

Title of Session: Math and Technology

Moderator: David Weksler

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Room: Math Ed Tech Group

BJB2: Welcome to today's Math and Technology discussion, everyone

DavidWe: Welcome everyone

DavidWe: We weren't sure if we would get any takers, this evening, but thanks for coming

BJB2: David, would you like to start with introductions?

DavidWe: Thanks, BJ

DavidWe: We usually begin most discussions with short intros...what you do/what you are interested in/where you are, okay?

FredK: I am a tutor for the Pushmataha County Literacy Council in SE Oklahoma looking for ways to enhance our program.

BJB2: . o O (Fred is getting to be a regular TI groupie!)

MelissaLe: U of H student doing student teaching in 6th grade math & advanced math

FredK: yep

SharonR: Hello, I am Sharon! Currently a 6th grade student teacher!

DavidWe: I'm David Weksler, I lead this discussion. I teach teachers, mostly, about math education and technology. I started doing this 14 years ago as part a project that now is called the Math Forum - www.mathforum.org. I'm in New Jersey, near New York City

AmberDK: I am a second year Education student at the University of Regina, majoring in Elementary Education

VanessaB: 4th grade student teacher in Houston working on getting more math savvy

MelissaLe: I go to Math Forum a lot!!

DavidWe thinks Fred IS a TI groupie and should lead his own discussion

DavidWe smiles

DavidWe: That's good to hear, Melissa

NeemaP: I am a UH student also doing student teaching

MelissaLe: Got some Texans in your group David!

DavidWe: Y'all DID come back

FredK: Our council meets here once a month

DavidWe counts

FredK: lol

DavidWe: So 4 people are UH student teachers, right?

NeemaP: yup

MelissaLe: yep

DavidWe . o O (Melissa, Sharon, Neema and...)

DavidWe: Vanessa

DavidWe: And Amber is a Canadian

AmberDK: that is correct

DavidWe knows where BJ is most of the time

DavidWe: Thanks for making it an international group, Amber

BJB2: I'm a remedial communications teacher in Pennsylvania

DavidWe: So, let me ask the student teachers what they are interested in - besides getting beyond student teaching

AmberDK: Anytime!

VanessaB: oh yes, me too

SharonR: I am always looking for good websites for both teacher and student use.

DavidWe: What would help you all the most in what you have been experiencing as student teachers?

NeemaP: just learning new things

DavidWe smiles

MelissaLe: In my classroom, the teacher mainly uses the overhead (boring!). There are no student computers - so what can we do to use more technology?

VanessaB: I'm taking off in January to Singapore for a year and will most likely take on my 1st teaching job there

DavidWe: Wow

DavidWe: Some impressive math test scores come from Singapore

DavidWe: Good luck, Vanessa

DavidWe: Is there a computer for the teacher in your room, Melissa?

VanessaB: That is what I hear and they set some good standards for where we should be....so, hence why I'm interested in this forum

MelissaLe: yes

EllenA joined the room.

DavidWe: You can join us from Singapore, that would be cool

DavidWe: Hi, Ellen. We're just beginning

DavidWe: Would you quickly introduce yourself?

DavidWe . o O (what you teach, where you are, what are you interested in?)

JenniferLC joined the room.

DavidWe waves to Jennifer

EllenA: Sorry, I was having some tech trouble

DavidWe: Hi, Jennifer. Quick introductions - what you teach/where you are

DavidWe: No problem, Ellen. Thanks for joining us

JenniferLC: I teach 4th grade in MO

DavidWe guesses that MO is Missouri

JenniferLC: yes sorry Missouri

DavidWe went to NCTM in St. Louis for the first time in April

MelissaLe: the "show me" state

DavidWe smiles

EllenA: I am a student teacher in kindergarten. I am in Houston, Texas in the Alief district

DavidWe: You make 5 U of Houston folks, Ellen

AmberDK: Oh yeah....I think I need some fellow Canadians!!

DavidWe: Okay, so, first topic that I'm addressing is Melissa's challenge of working in a room with only one computer (for the teacher, I guess)

DavidWe: Is there a display device you have access to, Melissa?

MelissaLe: yes

JenniferLC: Does she have a Smart Board?

EllenA: I am interested in learning more on how to use tech to teach Math

DavidWe: Good question, Jennifer

MelissaLe: it's attached to the tv monitor

EllenA: Great Melissa! What school?

MelissaLe: no Smart Boards

JenniferLC: no lcd projector?

DavidWe: I was with 50 teachers at Bank Street College of Education who were learning about using SmartBoards on Saturday

MelissaLe: I did get a laptop w/projector and did a Jeopardy powerpoint

JenniferLC: my classroom has 12 computers and one Smart Board

DavidWe: Can the students see stuff on the tv, Melissa?

MelissaLe: yes

DavidWe hopes everyone gets to have classrooms like Jennifer

MelissaLe: wow Jennifer - I'm jealous!

DavidWe: Well, then, it's a demo device for the most part

JenniferLC: Missouri has what they call eMINTS grants, but that's off topic

NeemaP: that's impressive

DavidWe: What grade, Melissa, please remind me?

EllenA: Wow! 12 computers! That's amazing. We only have three

MelissaLe: 6th

DavidWe: Actually that's a good topic, Jennifer, as it addresses the tech issue

DavidWe: Grants become something that you may consider becoming involved with to get more tech. into your classroom

JenniferLC: Does your building have any Smart Boards or lcd projectors available?

DavidWe: So, what math are you doing, now, in 6th grade

MelissaLe: fractions

EllenA: I feel dumb saying this but what is a smart board?

DavidWe: Does your cooperating teacher have any math software available?

JenniferLC: It's an interactive white board

MelissaLe: equivalent/ordering/adding/subtracting/

MelissaLe: no

MelissaLe: he's not big on technology

DavidWe: You can write on a SmartBoard with special markers and it also presents what is on a computer screen

JenniferLC: ewww always a challenge

DavidWe: They're rather cool

DavidWe: Well, that's a challenge (for Melissa) to introduce stuff

MelissaLe: he built his own wooden jeopardy board instead of having to use PowerPoint

JenniferLC: lol

DavidWe laughs

EllenA: Wow that sounds very cool. I want one of those

DavidWe: That's impressive!

MelissaLe: it's very awkward and heavy!

DavidWe: We did a version of Biological Jeopardy in 10th grade to study for the Achievement test in Bio and made a blackboard version of the Jeopardy board

DavidWe: Probably is heavy and awkward

JenniferLC: there are sooo many resources online that you can even do whole group if you had access to a projector or at least a building lab

DavidWe: Anyway, it may be best then that you use some web site possibly for new ideas - just to give you and your cooperating teacher more resources that you can bring to the class

DavidWe: Do you know about the National Library of Virtual Manipulatives, Melissa?

JenniferLC: good website

EllenA: Is there a website?

NeemaP: I was wondering if there are good websites for math

MelissaLe: no

JenniferLC: actually I have found several for the elementary level

DavidWe: Some pretty cool JAVA applets arranged by topic, grade level, etc.

DavidWe: May give you some good ideas

DavidWe: Here's the web page:

JenniferLC: many online tutorials and practice

DavidWe: <http://nlvm.usu.edu/en/nav/vlibrary.html>

DavidWe: There are GREAT web sites for math, Neema

DavidWe is partial to the Math Forum

DavidWe: Have any of you seen this web site before?

DavidWe smiles

JenniferLC: <http://www.emints.org/ethemes/search.shtml>

DavidWe: Thanks, Jennifer

JenniferLC: You can search any topic, by graded level and it will give you already filtered websites

EllenA: what are some things this site has to offer?

DavidWe: Which site, Ellen?

DavidWe: The one Jennifer shared?

JenniferLC: so search for example fractions and click 6th grade and it will give you several websites

EllenA: The library for virtual manipulatives

JenniferLC: another good site is search other people's ikeepbookmarks

MelissaLe: cool...ty

DavidWe: There are a large variety of manipulatives that are software based

JenniferLC: math WebQuests are good, search and find quality ones

DavidWe: JAVA is the programming language that is increasingly popular on the Web

DavidWe: It's actually running this chat "applet"

DavidWe: So, if I had to suggest ONE starting place for math resources, online, I would encourage you all to look at the Math Forum - www.mathforum.org

DavidWe: Not only is it well-organized and comprehensive, but it allows you to search for resources efficiently - cuts down on using Google and getting too many hits

VanessaB: I could have used that site this semester, very useful!

DavidWe: But, you really have to use a web site to get a sense of whether it has resources that are valuable to you and can be utilized easily

JenniferLC: agreed

DavidWe: So, Melissa, if your colleague is not excited about technology, it may be up to you to try and EASE him into understanding that there are things online that can make his job easier

EllenA: Does it offer resources to use with very young children

DavidWe: Once he's convinced of that...it is easier to take the next step

JenniferLC: but if you don't have many computers, website might be harder to use unless you find tutorial type websites or maybe try a WebQuest as a whole group

DavidWe: Virtual Manipulatives are K-12, I think, Ellen

EllenA: Thanks

MelissaLe: great sites for me to visit! I only have a week left, but this will definitely help me out for when I get my own classroom

DavidWe: So, again - the one computer may be a resource MORE for the teacher(s) than for a whole class of students...it depends on how you see it being used

DavidWe smiles

DavidWe: Glad to hear that, Melissa

JenniferLC: I think it's possible

JenniferLC: but would take creative planning

JenniferLC: small groups at a time at the computer

DavidWe: It's hard to push people into using technology - it's been my job to help teachers learn about the stuff that has been developed in the past 15 years

JenniferLC: if you could at least get a projector that would help tremendously

DavidWe: You may not believe this, but teaching teachers can sometimes make you wish you were teaching students

DavidWe agrees with Jennifer

JenniferLC: agreed

EllenA: That's funny

JenniferLC: adult learners have their own way

JenniferLC: you have to approach them differently

FredK: <http://www.funbrain.com> offers grade level choices

NeemaP: hehe

VanessaB: my block teacher next door teaches math and science from a projector and I really have never seen it done so creatively.... it really is amazing

DavidWe: There are many commercial companies that offer deals to teachers and will accept proposals for low-cost (no-cost) donations

JenniferLC: read up on the adult learning theory it's interesting

FredK: I work with adults and I agree

DavidWe smiles

DavidWe: Thanks, Fred

DavidWe: What does she/he do that is so creative, Vanessa?

DavidWe: How does the projector help with this?

VanessaB: he leads every lesson by discussion...like everything is a big town meeting

EllenA: I have been using Larson's Elementary Math in our math centers and the children really seem to learn a lot from the software

JenniferLC: some of our teachers who have wanted more technology but can't get more computers have at least started with getting an lcd projector and a white board

VanessaB: the projector is just his medium to work problems as the students pose them

DavidWe: Takes a certain confidence level to be able to do that. He sounds like a pretty cool teacher

VanessaB: I have learned how to teach more or less just by watching him work

DavidWe: Does he do anything that you couldn't do on a black/whiteboard, Vanessa?

VanessaB: not really....the blackboard would suit just fine, he just chooses to use the overhead

VanessaB: he hates chalk

JenniferLC: overheard or lcd?

VanessaB: overhead

JenniferLC: ah

DavidWe smiles

DavidWe: Less dust, I guess

VanessaB: he works each problem in about 5 different ways

DavidWe: That can be very powerful - allows for different learning styles

JenniferLC: especially with math

VanessaB: and after each problem has been completed, he'll have a student transcribe it on the blackboard behind him, so it creates this running progression

DavidWe: yes

JenniferLC: many different algorithms

DavidWe: Do any of you have students write about mathematics - either in journals or elsewhere?

JenniferLC: definitely

SharonR: Yes!

JenniferLC: they wouldn't pass the state math assessment if they didn't

DavidWe smiles

JenniferLC: they have to explain how they arrived at their answer

VanessaB: yes, they have a daily math journal and it is the 1st thing they begin with. It usually entails a word problem where they will have several ways to investigate and work it out

DavidWe: Would working math problems or writing to other groups of students (in a classroom far, far away) be something that would work with any of you?

JenniferLC: we've done a monster exchange before

DavidWe wonders if everyone here knows that teachers can bring K-12 students into Tapped In

JenniferLC: which involves geometry concepts

VanessaB: oh, what a great idea. I bet this group of kids would really do well with that

DavidWe: Sounds good, Jennifer

JenniferLC: and written description

NeemaP: that sounds like a good idea

DavidWe: Well, part of it is communication (and they can work on writing as well as math) and part of it (the hook) is communicating with people from different areas

DavidWe: It's a real challenge to explain concepts in words and not numbers...and can reinforce understanding of concepts

EllenA: We are kindergarten, so I have only used powerpoints to show add./sub. slides, software, and sites

VanessaB: and as long as we talk to people from different areas we get brand new perspectives that could enlighten us

JenniferLC: we've used Tapped In with a social studies simulation

JenniferLC: but not math yet

DavidWe: It might be interesting to try...

DavidWe is going to switch gears for a minute

DavidWe: Have any of you watched the television program NUMB3RS?

JenniferLC: yes

VanessaB: no

MelissaLe: love it

SharonR: No

NeemaP: I like that show

DavidWe: Do you know there are lesson plans that coordinate with different episodes of the show?

MelissaLe: doesn't CBS have a website that has lesson plans?

DavidWe: They may be middle or high school level, but I'm not positive

DavidWe: http://www.weallusematheveryday.com/tools/waumed/what_is_waumed.htm

NeemaP: I like how he always uses real life experiences

DavidWe: So, the tag line is: "We All Use Math Every Day"

DavidWe: Yes, Neema. Exactly

DavidWe: One of my friends, Chuck Biehl, who teaches in Delaware, is one of the teachers who comes up with the lesson plans

SharonR: That Numbers website looks cool!!

DavidWe: I emailed him earlier today about whether he might want to talk about how they build the math lessons from the shows

DavidWe: It is a pretty cool program

JenniferLC: mostly higher level I would think?

DavidWe: Yes, Jennifer, that's my impression

DavidWe: Would any of you be interested in having a discussion with Chuck about the show or how the show and the lessons can be used in teaching?

JenniferLC: right now?

NeemaP: that would be awesome

DavidWe: I asked him if he would be interested in leading this discussion

MelissaLe: great

DavidWe: Not right now, but maybe next month

JenniferLC: oh I see

DavidWe: Just an idea I had

DavidWe: He loves hanging out with the actors (and especially the actresses)

JenniferLC: I could pass that along to the higher grades in my district

JenniferLC: great idea

VanessaB: cool, I may need to actually turn my t.v. on to check out this show.

DavidWe smiles

DavidWe: I'm not sure when it is actually on

DavidWe checks the web site

NeemaP: Fridays

DavidWe: Here's the web site for the show itself:

DavidWe: <http://www.cbs.com/primetime/numb3rs/>

MelissaLe: Fridays @ 9 (central)

DavidWe: Thanks Neema

DavidWe: 10pm EST

VanessaB: awesome!

DavidWe smiles

NeemaP: I love math, but I wish that my teacher had used real experiences instead of just teaching the algorithms

DavidWe: For you folks who teach younger students (elementary) do you know about Family Math?

NeemaP: it makes it more meaningful

JenniferLC: don't believe I have

NeemaP: nope

DavidWe: Family Math was developed at the Lawrence Hall of Science - science museum that is connected to the University of California, Berkeley

DavidWe: It's a wonderful program to involve parents and their children in doing everyday activities and highlighting mathematics

DavidWe: Let me give you the web site....

DavidWe: <http://www.lawrencehallofscience.org/equals/>

JenniferLC: good resource

DavidWe: EQUALS was developed all around equity issues and is the umbrella underneath which Family Math operates

DavidWe: The Family Math workbook is a great resource (early elementary) and is available in Spanish also

DavidWe: There are also Family Math workshops and trainers - they put on Family Math events (or teach you how to put them on)

DavidWe: They really want family involvement

DavidWe: Here's the ABOUT Family Math page:

DavidWe: <http://www.lawrencehallofscience.org/equals/aboutfm.html>

MelissaLe: I think you need family involvement! There are so many resources to check out - ty all!

DavidWe: You're welcome, Melissa

DavidWe: One thing we have talked about at times is whether it would be helpful to other student teachers to have a discussion targeting them, specifically

NeemaP: these websites are great

MelissaLe: I wish I could have attended this session about 2 1/2 months ago!

JenniferLC: are most student teachers in here tonight?

DavidWe: Student teaching is challenging enough - we don't always know how to interact with you - what would really help you since you are enmeshed in a very challenging circumstance

DavidWe: I think we have 5 (or did)

SharonR: Now you have them for when you're on your own, Melissa!!

MelissaLe: wonderful!

DavidWe: Well, Melissa, we're very glad that Mary Thompson at the University of Houston is pushing student teachers to login to Tapped In

MelissaLe: yep!

DavidWe: We think more teacher education programs should take advantage of THESE online resources

DavidWe: Mary has been FANTASTICALLY supported and she has really encouraged the students she works with

MelissaLe: It's something I want to continue even after I graduate!

JenniferLC: This is part of my specialist degree program

JenniferLC: so it helps at all levels

DavidWe: Cool

DavidWe: At times it is challenging for me when we get a range of people high school, elementary school, student teachers - I usually show people fairly comprehensive web sites

DavidWe: There are a lot of resources - Susan, chime in when you want - that are oriented more by grade level than by topic

DavidWe wonders if Susan wants to mention the discussion she leads in Tapped In

DavidWe pokes Susan

DavidWe: Susan leads a K-3 discussion

NeemaP: that what I need

FredK: <http://www.aaaknow.com>

DavidWe: On all topics, but...

JenniferLC: I need k-12, I'm looking at trying to get a tech coach position and will have to help all levels

JenniferLC: in all subject areas

JenniferLC: for integrating technology

JenniferLC:

DavidWe: She has a better sense (than I do) about K-3 resources

SusanR: The K to 3+ sessions zero in on Great Resources for the primary educator and students

DavidWe: She leads her discussion twice a month, usually on Tuesdays at 8pm

SusanR: The topic for the next session is Reading Strategies

DavidWe: Do you all know about the Tapped In calendar of events

NeemaP: yup

SharonR: Yes!

MelissaLe: yes

JenniferLC: yes

DavidWe . o O (gives a month-view of what is going on, here)

DavidWe smiles

DavidWe: Okay, you all know about the calendar

SusanR: and feel free to browse the K to 3 Resource room for additional resources to support the monthly sessions...which I moderate

DavidWe: Let me give you all some time to ask questions or suggest things that you might want to see happening here in the future

SharonR: I think what you are doing is great David!!

DavidWe: Please let me know if there are specific topics (curriculum, math topics, technology) that you would like to see addressed in greater depth

DavidWe: Thanks, Sharon

DavidWe: Are any of you involved...

DavidWe: ...with teaching the "Investigations" curriculum?

MelissaLe: I'm sure I'll be asking for a lot more tips/ideas once I get my own teaching assignment

JenniferLC: we are trying that out in our district

DavidWe: Pretty sophisticated elementary math curriculum

DavidWe: Cool, Jennifer

JenniferLC: my teammate is trying it, loves it

DavidWe: I know some of the authors/developers

NeemaP: what is that?

JenniferLC: we currently have everyday math

DavidWe: Here's a web page with a fairly concise description of Investigations:

DavidWe: <http://investigations.terc.edu/curr/index.cfm>

NeemaP: thank you

VanessaB: we use everyday math too, but we add more to it

JenniferLC: we do too

DavidWe: Pearson Scott Foresman now publishes it:

DavidWe: <http://investigations.scottforesman.com/overview.html>

JenniferLC: it is different from everyday math though

DavidWe: But it was developed at wonderful place, TERC, which has done some very cool math/science/technology projects over the years

DavidWe: It is probably the most innovative (and challenging) elementary curriculum that was developed after the NCTM standards were announced in 1989

DavidWe: There are all sorts of activities, software projects, etc.

DavidWe: The full title of the program is "Investigations in Number, Data, and Space"

DavidWe: Have any of you used the software program Inspiration?

NeemaP: yes

EllenA: I use Kidspiration

NeemaP: we used just today

SharonR: Yes, Dr. Thompson showed us

EllenA: I have used inspiration in the past

MelissaLe: Yes

DavidWe: The company that develops Inspiration/Kispriation is now distributing a very cool math software - originally it was called TableTop, but they are distributing it as InspireData

DavidWe: It was developed, again, for early elementary students to understand GROUPING and the beginnings of data analysis - putting data into tables, simple graphs, etc.

DavidWe: Here's some more about it:

DavidWe: <http://www.inspiration.com/productinfo/inspiredata/index.cfm>

DavidWe: It's WAY cool software and very user-friendly

DavidWe believes that FREE demo versions are downloadable

NeemaP: thank you David!

DavidWe: Again, Melissa, if it does something that makes YOUR job easier, that is a way to slowly introduce more tech. into the classroom

MelissaLe: I agree!

DavidWe: You don't have to teach with it, necessarily, at first, but use it for your own purposes

DavidWe: So, we've got a couple of minutes left...

DavidWe: Everyone knows that you will receive a transcript of this discussion with all the URLs in it...you don't need to write it down

SharonR: Yes, thank you!

DavidWe: . o O (it will show up in your email shortly after you logout)

MelissaLe: I stopped writing them down after the first 3! lol

DavidWe: Again, let me invite you to share any ideas, thoughts, requests you may have for future discussions

DavidWe: Good move, Melissa!

DavidWe: smiles

EllenA: Thank you

BJB2: The next Math and Technology discussion will be on December 19

NeemaP: thank you David for all your help

FredK: Lots of good ideas to review tonight, thanks David

VanessaB: yes, thanks for all the tips! this forum is useful

MelissaLe: Thank you for all the wonderful sites - I look forward to viewing them

DavidWe: Feel free to contact me as well with math education/technology questions

EllenA: Thanks, I will do that

DavidWe: I'm happy to help answer them for you

SusanR: Thanks David..some GREAT resources to explore

DavidWe: nods

DavidWe: Thanks, Susan

DavidWe: Hope you all have a good Thanksgiving, too (day off from school!)

MelissaLe: Thanks David! You too

SharonR: Thank you so much David! Have a wonderful Thanksgiving!!

DavidWe: I'll hang out if anyone wants to ask other questions, but let's call it a night, at least of math

DavidWe smiles

DavidWe blushes

NeemaP: have a happy turkey day

DavidWe smiles

SusanR: yes, happy Thanksgiving.