Title of Session: Math and Technology
Moderator: David Weksler
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BJB2: Welcome to the MathEdTech discussion, Courtney.
CourtneyFD : I am a McNeese student. We are asked to join a forum and participate in the discussion. I am new to this, so please let me know if I am doing something I am not suppose to.

BJB2: let's start with introductions, please, David
DavidW: Thanks for joining us, Courtney
BJB2: and a reminder to go to the Actions menu in the top right of the chat and click on detach

CourtneyFD: Thanks
DavidW: I'm David Weksler. Bj, Jeff and I are HelpDesk volunteers. I mostly help teachers learn more about educational technology, especially for math

CourtneyFD : Wow y'all are really good at this forum
BJB2: I teach remedial communication in Pennsylvania, Courtney
DavidW: Well, we have been using it for quite some time
DavidW: I'm in New Jersey, near New York City
CourtneyFD: My name is Courtney Dressler, I am 23 and this is my second year to teach first graders in Lake Charles, LA.

DavidW: Cool

DavidW: So, you probably do some math teaching with your first graders
CourtneyFD: Yes, I am at a school were we use a lot of technology. I have 4 desktop computers, 2 laptops, and LCD projector, 30 handheld palms, and I just wrote a grant for an Active Board.

DavidW: What are first graders working at the beginning of the year in your school in
math?

CourtneyFD: We are just finishing our unit on Math and we start subtraction tomorrow. My math series Houghton Mifflin is wonderful, they provide us with resources such as a Math book on a disc that I can project on my LCD projector and a Math software assessment disk.

CourtneyFD : So BJB and David, what subjects or grades do you teach?
DavidW: I mostly work with teachers, Courtney - help them learn more about how to use it for math education

BJB2: I teach communication to teens/high school level
DavidW: Have you used any online resources, Courtney, with your students?
DavidW: I was part of the group of people who first started a big web site for math education - the Math Forum - www.mathforum.org

CourtneyFD: Yes I use APlus Math, and Houghton Mifflin has a website
DavidW: One of the well-known projects at the Math Forum is called Ask Dr. Math students can send their own math questions ...

DavidW: Anyway, have you seen the Ask Dr. Math web site?
DavidW: No problem - here is the address for the elementary level of Ask Dr. Math
DavidW: http://mathforum.org/library/drmath/drmath.elem.html
CourtneyFD: This sounds like a crazy question, but will Tapped in email me that notes we discussed a little while ago

## DavidW: yes

CourtneyFD : That's for the website-Do you want me to view it now?
DavidW: Shortly after you logout, you'll get a transcript of this discussion - with all the web site addresses

DavidW: Feel free to take a look at it. If you don't know about it might be something you can use with your students

DavidW: I was actually going to show a few web sites that deal with data analysis/presentation - not sure applicable that may be to your first graders

CourtneyFD: That's fine do whatever you need to....
DavidW: There's a wonderful, simple data analysis software called InspireData - it's from the company that develops Inspiration/Kidspiration

DavidW: Do you start to get the students thinking of types of information?
DavidW . o O (how many people have brown/blue/green eyes, hair color, etc? )
CourtneyFD : Yes, we use kidspiration/inspiration in my classroom- I have actually never used it with Math though.

CourtneyFD: Sorry, is your previous question directed towards me?

BJB2: yes, Courtney...
BJB2: David is trying to find out how you give your children a sense of numbers
BJB2: and a sense of sorting information
CourtneyFD : Most of the students know their numbers prior to first grade
BJB2: I was trying to explain why you asked the questions about information, David
BJB2 . o O ( sorting information about hair color, etc )
DavidW: I know that some early elementary teachers are concerned that 1st graders, for example, need to deal with more concrete examples of numbers

CourtneyFD: We use counters and real life experiences a lot
DavidW: the trick of course is to try to find where you can bring "thinking about numbers" into all aspects of what is going on in the classroom

DavidW: Having students start to think about what it means if more people have blue eyes v. brown eyes

DavidW: Start to look at the things like comparing foot size with height
CourtneyFD: Yeah- We are trying to introduce them to graphs as well- We reviewed a pie chart and a bar graph today

DavidW: Do you know about the National Library of Virtual Manipulatives, Courtney?
CourtneyFD : No, but it sounds neat!

DavidW: It's a big web site with lots of simple tools
DavidW: Let me show you that site
CourtneyFD: ok
DavidW: http://nlvm.usu.edu/en/nav/vlibrary.html
DavidW: They break things up nicely into 5 distint math areas and then also into gradelevel groupings

CourtneyFD: Do you want me to go their now or later
DavidW: First example under K-2....
DavidW: Sure, why don't you take a quick look
DavidW: ...is actually a Bar Chart
DavidW: It allows you to enter in your own data
CourtneyFD : It looks really neat. I guess I will play with it after the chat, because it says I need to download Java and restart me computer.

DavidW: that's interesting
DavidW: the chat we are using is actually a Java applet, but you may want to take a look at some of those applets later on, as well

CourtneyFD: You know what it just allowed me to look :)
DavidW: good
CourtneyFD: This is really neat, I am going to have to share this with my first grade team

DavidW: Another big site for online examples that are well described, linked to standards is the Illuminations web site from NCTM

DavidW: Have you seen that?
DavidW: http://illuminations.nctm.org/
DavidW: There is something like 520 lessons - divided into grade level, with activity sheets you can print out, etc.

CourtneyFD: Wow this is really cool! There is so much I don't even know where to start.

DavidW: Are there any questions you have, Courtney? I don't mean to throw too many web sites at you

DavidW: It takes some time to get familiar with what's available online
CourtneyFD: I no I am fine. Thanks though
DavidW: What we are typically trying to do in Tapped In is encouraging teachers to share with each other good examples that have worked well with their students

CourtneyFD: Do you know of a website that keeps students scores for addition
facts. For example, if Jimmy answered so many addition math facts he would move to the next level?

DavidW thinks
DavidW: Here's one that may do a little bit of assessment:
DavidW: http://home.indy.rr.com/lrobinson/mathfacts/mathfacts.html
DennisW joined the room.
DavidW waves to Dennis
DavidW: Hi, Dennis. Welcome
DavidW: Courtney, have you seen Rainforest Maths?
DavidW: It's especially aimed at elementary students
DennisW: Hi Dave, I am a visitor from Denver Public Schools learning about tapped in.
DavidW: http://www.rainforestmaths.com/
DavidW: Welcome to Tapped In, Dennis
DavidW: This is the math education and technology discussion
DennisW: Thanks.
DavidW: Welcome to the Tapped In community, Dennis - looks like you just became a member today

CourtneyFD : No I have not seen Rainforest Maths- Thanks for the first website. I am going to post in on my classroom blackboard

DennisW: I did and I need to return to the class. Best of luck.

DennisW left the room.
DavidW: One of the cool, new tools that I've come across recently is a data analysis tool called Gapminder

DavidW: Google is hosting a version of it that shows some interesting comparisons of world data in a rather dynamic way

DavidW: This may be a bit beyond where your students are at the moment, Courtney, but take a quick look

DavidW: http://tools.google.com/gapminder/
DavidW can't remember if Bj or Jeff has seen this
SethLe joined the room.
DavidW: A Swedish scientist is trying to develop better and simpler ways of presenting complex data in dynamic ways

DavidW waves to Seth
DavidW: Hi, Seth. Welcome
SethLe: Hello
BJB2 has looked briefly at gapminder

DavidW: Just having people take a look at a new statistical tool from Google
DavidW: http://tools.google.com/gapminder/
SethLe: okay. thank you.
CourtneyFD : Pretty neat. It's amazing what technology and people can do
DavidW: Additionally, there is a web site, Swivel - www.swivel.com - that lets users (it's free to join) upload data and share with other people

DavidW: Seth, if I recall you teach middle school - are you using an software for data analysis with your students?

SethLe: We have purchased TinkerPlots but haven't used it yet.
DavidW: There's a great deal people can do with just a spreadsheet - getting at the basics of algebra

SethLe: Do you know of any collection of spreadsheet resources?
DavidW: There are some good resources at the Math Forum - www.mathforum.org
DavidW: This is a nice article about using Excel
DavidW: http://www.educationworld.com/a_tech/tech/tech079.shtml

DavidW: Here is a good set of specific examples - you can download the excel files, themselves

DavidW: http://www.teacherlink.org/content/math/interactive/interactiveexcel.html
SethLe: Thank you. I'll look at them at a later time.
DavidW: Seth, these will all be in the transcript of the discussion - you'll receive it by email shortly after you logout

SethLe: Can you tell me how I can find the transcript of previous sessions?
DavidW: Courtney, any other questions you may have
BJB2: www.tappedin.org/transcripts
DavidW: Transcripts usually show up within a week to 10 days
DavidW.o O (BJ edits them )
DavidW: One of the challenges presented by many of the online tools for math is that teachers need to feel comfortable with the technology in which the math is embedded.

CourtneyFD : No, Thank you for showing me these wonderful websites and thank you for helping me for my first forum.

SethLe: I found the transcripts. Thank you.
DavidW: There is enough variation in how web sites/software is built that it can be a challenge to know how to manipulate technology tools for the desired effect

DavidW: It may be actually a good thing for students to build something, in a
spreadsheet, for example, or in creating a simple pie chart (Courtney's first graders), so they are using the tool to demonstrate what they understand

DavidW: You don't want the technology to "get in the way"
SethLe: I don't know if I'm jumping in in the middle of a conversation about variations in web sites and software.

JeffC: doesn't want "the way" to get in the way of technology!
DavidW smiles
DavidW: Feel free to jump in, Seth
CourtneyFD: Yes, I agree
SethLe: It seems to me that if a student is computer literate, these variations are not that big a deal.

DavidW: I agree, Seth. Most often the students will feel very comfortable figuring out the software - sometimes that challenge is more for teachers

SethLe: That is true.
SethLe: What have you done to break down that handicap?
DavidW: One part of the transition is that teachers can use software and SmartBoards, for example, as high-tech blackboards and the teacher simply teaching the old way with fancier tools

DavidW: It's easy to say one is "utilizing technology"
SethLe: I think there has to be a better way but I sure haven't figured it out.
DavidW: The real challenge, at the educational level, is to encourage teachers to give up some "control" in the classroom - giving students opportunities to present different ways of solving problems

SethLe: That is a major issue, one that is true in all of our endeavors, not just with technology.

DavidW: I think it IS a big challenge and it depends on the resources at hand - if you are in a classroom where everyone has a laptop - then you have different options than if there is just one computer

DavidW thinks that is an excellent topic for a future discussion

SethLe: I agree.
BJB2 looks at the clock on the wall

CourtneyFD : I have 30 Palms and I use a program called Sketchy- Which is just like a drawing program- I will say 2 frogs are on a log and 2 more frogs join them. They draw 2 green circles and 2 brown circles and write the addition sentence. They could use pencil and paper. But they have more enjoyment in learning when technology is involved

SusanR joined the room.
DavidW: I'll do some work on getting some resources together to address that, Seth

DavidW waves to Susan

SethLe: Thank you very much.
SusanR : hi David

BJB2: The next MathEdTech discussion will be on October 16
CourtneyFD: Well, Thanks for all your help, It is time for Courtney grade papers :)
DavidW: So, Courtney, you have the students using the Palms most every day?
CourtneyFD : Yes, pretty much
DavidW: Courtney, say hello to Susan who leads the K-3+ resources discussion
JeffC: that's great
SethLe: I'm off - thanks for getting me started in this sort of discussion forum.
DavidW: Susan, Courtney teaches 1st grade in Louisiana
DavidW: Thanks for joining us, Seth
SethLe: Thank you. Good bye.
DavidW: That's impressive, Courtney - is that consistent throughout your school?
DavidW.o O (Palms )
CourtneyFD : No, only about 7 teachers out of 30 have Palms

## DavidW: very cool

CourtneyFD : Well, thanks again for your help.
DavidW: Thanks for joining the discussion this evening, Courtney. Look forward to seeing you in Tapped In, again

DavidW: Susan, have I shown you Gapminder, a data analysis tool?
SusanR: no please do
DavidW: http://tools.google.com/gapminder/
DavidW: it has a variety of presentation modes - a small set of interesting data sets
DavidW: Thanks, BJ, Jeff

