

Encouraging Creative Thinking in the Undergraduate Curriculum: Reflections on the CMS Task Force Report



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Greetings and welcome to my little part of cyberspace!

I am an adjunct professor with an appointment as Scholar-in-Residence at the [Thornton School of Music](#) at the [University of Southern California](#) in Los Angeles. I recently retired as a professor emeritus from the [Henry and Leigh Bienen School of Music](#) at [Northwestern University](#) in Evanston, Illinois.

I am very interested in children's creative thinking in music and in the appropriate use of [music technology for music teaching and learning](#). I do research and write extensively in these fields as well as offer papers and workshops both nationally and internationally. I continue to play my trumpet as much as time allows and am an avid concert goer and iPad2 user. Click on the links to the right for more [biographical information](#).

My hobbies include sailing, biking and reading novels. I've been known to enjoy a good meal or two in area Chicago and now Los Angeles eateries before a night of theatre and wouldn't turn down a glass of good Irish or Scotch whiskey and a good cigar.

[Link to information about my latest research on adult creativity and music background](#)



Sample Publications

[Experiencing Music Technology](#) (jointly authored with [David Williams](#)) Cengage/Schirmer, New York, 2008. (3rd edition UPDATE) (with project-centered website: www.emtbool.com)
Note that this book is now undergoing revision and will be available in a 4th edition later next year.

Samples from complete textbook:

[Front material including table of contents](#)

[Module III, Viewport 9](#)

[0\). Creativity as creative thinking. *Music Educators Journal*. 76 \(9\), May, 1990, pp. 22-28. \[Google Scholar rated this article as the #1 most frequently cited article in Music Education, June, 2010.\]](#)

[, P. \(2011\). Constructivism and Music Learning. In R. Colwell and P. Webster \(Eds.\) *MENC Handbook of Research on Music Learning, Vol. 1*, \(35-83\) New York, New York: Oxford University Press.](#)

[09\). Children as Creative Thinkers in Music: Focus on Composition. In: L. Hallam, I. Cross & M. Thaut \(eds.\) *The Oxford Handbook of Music Psychology*, \(pp. 421-428\) Oxford, UK: Oxford University Press.](#)

[Webster, P. \(2009\). Music technology as a servant to real music experience, *Orff Echo*, XLII \(1\), 9-12.](#)

[2007\). Computer-based technology and music teaching and learning: 2000-2005. In L. Bresler \(ed.\), *The International Handbook of Research in Arts Education*, \(1311-1328\). Dordrecht, The Netherlands: Springer.](#)

[Webster, P., and Hickey, M. \(2006\). Computers and technology in music education. In G. Whitherson, G. \(ed.\), *The child as musician: a handbook of musical development*, \(pp. 375-395\). New York: Oxford University Press.](#)

[\(2002\). Creative thinking in music: Advancing a model for music education. In J. L. Willingham, \(Eds.\), *Creativity and music education* \(pp. 16-33\). Edmonton, AB: Canadian Music Education Association.](#)

[Webster, P. \(2002\). Creativity in music: Advancing a model for music education. *Music Educators Journal*. 89 \(1\), pp. 38-43.](#)

Recent Presentations

RIME 2015, April
[Polymathic Thinking](#)

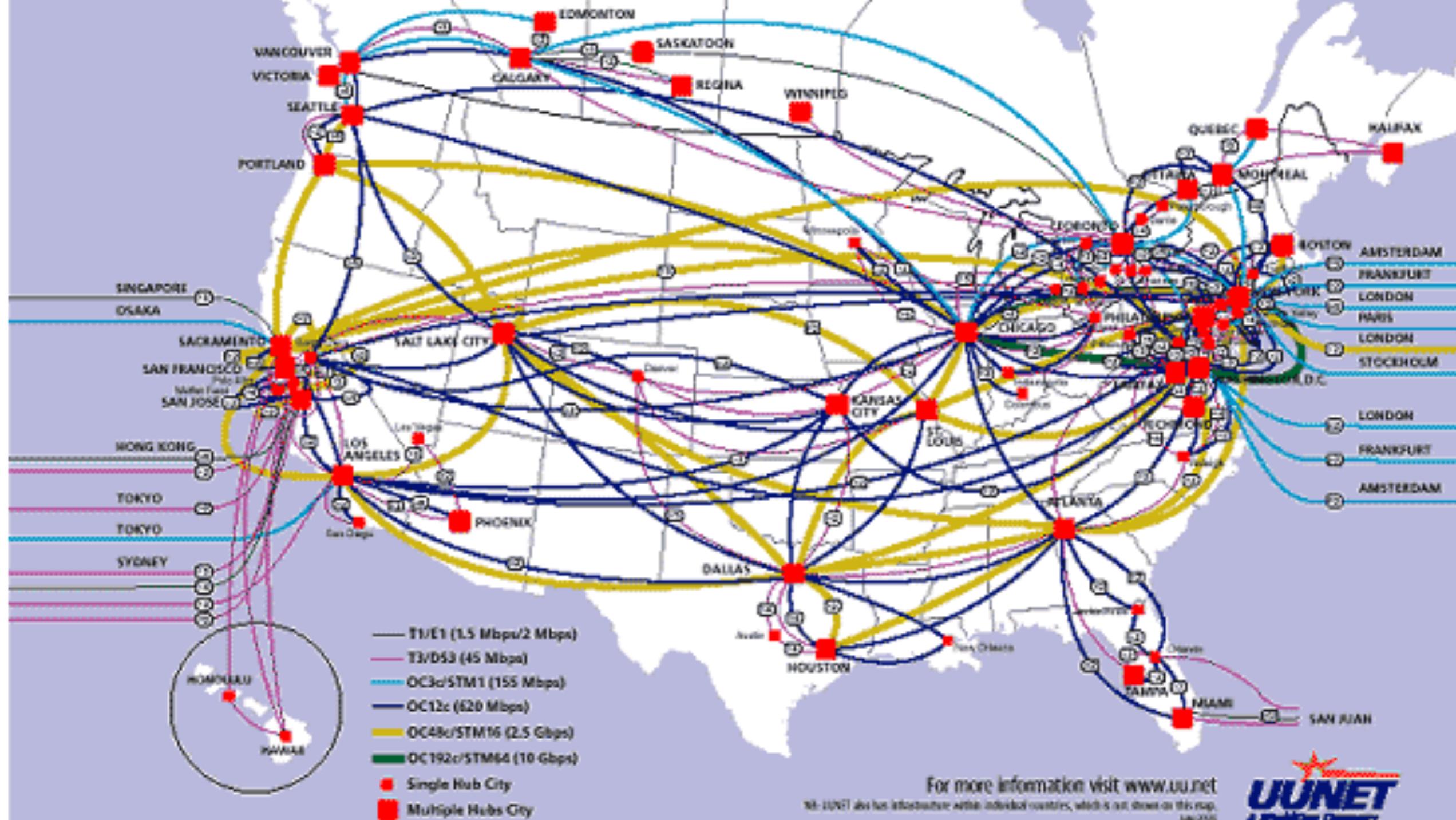
What's to come

- Complex systems
- Most teacher education programs today
- What seems to make certain public school systems work (what might we learn)
- CMS Report – quick overview
- University according to Peter
- Real teacher education programs that are working to change



- Bakerloo
- Central
- Circle
- District
- District open weekends, public holidays and some Olympia events
- Hammersmith & City
- Jubilee
- Metropolitan
- Northern
- Piccadilly
- Victoria
- Waterloo & City
- DLR
- London Overground
- Emirates Air Line
- Interchange stations
- Step-free access from street to train
- Step-free access from street to platform
- National Rail
- Riverboat services
- Tramlink
- Airport
- Emirates Air Line

UUNET's North America Internet network





8 Semesters (Fall Student Teaching)**Year #1 Fall Semester****17**

FAA101 FAA Orientation
 Applied Music
 Music Ensemble
 MUS101 Theory of Music
 MUS107 Aural Skills I
 MUS172 Group Piano
 Supplemental Instrument (Clarinet, Percussion or Trumpet)
 MUS110 Basic Music Literature (fall only)
 Any General Education course

Year #1 Spring Semester

Applied Music
 Music Ensemble
 MUS102 Theory of MUSII
 MUS108 Aural Skills II
 MUS173 Group Piano
 Supplemental Instrument (MUS140 String Class x1)
 MUS243 Introduction to Technology Based Music Instruction
 Any General Education course
 Any General Education course

Year #2 Fall Semester

Applied Music
 Music Ensemble
 MUS201 Theory of Music III
 MUS207 Aural Skills III
 Supplemental Instrument (Clarinet, Percussion or Trumpet)
 MUS240 Introduction to Music Education (Fall or Spring)
 MUS242 Elements of Conducting (Fall)²
 MUS313 History of Music I
 Any General Education course

Year #2 Spring Semester

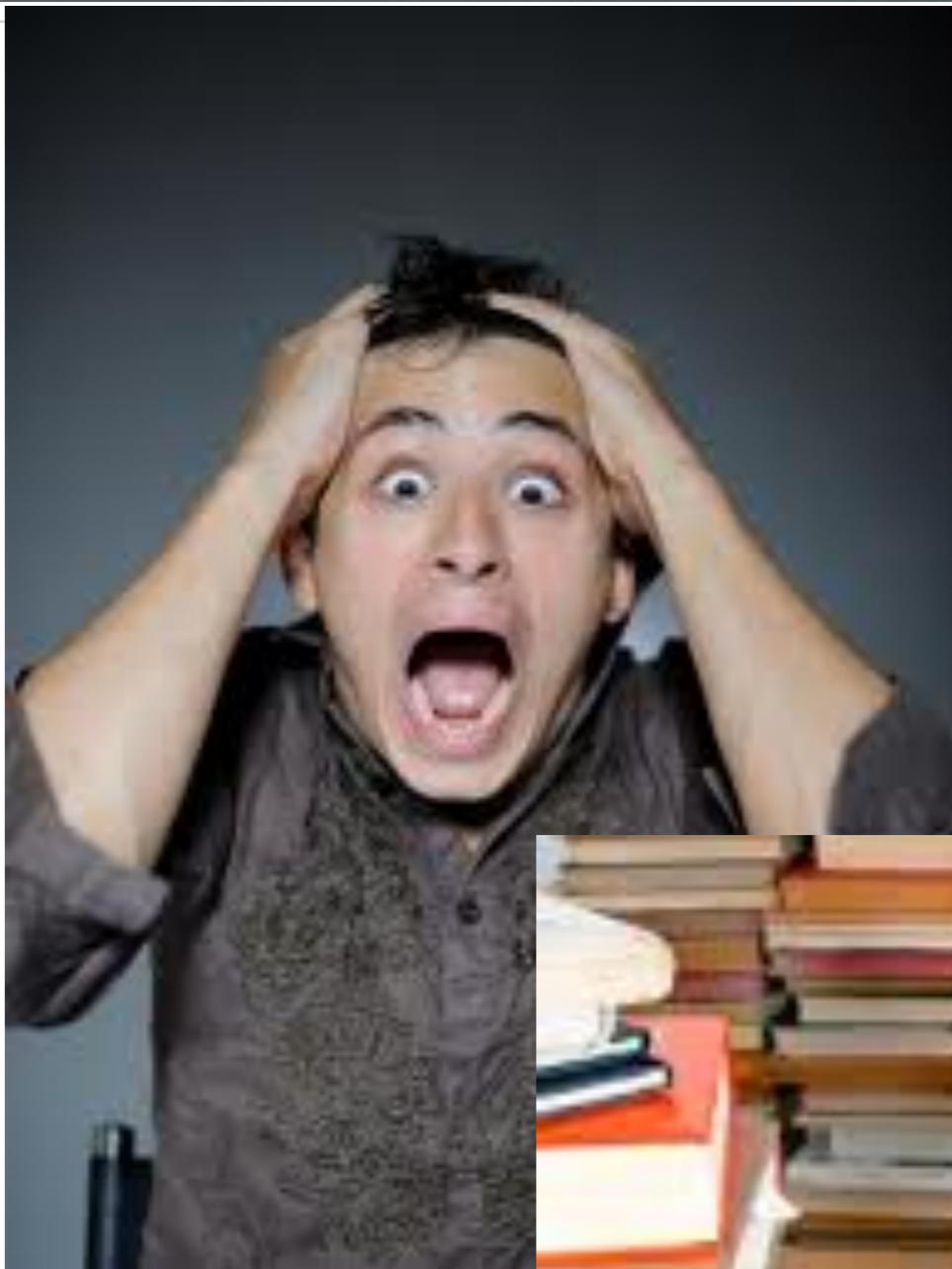
Applied Music
 Music Ensemble
 EPS201 Educational Policy Studies³
 MUS202 Theory of Music IV
 MUS208 Aural Skills IV
 MUS240 Introduction to Music Education (if not already taken)
 MUS314 History of Music II
 MUS332 Advanced Conducting & Teaching Strategies-Band
 Supplemental Instrument (Clarinet, Percussion or Trumpet)
 Curriculum & Instruction 473 (Spring only)
 PSY100: Introduction to Psychology
 Any General Education course

Year #3 Fall Semester

Applied Music
 Music Ensemble
 EPS201 Educational Policy Studies⁴
 MUS320-S Early Field Experience (Fall only)
 MUS333 Advanced Conducting & Teaching Strategies-Orchestra
 MUS335 Elementary/Middle School Instrumental Music (Fall)
 MUS346B Teaching Choral Music (Fall only)
 MUS439 Diversity in Music Classrooms (Fall only)

3







Opera de Paris (1875)

Classical music was a growth industry

Course of Study

❖ 19th C. Conservatory

- ❖ extensive group instruction focusing on a single instrument or voice in the classic tradition
- ❖ extensive conductor-led large ensemble or opera experience with 19th C. repertoire
- ❖ some piano study
- ❖ multiple years of theory emphasizing written notation and solfege
- ❖ historical study of European music literature

❖ 21st C. School of Music

- ❖ extensive private instruction focusing on a single instrument or voice in the classic tradition
- ❖ extensive conductor-led large ensemble or opera experience with primarily 19th C. repertoire
- ❖ some piano study
- ❖ multiple years of theory emphasizing written notation and solfege
- ❖ historical study of primarily European music literature

Why did we get this way?

- Long-standing model that has been additive over the years (more and more):
 - 120-144 credit hours
 - 5 year programs
- Responses to changing profession and outside agencies (state/national regs)
- Attitude is that the longer the preparation, the better teacher you become

Some Forces are Understandable

- Changes in music
- Wider acceptance of varied musical styles and genres
- More nuanced understanding of philosophy and research
- Technological developments
- Social context
 - Notions of more democratic teaching
 - Need to address widening gaps in wealth
 - Demographic changes

Change and “reform” can be valuable

- But should our response always lead to more courses, more testing, more projects and homework, more required time to study one’s performing medium, more ensembles, more
- Model is not sustainable
- No real empirical evidence that longer education programs make better music teachers
- Perhaps the answer lies in another direction???



Possibilities???





- Look more closely at what we do and how we do it
- Examine how to construct more effective systems that have more **open space for students** – respect their personal motivations and their own beliefs of what they need
- Time for reflection
- In other words, create an environment for learning that mirrors what we know about how we learn

Schools that seem to work



To find the answer we asked
students, teachers and teachers to be.

Often cited aspects of the Finnish education system

- Teachers have autonomy
- Teachers are respected and paid well, given professional development time
- Competition for teacher education programs in Finland that attract the finest candidates
- Stress on student creative projects that teach the standards for learning
- Student agency and encouragement to participate in learning with teachers
- Limited standardized tests
- Students are taught without grouping by ability
- More recess time

More use of projects that teach subjects

While most countries would leave well enough alone, Finland's educators believe in order to succeed in the 21st century, students need to develop more integrated knowledge and skills about real world issues. Hence, from August 2016, Finnish students will get some reprieve from having to learn individual subjects like History, English, Math, etc. in isolation. Instead, the subjects will be taught intertwined as part of a broader topic. All schools will be required to have at least one extended period of the new multi-disciplinary, phenomenon-based teaching and learning in their curricula. However, the educators will be given full freedom to decide on the length of the period. The law also stipulates that students be involved in the planning and assessment of the new curriculum.

College Music Society Task Force Manifesto



- Presented publicly at the 2014 Fall Meeting in St. Louis
- What does it mean to be an educated musician in the 21st century?
- 18 months in the making and was created by a cross-disciplinary panel of college professors in music (not just music education professors!!)

Important basis of work

Factors include an expanding, interconnected global society with its cross-cultural influences, crossover stylistic expressions, electronic as well as acoustic performance and production, advances in technology, access and transmission afforded by the internet and digital media, and growing creative impulses for many real-world musicians in the form of improvisatory and compositional endeavors.

- Three pillars upon which the report rests: creativity, diversity, and integration
- Improvisation and composition are of equal importance to the training of performers to interpret the works of others
- Students should engage in music of many cultures and with more varied ways of expression
- Integration across sub-disciplines in music

Important basis of work

...traditional music instruction at odds with what we know about perception, cognition, and motivation to learn ...urges far more student engagement with curricular planning, as well as preparation that logically fits with the likelihood of professional opportunities for gainful employment. ... ability to talk about as well as perform music, to share research in understandable ways, to value and engage with diverse constituencies in terms of age and cultural background, to lead in developing new models of concert performance that bridge performer--audience barriers

- **proposes a return to the authentic roots of the heritage of 17-19th century Bach, Mozart, Beethoven in a way that is relevant to our current musical lives.** The kind of contemporary creative exploration and synthesis that the report proposes is not antithetical to traditional grounding or deep musical understanding, but rather enhances and reinforces artistic rigor, authenticity, and relevance.

Other features of the report

- Top down and bottom up approaches
- Desire to create options for students
- Notion that all programs of study need not be the same
- Creative options for course experiences, especially for those courses that deal with music teaching and learning (require negotiation with state or national credentialing)
- Rethinking of traditional core requirements in music theory, aural skills, history, performance (probably require professional development for faculty to think more holistically about content)

Other features of the report

- Creative approaches to lessons and ensembles (suggestions for multiple teachers and ensemble experiences)
- Richer upper division course experiences
 - Technology-mediated courses that compare older and more contemporary performance practices
 - Time, cognition and consciousness
 - Movement course (Dalcroze, Laban, modern dance, etc)
 - Improvisation: east meets west
 - Advances in music and neurology
 - Community music project or other creative capstone

PETER



UNIVERSITY



Ways We Make Music

Perform the Music of Others

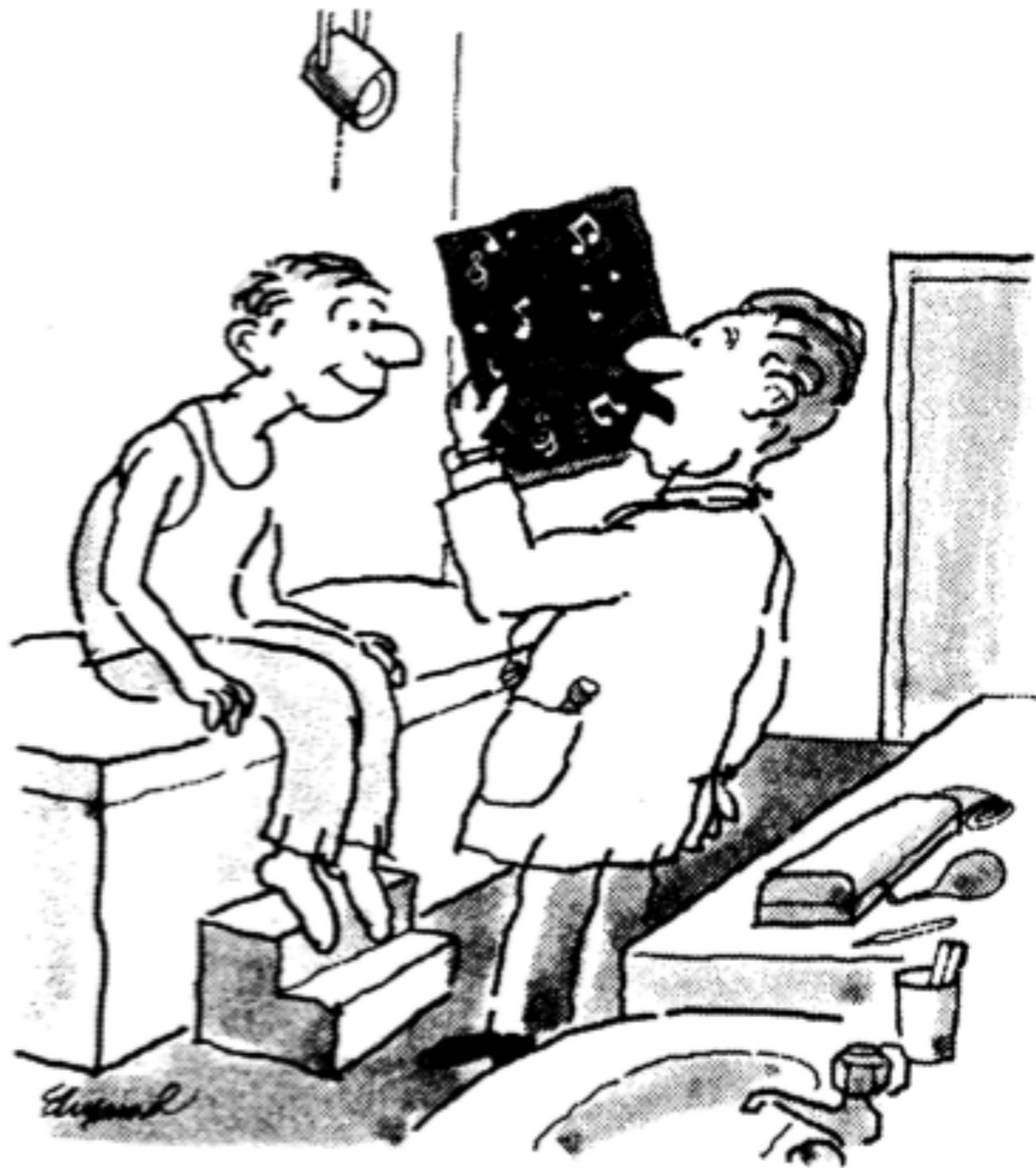
Perform our own Music (Improvisation)

Compose

Listen

Thinking In Sound

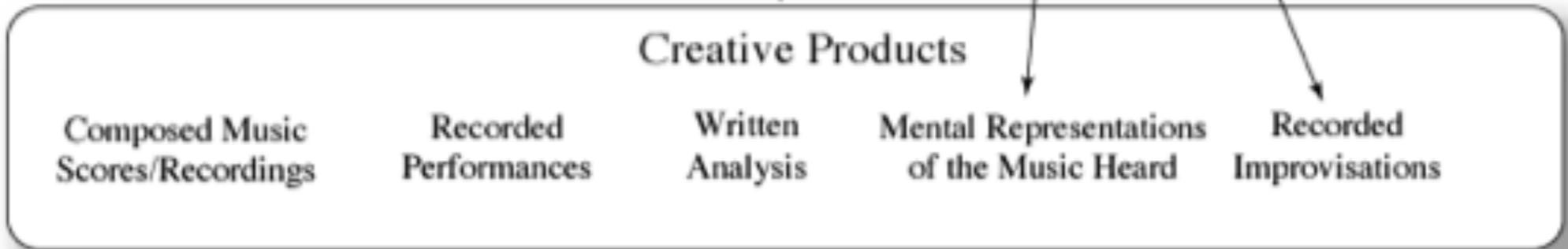
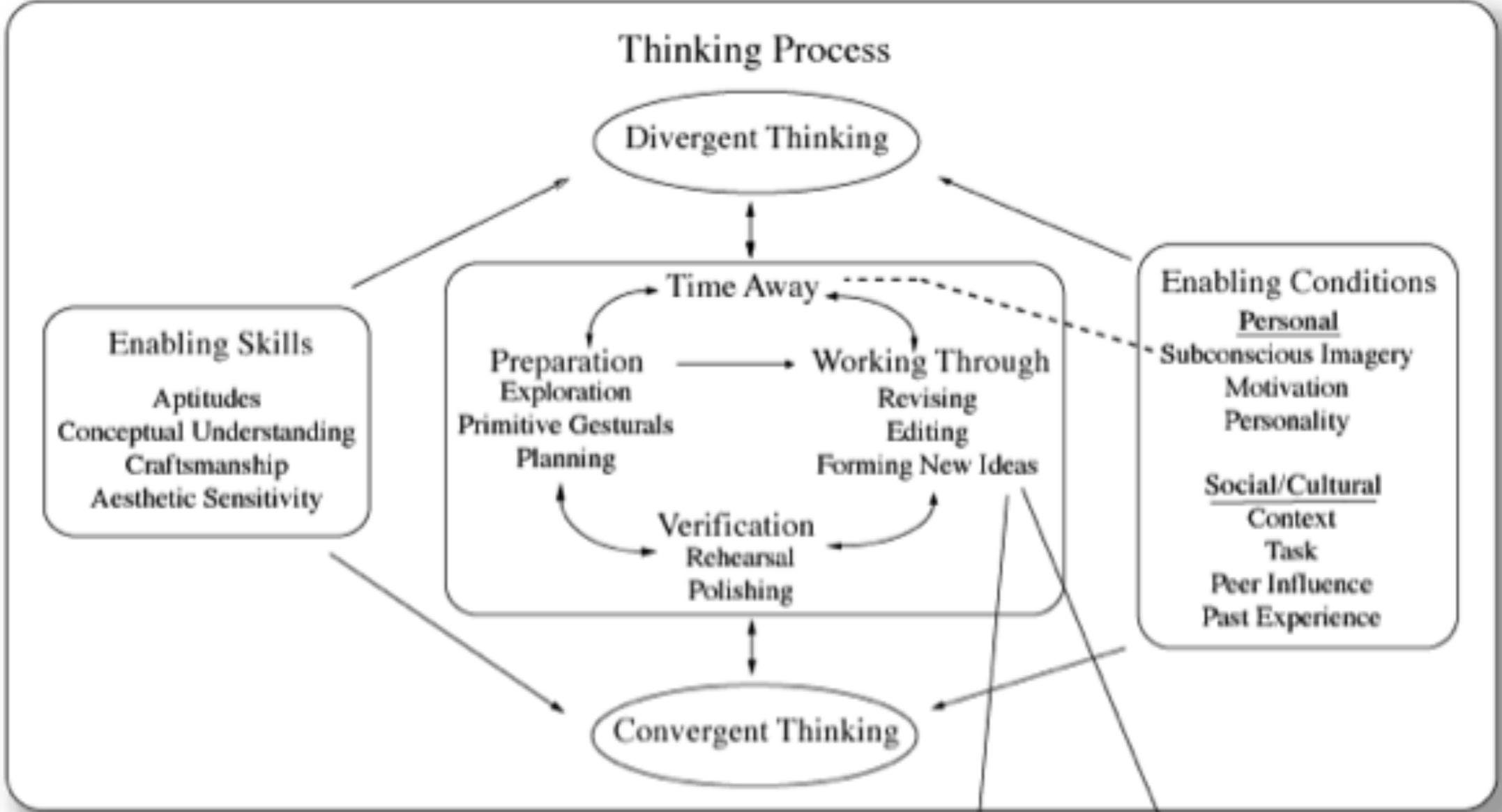
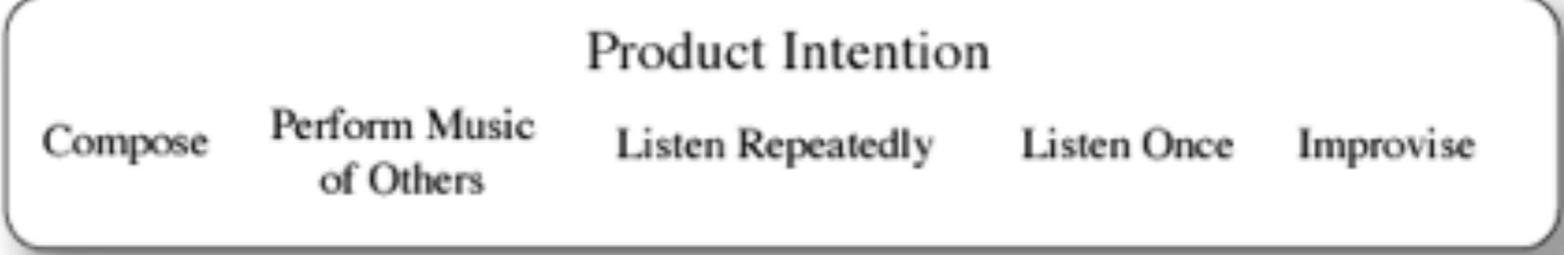




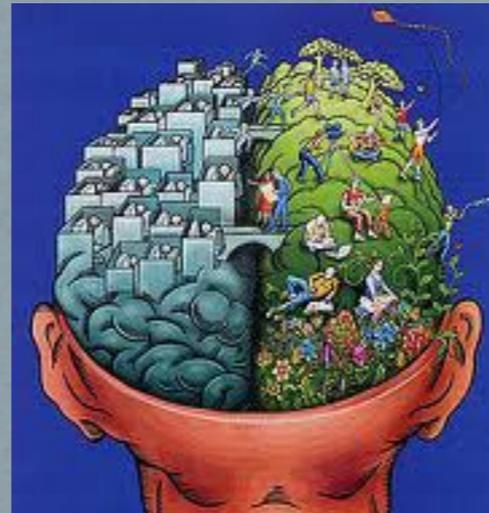
*All I can see is music, lots of
it, simply dying to get out.*

CREATIVE THINKING IN MUSIC

Ultimately, as educators in the arts, we are successful if we engage our students in thinking about the core of our art forms by blending imaginative thought with mastery of skills and knowledge.



Creative thinking in the arts is a dynamic mental process, alternating between divergent and convergent thinking, moving in stages over time. It is enabled by internal musical skills and outside conditions and results in a final musical product which is new for the creator



Key Question

Have I maximized the opportunities for all learners to make their own aesthetic decisions with my guidance and encouragement?

Pedagogical Concept**Older View****Newer View****Relationship Between Ideas**

Hierarchical

Networked

Environment

Highly Structured

More Informal

Thinking

Lower-order, linear skills valued; convergent thinking, memorization

High-order, non-linear thinking valued, convergent and divergent thinking, application of knowledge, critical and creative thinking

Instructional goal

Memorization

Inquiry and invention

Relationship Between Student and Teacher

Instructors are experts with learners as passive receptors

Instructors are seen as mentors with students as active participants

Teacher Role

Fact Teller

Architect of school experience by creating opportunities for discovered learning

Student Role

Listener

Discover of learning with guidance from teacher and other resources

Classroom Activity

Didactic

Interactive

Approach to Knowledge

Accumulation of facts, centered in the classroom/school

Transformation and application of facts, knowledge sources both in and outside of the classroom/school

Role of Technology

Drill and practice reinforcement, information defined by the machine/system

Active agent for new knowledge via simulation, non-linear links, multimedia, interactivity

Assessment

Norm-referenced measures, standardized testing, objective measurement, teacher-centered assessment

Criterion-referenced, portfolios of achievement, self-assessment, rubric-based scales,

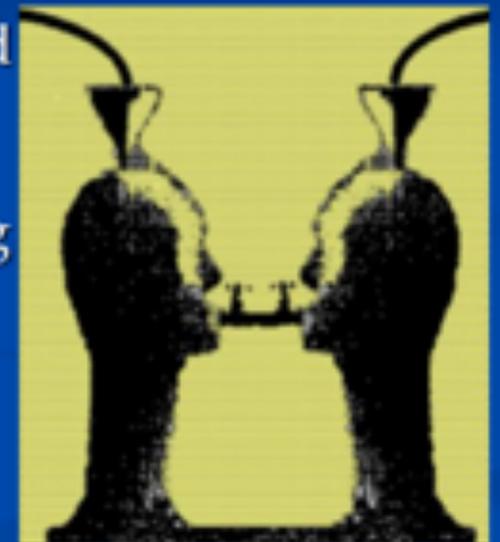
Instructor-Centered learning

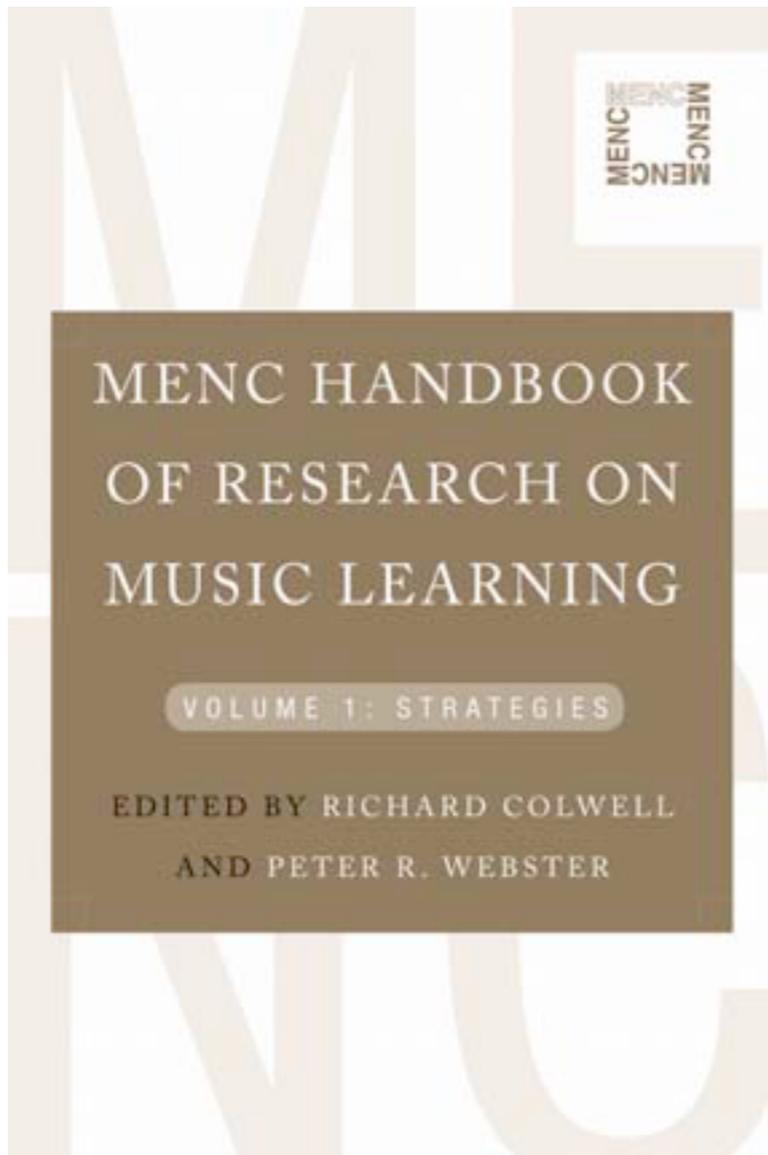
- Hierarchical relationships
- Structured environments
- Instructors as experts
- Students have little or no knowledge
- Convergent Thinking is valued



Student-Centered

- Group learning celebrated
- Informal environments are valued
- Learners & mentors
- Students are recognized as having their own knowledge and experiences
- Combination of convergent and divergent thinking is valued

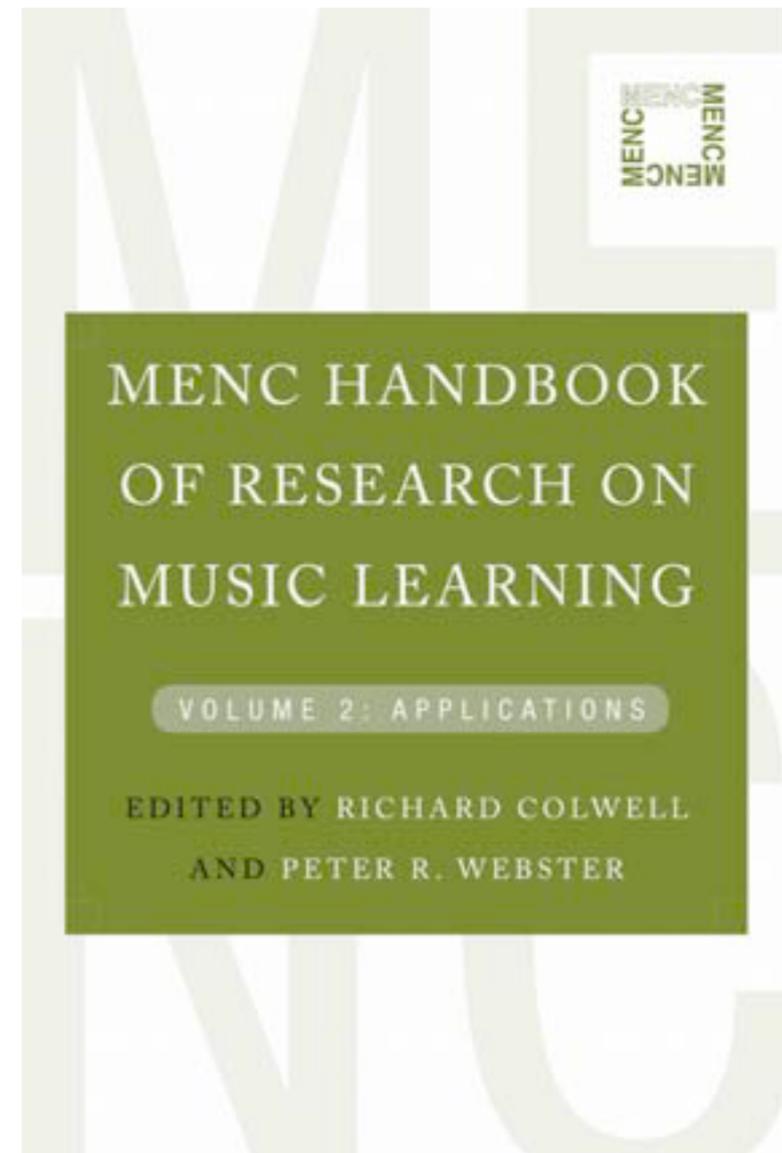




MENC HANDBOOK
OF RESEARCH ON
MUSIC LEARNING

VOLUME 1: STRATEGIES

EDITED BY RICHARD COLWELL
AND PETER R. WEBSTER



MENC HANDBOOK
OF RESEARCH ON
MUSIC LEARNING

VOLUME 2: APPLICATIONS

EDITED BY RICHARD COLWELL
AND PETER R. WEBSTER

Constructivism

Knowledge is formed as part of the learner's active interaction with the world.

Knowledge exists less as abstract entities outside of the learner and absorbed by the learner; rather it is constructed anew through action.

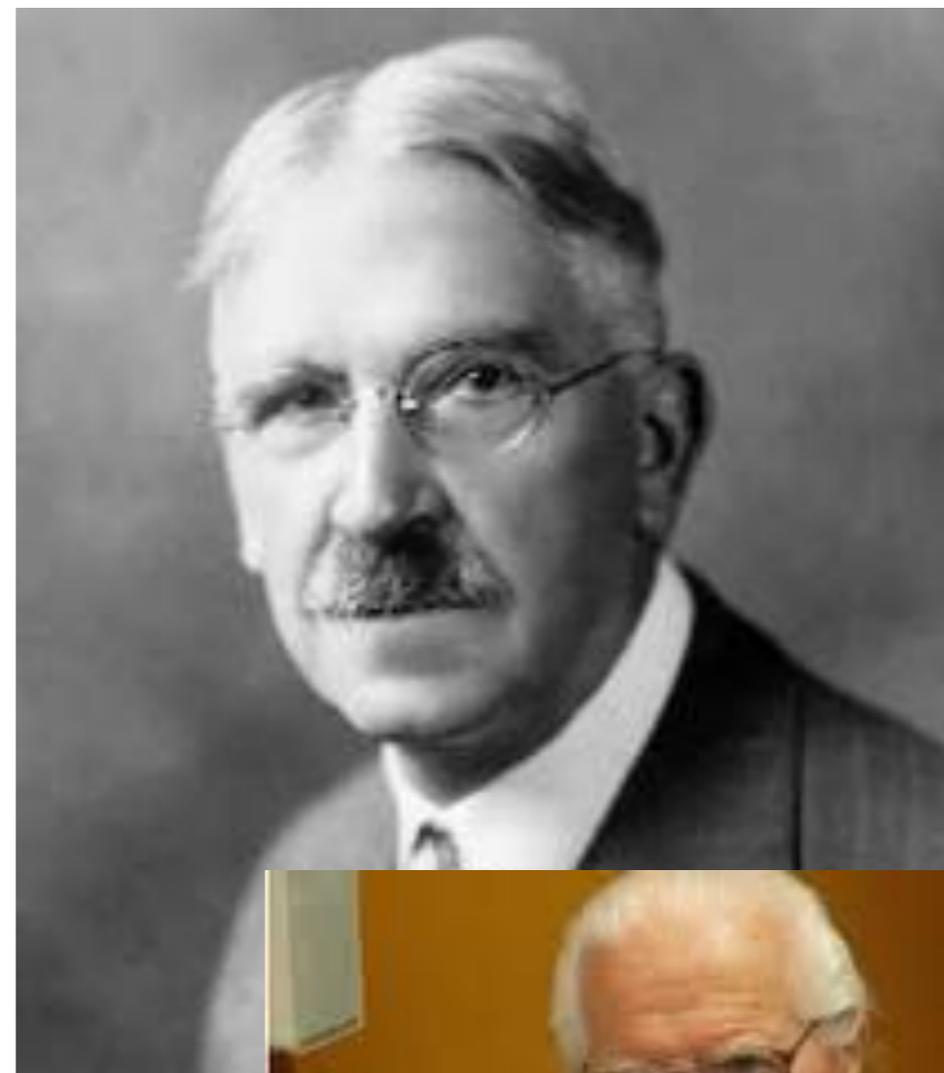
Meaning is constructed with this knowledge.

Learning is, in large part, a social activity.



Constructivism is, first and foremost, a theory about knowledge and learning and not necessarily a theory about teaching!!! practice.





Implications for Music Learning

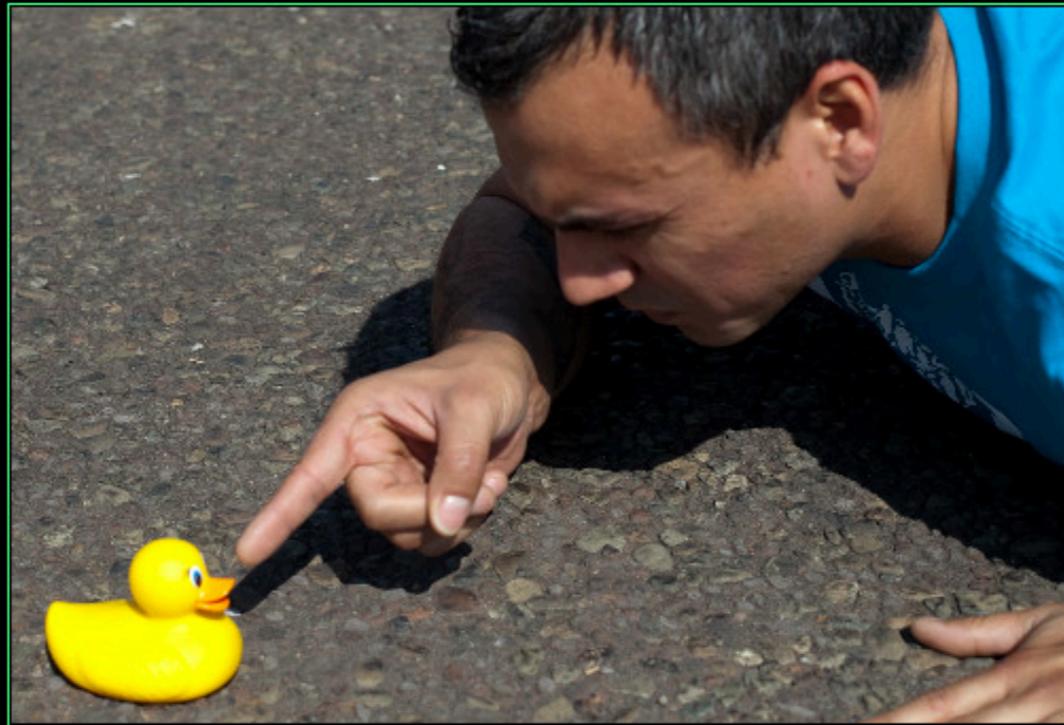
1. How is musical meaning constructed?
2. How am I using students to teach one another?
3. How do we honor the experiences that student themselves bring into the classroom?
4. How (or should) we use language in different ways to mediate learning in musical environments?
5. And what music should we choose to feature--multiple styles, cultures?
6. What about the balance between process and product?
7. Most importantly, how do I know that such an approach is effective?
8. How do we reconcile constructed knowledge that emerges from students that seems to be at variance with accepted aspects of music knowledge?
9. How "active" does one need to be in music to construct knowledge?
10. How do I reconcile learning objectives from existing/required curriculum guides and still support constructivist learning?
11. How do I blend the need to prepare my students for musical performance while working to achieve some measure of constructivist learning?
12. With so many approaches to encouraging constructivist thinking (Webquests, project-centered learning, computer-assisted composition/improvisation, others), what do I chose?
13. Can I trust students to accept responsibility for their own learning?
14. How do I change my thinking of not being center stage as the central focus of learning?
15. How can I gain the support of parents/administrators for such an approach to teaching music?

Answer Might Be: *Adapted Constructivism*

- Much in our profession that can be established effectively with top-down approaches
- But there is much room for encouraging the application of this knowledge in constructivist ways
- Students must learn to think **in** and **about** sound in ways that end in independent thinking
- For those learning goals that do not involve sound itself, (i.e. ways to effectively practice, work musically with others, deal with stakeholders like parents and administrators, similar hopes for teaching independent and effective active action is important
- Less emphasis on covering large amounts of information quickly and less information more thoroughly

Possible Implications

Some Ideas for the Future

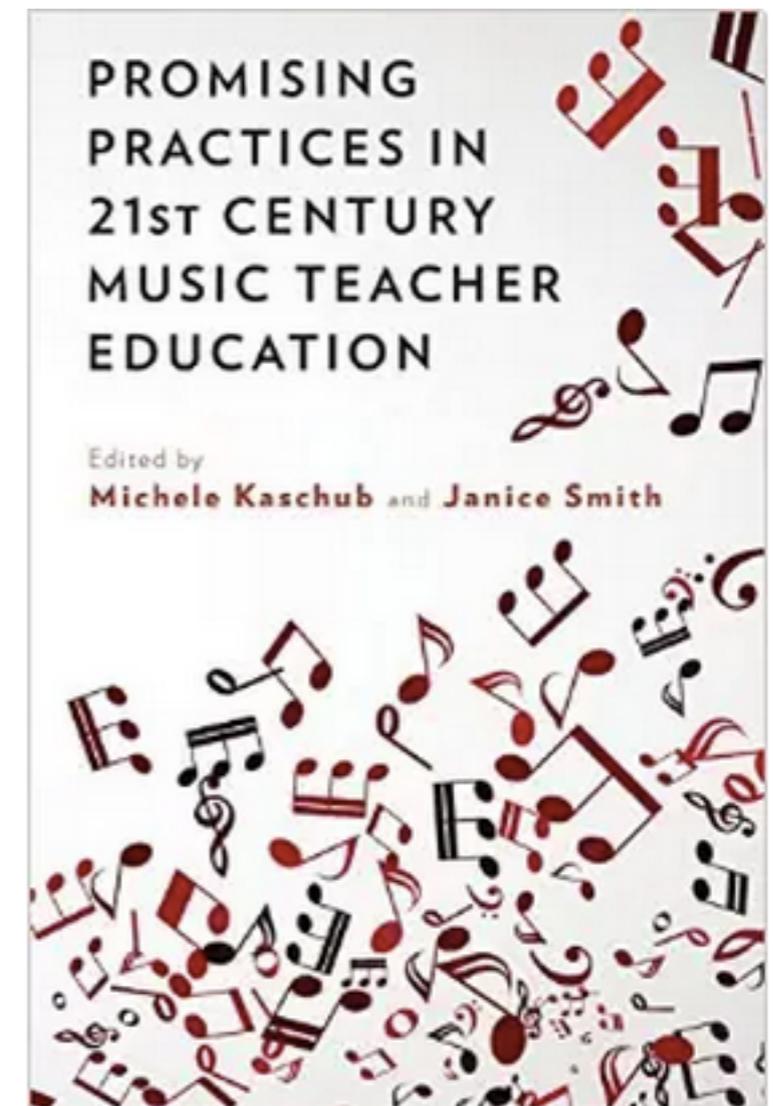


THE RUBBER MEETS THE ROAD

COMING BACK FULL CIRCLE AND APPLYING OUR BACKGROUND, KNOWLEDGE,
AND SKILLS TO OUR TEAM SETTING

Promising Practices

- USC Masters Credential
- University of Southern Maine
- SUNY Potsdam
- Miami University
- University of South Florida
- University of Massachusetts-Lowell
- Arizona State University
- Others?



Discussion!!!



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