Music Computing Goes Mobile!!

Session II

Presentation for

Association for Technology in Music Instruction

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Kansas City

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Peter Webster, Northwestern University

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Organization for the Two Sessions

- Session I: Solutions for Teaching, Composing, and Performing
  - Personal Hardware/software
  - Wireless Developments for Personal Hardware
  - Music in a Box
  - Recording Solutions
- Session II: Future of Music Studios, Labs and Classrooms
  - Recording Goes Mobile
  - Mobile and Wireless Penetrates the Classroom
  - Integrating Mobile Computing into Instruction
  - Wither Goeth Music Computer Labs?
  - Key Considerations and Issues

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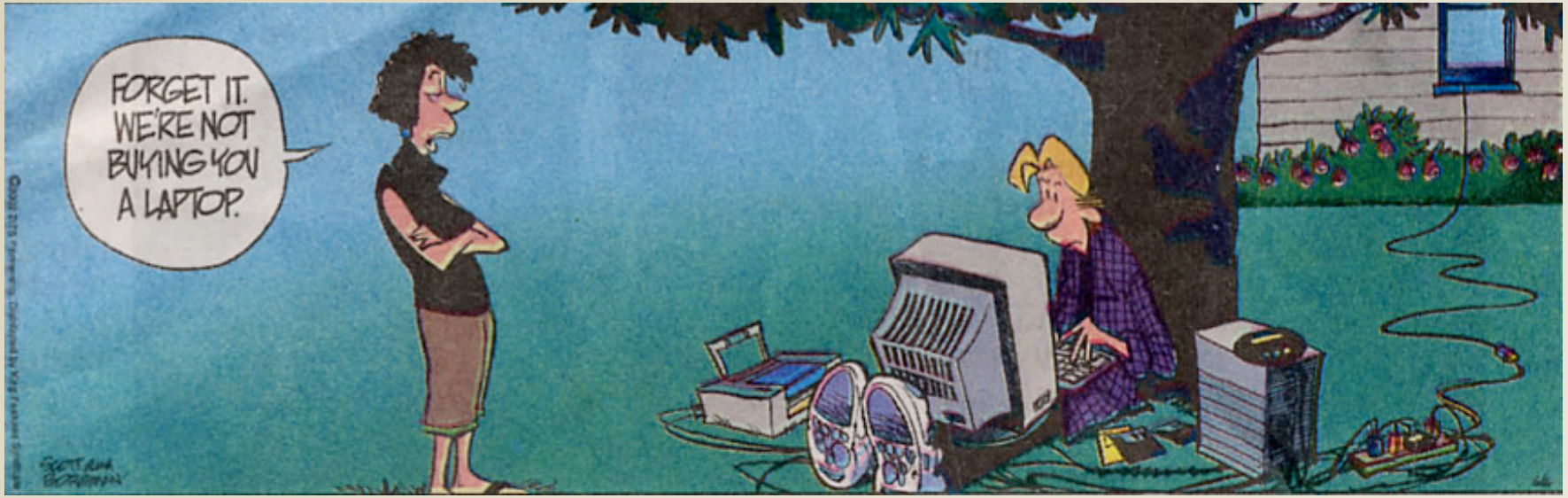

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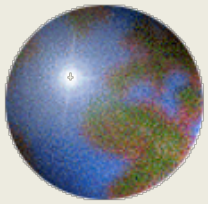

1. Recording Studios Go Mobile

Taking your computer music with you….

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MASTER
INPUT MONITOR
NULL
LOCATE
SET
BANK
REW
F FWD
STOP
PLAY
RECORD

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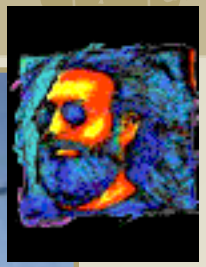
REDRUM
CYCLONE
PARAMETRIC EQ

DAT-Heads and Tapers



Sony DAT D8

Rio Jukebox

(Show)
Mics ★
Preamp ★
DAT ★ Rio ★
(Home)
USB ★
Laptop ★
CoolEdit ★
CD burner

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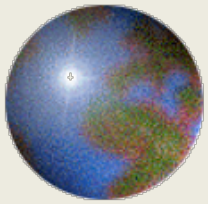

2. Mobile and Wireless Penetrate the Classrooms

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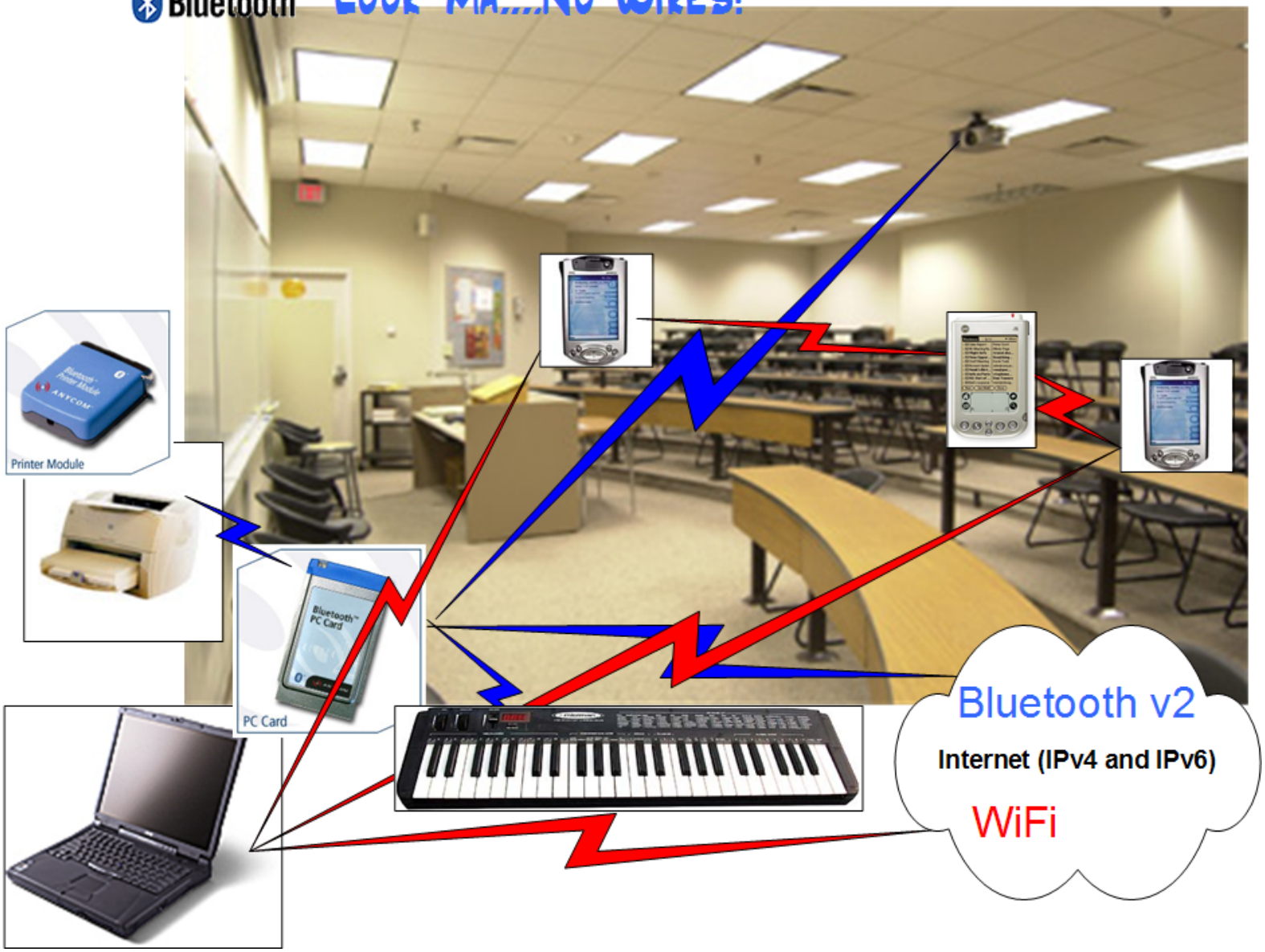
Bluetooth™ Look Ma....No Wires!



Porting Software to Mobile Formats

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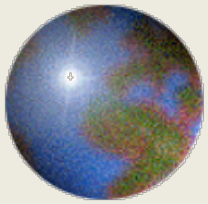
3. Wither Goeth Computer Labs?



How does the development of mobile computing influence ways to design institutional computing in music?

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Traditional Models vs. New Approaches

- Rows of Desks with Identical Networked “Workstation”
- Dedicated stations for scanning, CD creation, or other special function
- “Library” atmosphere with quiet, private work in one room
- Single Laser Printer and Dedicated Server
- One computer/projector station
- “High-end” audio recording lab with studio space
- Similar software on all computers

Powerful stations mixed with network taps and/or wireless for personal laptops and handhelds--flexible furniture

Areas for single and group work

Combination photocopier/printers/ scanners networked and accessible 24/7

Server space in more central location

Multiple approaches to projecting images

Variety of software, some metered for use by students as needed

Check-out system for digital cameras and recording equipment

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Traditional Views

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More Flexible Approaches

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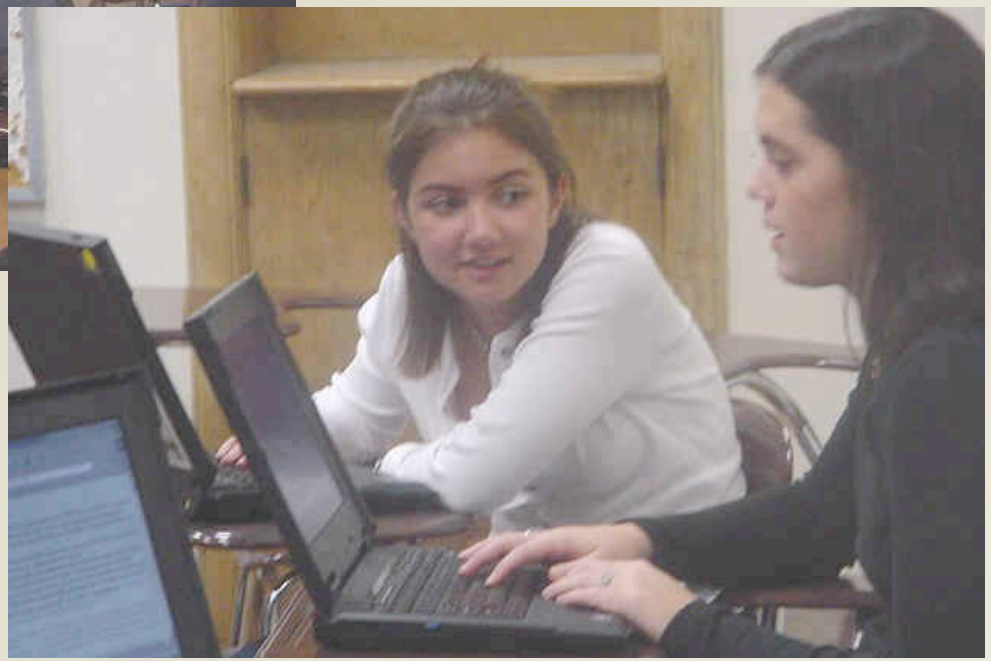
More Flexible Approaches



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More Flexible Approaches

The Titanium PowerBook G4 with Mbox.

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More Flexible Approaches

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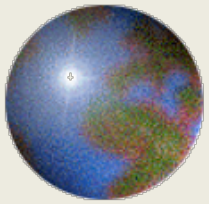

4. Integrating Mobile Computing into Music Instruction

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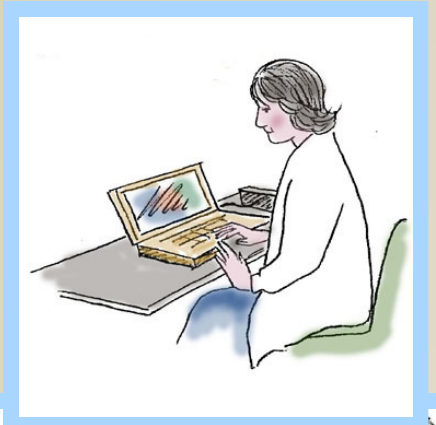

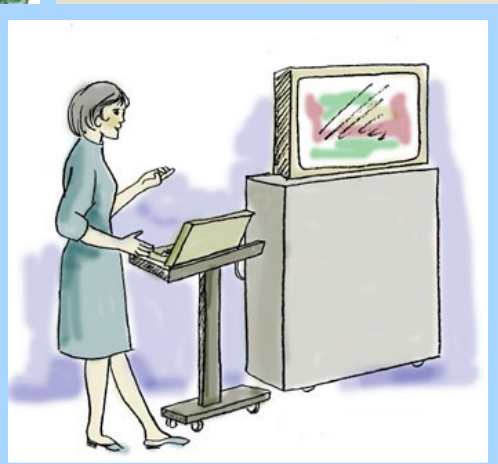

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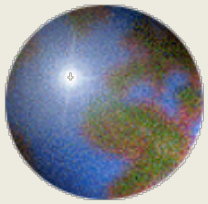

Social and Intellectual Commons (iCommons) for Technology

Bringing your computing to your activities, not the other way around…

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Laptop Study Areas

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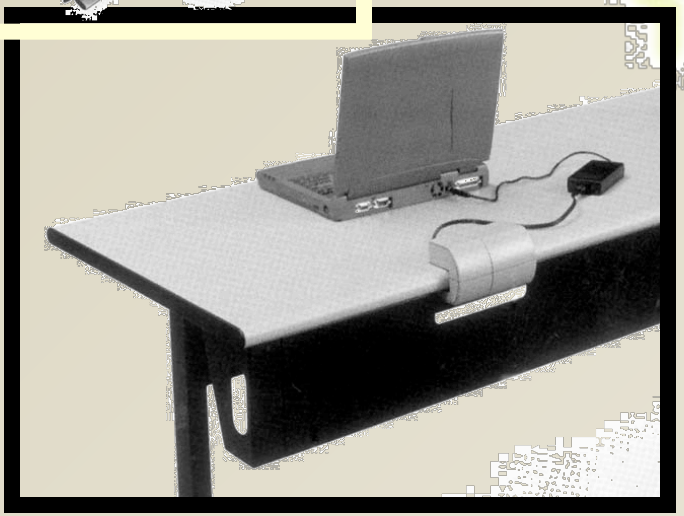
Multipurpose Classrooms



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Multipurpose Classroom

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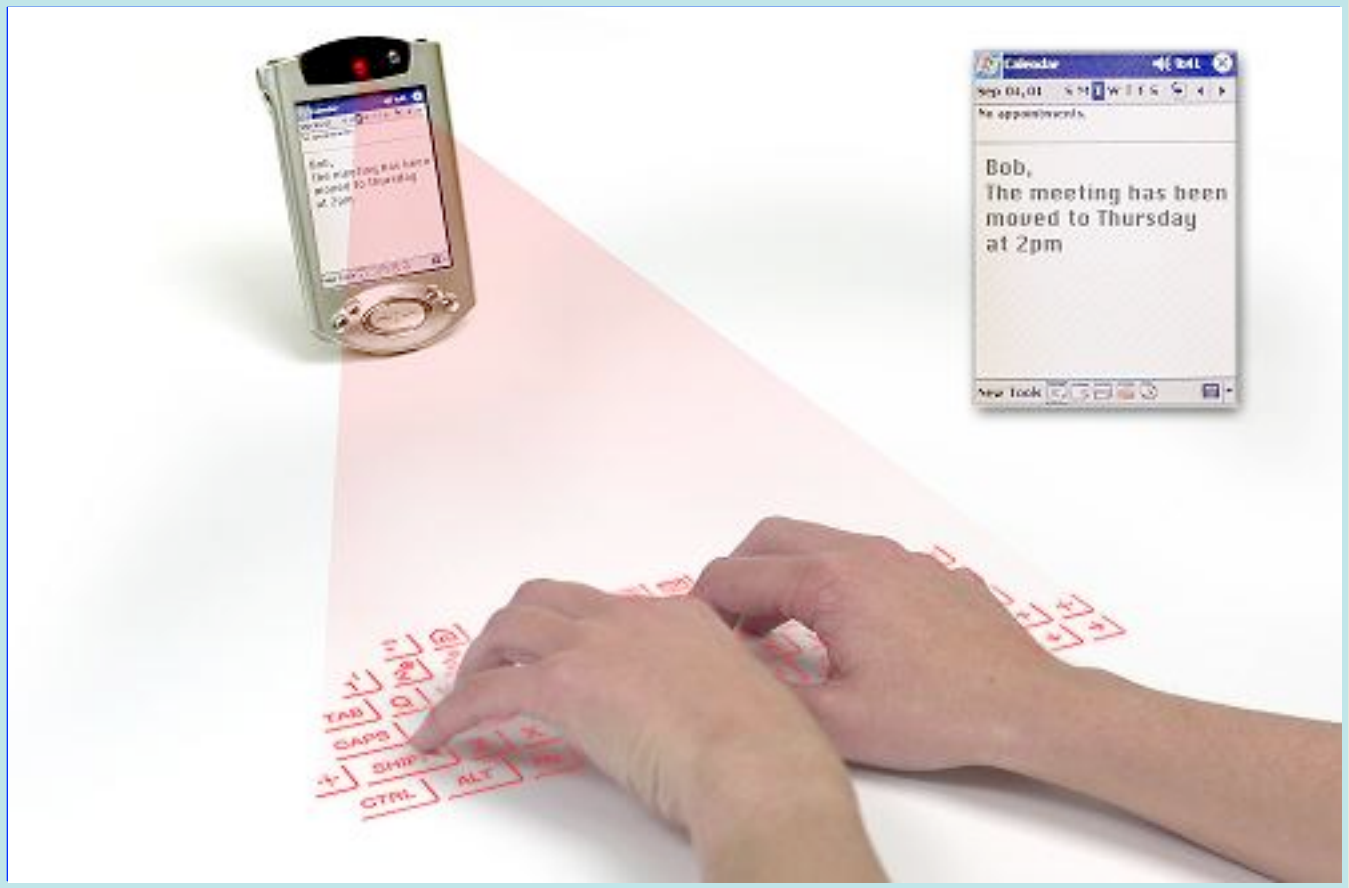
Roaming Faculty

How flexible can we get?



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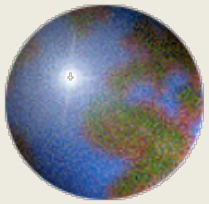

4. Key Considerations and Issues

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Reasons people give for not going mobile

- Keyboard and screen comfort
- Need for docking stations, alternative displays, keyboards, etc.
- More repair prone
- Price point higher than desktop unit
- Overall more expensive to maintain
- Security, theft, damage

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Undesirable Attributes

- Student off-task behavior with handheld devices
- Students loss of focus because of variety and amount of information
- Lack of wireless etiquette
- “Cool” factor overshadowing music content
- Cost and security
- Lack of “serious” software
- Teacher time
- Change in culture seen as threatening

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Illinois State Challenges:

- Taking computing with you, not going to the computer.
- Intellectual Commons (iCommons)
- Selective beaming of campus information
- Accommodating PDAs and Cell Phones
- Classroom access to laptops, etc.
- Changing recapitalization of technology budget strategies
- Faculty and staff support and training for portable computing/rethinking curriculum

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