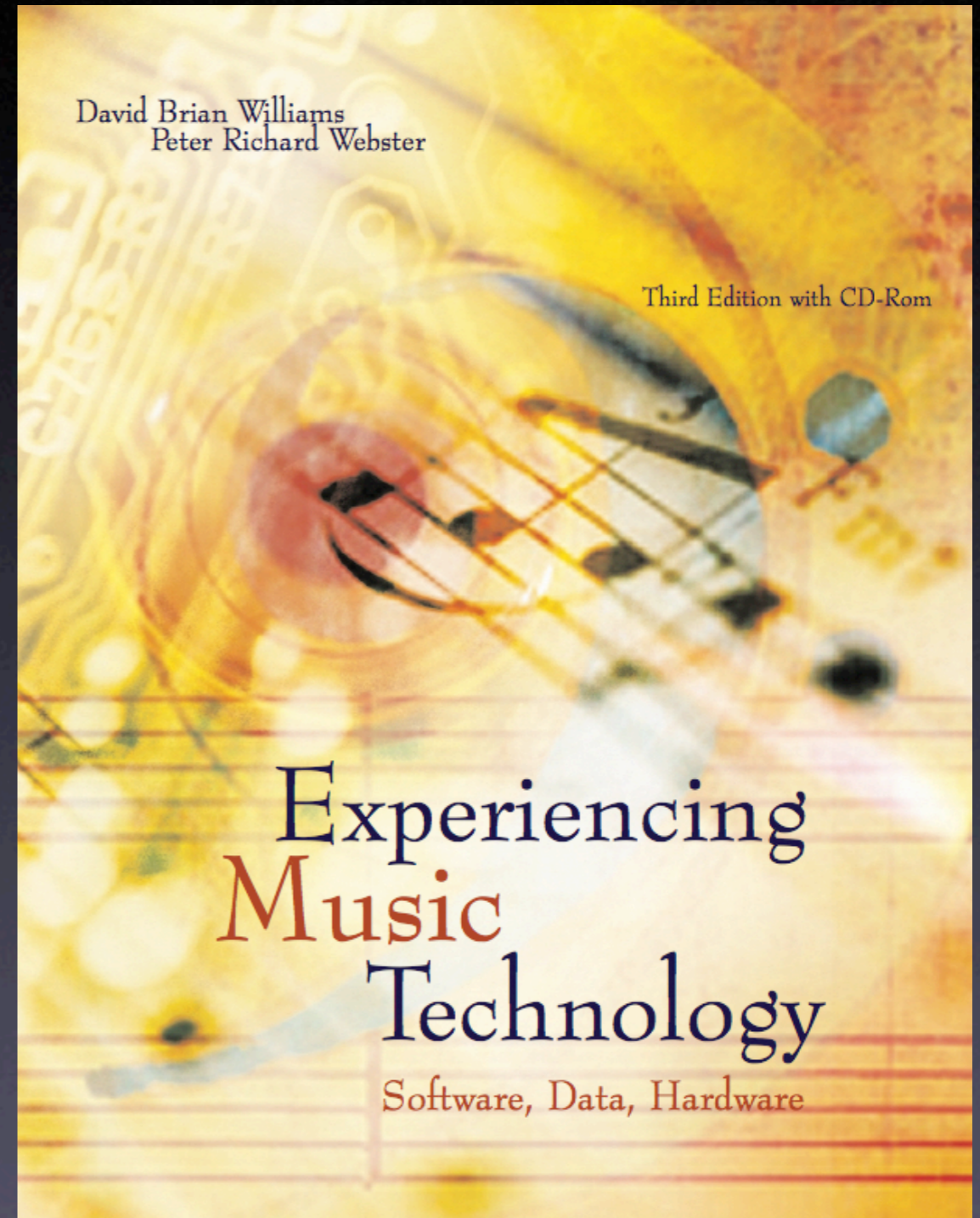
Milwaukee Public Schools Sibelius In-service, September 2008.

University of Alabama-Birmingham, November 2008. Performance of the Harding & Williams Grassroots 2008 multimedia performance piece and master classes.

www.emtbook.net

My thanks to the following companies that support my work in various ways.

- Ableton
- AABACA/MusicBarn
- Korg/SoundTree
- Linplug
- MakeMusic!
- MiBAC
- OZ Software
- PG Music
- Sibelius/M-Audio/Avid



returning to my biases

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