

Title of Session: Music Across the Curriculum - Music and Biology

Moderator: Leo LaBarge

Title of File: 20061009musicbiology

Date: October 9, 2006

Room: ArtsSites Group

BJB2: Leo has provided a handout for you, but it might help if you wait until after his presentation to access it

DavidWe waves

BJB2: at that time, go to the screen above this chat window, scroll down to Featured Items and then Files

BJB2: To make it easier for you to read your chat text, go to Actions in the top right of this chat window and click on DETACH

JenniferAG: thanks

BarbaraLK: HI

BJB2: I'd like to welcome you all to this month's Music Across the Curriculum discussion. Leo, as always, has prepared some exciting resources for you.

BJB2: we usually start all the Tapped In discussions with introductions....

BJB2: can you please tell Leo where you are located and what interests you about the topic?

JeffC: I'm here to see how my son can get credit for his trombone playing in his other classes.

DavidWe: I'm David Weksler. I'm a HelpDesk volunteer and I lead a math and technology discussion here. I'm in New Jersey, near New York City

BJB2: . o O (probably depends on how well he plays, Jeff)

LeoL: We'll think of something Jeff

LoraAB: math and science middle school teacher in NJ

DavidWe: Good luck, Jeff!

BJB2: I'm a communications teacher in Pennsylvania

AmberMM: I teach math in CA, and I love Music...so here I am.

MelissaKe: Melissa, Garden City, MI and I am interested in incorporating music into my life science class

LeoL: I'm a musician and K-8 teacher in New Jersey

SusanR: Sue from Ottawa, Ontario and fascinated by the topic of music and biology integration

JonathanL: I'm a middle school multimedia teacher in Southern California.

JenniferN: Carlsbad, CA. I teach at a charter school and have a colleague that will find this info. very helpful.

FionaVM: I'm here in response to an invitation Leo issued on the IRA listserve.

JenniferAG: I teach middle school science

AmandaRo: Hello everyone. I teach middle school science in

AmandaRo: Houston, TX

BJB2: wonderful group, Leo!

LeoL: Yeah This is great!

LeoL: I want to welcome everyone

LeoL: HI

LeoL: I have been interested in the connection between music and other curricula for a while

LeoL: I'd like to (full disclosure) thank Lora AB for her help

LeoL: Lora and I taught together for the past four years

LeoL: So

LeoL: I needed some kind of scaffold for this

LeoL: I simply went with plants, animals and people

LeoL: first I needed to talk about the nature of sound and how we hear

LeoL: so

LeoL: tour of the human ear

LeoL: <http://www.augie.edu/perry/ear/hearmechn.htm>

JenniferAG: This website is great since I teach sound in science

LeoL: seems like that site has closed on us

LeoL: let's look at

BJB2: The topic of this discussion is music and biology

LeoL: <http://library.thinkquest.org/3750/ear/ear.html>

LeoL: ahh

AmberMM: I am sorry, I am kind of new to this. Should I just click on the web sites given

BJB2: hold down the ctrl key on your keyboard before you click on the url

FionaVM joined the room.

CarolAnnJ: thanks

DavidWe . o O (pop-up blockers MAY kick you out of Tapped in)

AmberMM: thanks

LeoL: The idea is that sound carries information. That information gets processed

LeoL: We can look at the model of the way the brain processes information and adapt that to the way students process info

LeoL: (This whole project started with adapting song forms to literary forms)

LeoL: Who has had a student mishear an instruction?

BJB2 raises her hand

JenniferAG: me

SonjaH: me

LeoL laughs

AmandaRo: A common occurrence in my classroom

AmberMM: all the time..I feel like a broken record

LeoL: right?

BJB2 wonders if any teachers ever mishear a student?

LeoL: What might have gone wrong?

AmandaRo: of course

BJB2 . o O (we mumble?)

LeoL: You've basically got source

LeoL: medium

AmandaRo: thinking of other things

LeoL: receptor

BJB2 has to learn to take the marbles out of her mouth

LeoL: mumbling and marbles are source problems

LoraAB: we may hear different vibrations

LeoL: medium might be the room, or ambient noise

BJB2: there may be auditory distractions like traffic sounds or an air conditioner

LoraAB: or background noise may interfere

LeoL: or language barriers, (but I'm not prepared to get into those. It's still a good point though)

AmberMM: Or other students

LeoL: right the media may be clogged

BJB2 . o O (the kid has a pencil stuffed in his ear?)

LeoL: or as Lora said, the receptors may be... off

LeoL: like a pencil in the ear

LeoL smiles

LeoL: Ok

LeoL: so some of this material works as a hook to get them in

LeoL: some as background info

LeoL: and some as primary objective of the lesson

JeffC heads off for rehearsal... I like the sound-- science connection for trombones... if someone comes up with a dynamic way for my kid to figure out the way the tubing does the sounds, etc.... then send me the info at jbcoops@gmail.com or start a discussion thread here!

JenniferAG nods

JeffC is afk.

LoraAB: many of the sites on sound and ear are interactive

LeoL: so we've got a ton of stuff, and all these links will be on the cyberhandout

LeoL: everybody ready to deal with some applied sounds?

AmandaRo: yes

AmberMM: I am very interested in using the music to get them hooked

JonathanL: me too

JenniferN: sounds good.

CarolAnnJ: yes

LeoL: sing to your plants

CarolAnnJ: all the time

JenniferAG: yes

LeoL: http://www.dovesong.com/positive_music/plant_experiments.asp

LeoL: dovesong

LoraAB: had a girl in class sing to a sweet potato plant and boy did it grow right up the blinds

LeoL: This site tells about Dorothy Retallack

LeoL: She's the one that did the experiments with different type of music and the effect

LeoL: (It also goes on to expound the guy's thoughts on "positive"music.. but....

LeoL: <http://www.miniscience.com/projects/plantmusic/index.html>

LeoL: another experiment site about plants and music

SonjaH: Tell me about math and music, there seems to many connections

DavidWe . o O (there are)

LoraAB: definitely classic music seems to be best my class experimented with that

LeoL: let's move on from the plants, skip the animals, and get right to people

JenniferAG: This is great for science fair too

AmandaRo: sounds good to me

LeoL: Milford Graves <http://www.furious.com/perfect/milfordgraves.html>

LeoL: Milford is a drummer who's done a bunch of research on the effect of music on people, notably on cardiac rhythms

LeoL: (took a lesson with him once. He suggested I study aikido)

LeoL: There is the relationship between physiological effects and ritual

SonjaH: makes sense

JenniferN: cool website

JenniferAG: great site I can use these later thanks

LoraAB: music can calm or agitate the listener

LeoL: sure once you are in a trance or altered consciousness, you exhibit bio. changes too

FionaVM: The other day I was listening to a podcast by Ray MacDonald that was discussing music therapy.

LeoL: what did you find Fiona?

LeoL:

<http://www.imedici.mcgill.ca/imediciengl/resources.htm#MUSIC%20EXPRESSION%20IN%20CHILDREN> really heavy

DavidWe has something to share

BJB2: Sonja, go to

<http://ti2data.sri.com/transcripts/artshumanities/2006/20060710music.pdf> for some of Leo's Music and Math information

FionaVM: typed podcast into google and then chose the first hit and there it was

LeoL: The Mozart Effect is often mentioned in regard to the common tempo of Baroque music... 60 beats per minute (BPM)

DavidWe: The MIND Institute (non-profit group in southern California) has been working on a math+music elementary curriculum for a number of years - quite interesting stuff that has worked well in Orange County schools (grew out of the Mozart Effect)

DavidWe: <http://www.mindinstitute.net/cont/edu/stmath.php>

LeoL: I'm not really impressed with the tempo: there is much Baroque music in other tempos and time signatures

LeoL: One point that I do kind of like is the structure of Baroque music

LeoL: It's in periods

LeoL: a questioning phrase, and an answer

LeoL: all in even four bar units

LeoL: (there is a file in my office called blues to bachnback... song forms)

LeoL: that is supposed to encourage people to think more logically

LeoL: Does anyone use music as a meditation. either in the school or at home?

LeoL: healing <http://www.paulhornmusic.com/interview.htm>

BJB2: I try

LoraAB: I do in both places

LeoL: David Thanks for the MIND institute link. I missed it. (I'm not the best multitasker)

AmandaRo: I try

JenniferAG: mostly at home or in the car

DavidWe smiles

LeoL: OK Good

AmberMM: So the Baroque music encourages people to think more logically....meaning if played during class they could focus better on whatever they are working on.

JenniferAG: scary in the car, you don't want to be too relaxed!

LeoL: I got to use it in school with the kids. It was a private school so I did have that leeway

LeoL: One good byproduct was that I could then talk about focus, and clarity of thought, and being PRESENT

LeoL: That's the idea Amber

LoraAB: I found the students in 7th and 8th grade enjoyed classic music while they worked

LeoL: I'm concerned about its Euro centricity but I can't argue with the results

AmandaRo: my class seems to think that because music is on they can talk louder...

AmberMM: My kids want me to start playing popular music of today...but I think it would only distract them.

LeoL: well...

LeoL: I used to sub , one on one with some E.D. kids

AmandaRo: they miss the point of playing music to help them focus

LeoL: We would do listening exercises

SusanR: in some classes even as low as kindergarten teachers play classical music all day long as quiet background music

LeoL: "BE silent and tell me what you hear"

LeoL: so they learn to listen critically

JohnathanC: Play popular music that relates to the topic at hand

JenniferAG: When I played Mozart they said it was freaking them out

AmberMM: I am not familiar with Baroque music, will one of the web sites you've given give this poor math teacher a clue.

AmandaRo: am I asking them to identify the instruments being played or what they are thinking when they hear the music?

LoraAB: Sometimes we would use pop music like during science experiments when the students were moving around

LeoL: Amber you'd recognize Baroque as soon as you heard it. think harpsichords

LeoL: there are objective effects that music has on people , as well as subjective

LeoL: the tricky thing is deciding where the two separate (if they ever do)

AmandaRo: in your opinion when is the best time to play music... during tests to help them concentrate

AmberMM: I knew a few teachers who played current music, loudly as the students entered...they said it pumped their kids up.

LeoL: I think culture has so very much to do with it Amber

LeoL: Jennifer said it was freaking them out

LeoL: That's a learned reaction

AmandaRo: can I use certain music to settle kids down after their lunch as a way to wind them down?

FionaVM: I don't think it's a good idea to play music during a test,

LeoL: Maybe we need to look at the physiologic reactions, and see how we can manipulate them to some desired end

FionaVM: It may help some but distract others.

AmberMM: There are always some kids who may work better in pure silence....like on a test

LoraAB: There are times you want them to be totally focused on the task and maybe then is not a good time for music

JenniferN: Do you allow ipods, so they can listen to their own music? I need it quiet to study but others need the noise.

JohnathanC: make it part of the assessment

LeoL: I like to teach them to listen critically

JohnathanC: exactly

LeoL: Ask them Does this bother you?

LeoL: Does it relax you?

LeoL: and why?

LeoL: then , depending on the amount of biology background, you can explain why.

LeoL: If you need to teach some more biology, I'll bet , with the heightened interest, you could teach some fairly advanced concepts

LoraAB: Listening critically to other sounds besides music becomes necessary

LeoL: circulation, respiration, oxygen conversion

LoraAB: Watch the physical reactions to certain types of music

LoraAB: faster the beat the harder and quicker the breathing

LeoL: Anyone know about the TOMATIS method?

LeoL: (a little off topic but..)

AmandaRo: no, sorry

LeoL: Tomatis

LeoL: <http://www.tomatis.com/English/index.htm>

LeoL: in short, the theory says that by modulating certain frequencies, you can affect the way the brain processes information

BJB2: interesting, Leo!

AmandaRo: wow

DavidWe . o O (theory?)

AmberMM: interesting

LeoL: supporters swear by it

DavidWe smiles

LeoL: opponents call it voodoo

AmandaRo: lol

BJB2 . o O (just as supporters of the Mozart Effect swear by it)

LoraAB: it may work on some subjects and not others (theory)

DavidWe . o O (trick is NOT to swear)

LeoL: It also has a large bio-feedback part

BJB2: Our hour has already zipped by!...at the speed of sound!

LeoL: bada crash!

AmberMM: Are all the sites you've given in the Music Resources folder

DavidWe . o O (740 mph give or take)

BJB2: a reminder that all urls will be in your transcript...and...

JohnathanC: Thanks Leo, bye

SusanR: Interesting ..We don't hear with our ears only. We also hear through the bones of our body

BJB2: if you attach your chat window

LeoL: they are in the doc

AmberMM: This was great...thanks.

LeoL: Discussion 4

CarolAnnJ: Enjoyed the topic

BJB2: and look under Featured Items at Files...you'll see the handout Leo prepared

LeoL: but... What about the animals??

AmandaRo: very interesting. I enjoyed your presentation

LeoL: the wee beasties?

BJB2: what about animals, Leo?

AmberMM: I liked talking about people better...

LeoL: there's a ton of it Amanda

LoraAB: animal sounds are music

CarolAnnJ: they have a party going on

LeoL: hehe y'all see it on the doc

BJB2 nods to Lora.

BJB2: Thanks, Lora, for your help and support.

LoraAB: You're welcome

LoraAB: good job Leo

FionaVM: Good night, it's now 11:00 here

LeoL: thanks Lora

AmandaRo: thank you all for everything

LeoL: Thanks for coming in from the listserve Fiona

BJB2 waves goodnight

LeoL: Thank YOU Amanda

AmandaRo: goodnight

CarolAnnJ: Goodnight All

BJB2: The next Music Across the Curriculum discussion will be on November 13

SusanR: Thanks Leo..stimulating session