Title of Session: Math and Technology

Moderator: David Weksler **Title of File:** 20060919mathedtec

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Room: MathEdTech Group

DavidWe: Is everyone fairly new to Tapped In?

DavidWe: Hi, Tiffany. Welcome

TiffanyMS: Yes

RachelJa: yes

SharonR: Yes

TiffanyMS: Hi David

EricDM: Yes

LauraFD: Very new.

TiffanyMS: Excited to be here and Happy you are leading

DavidWe: Thanks, Tiffany

DavidWe: So, we usually start Tapped In (TI) discussions with brief intros: what you

do/what age students/where you are

DavidWe: Anyone want to go first?

TiffanyMS: I teach chemistry at a high school in SD CA

DavidWe is glad that Tiffany found the math discussion

SharonR: Hi, I'm Sharon. I am a student teacher teaching sixth grade math

EricDM: I teach 6th grade in Encinitas, Ca. I teach 3 periods of math and one of social

studies

TiffanyMS: We do a lot of math and technology in chem

RachelJa: I'm in KY and I teach elementary but I am not working right now. I'm working on my masters.

PatriciaSu: How do I get into a meeting that is now taking place. It is the Math Ed Tech meeting in the MathEDTech Group room.

DavidWe: I'm David Weksler. I'm in New Jersey near New York City and I am one of the HelpDesk volunteers (with BJ) for Tapped In - we've known each other online and in person for close to 9 years

DavidWe: You are in the right place, Patricia

DavidWe: Good luck with your Master's program, Rachel

PatriciaSu: Okay so how does this work?

DavidWe agrees with Tiffany

LauraFD: Again, just in case you missed it, I am in Yuma, AZ, working on my professional clear credential and teaching Pre-k

TiffanyMS: Rachel, cute cat!!

RachelJa: Thanks

DavidWe thought Laura was working on her tan in Yuma, AZ

LauraFD: Ha Ha

LauraFD: I might be

DavidWe: So, some of you may know about the Math Forum - www.mathforum.org - big website (K-20) for math education

DavidWe . o O (sun is already set here in New Jersey)

DavidWe: I was part of the team of people who put that together (with your tax dollars) 14 years ago

RachelJa: setting in KY

EricDM: I think it is great and it has many resources that you can use in class

DavidWe: It started as the Geometry Forum and then expanded its focus

PatriciaSu: Is the format of the meeting an online chat???

DavidWe acknowledges paying Eric beforehand to say those thigs

DavidWe: Yes, Patricia. That's the format

DavidWe: I'll show you some web pages, too, online resources

DavidWe: Is that okay, Patricia?

EricDM: I am anxious to see some web pages

RachelJa: me too

DavidWe: Given that we have folks teaching different levels (some not presently teaching) and different subjects, I'm also relying on you to let me know what you are looking for and what you are interested in

TiffanyMS: Does the Math Forum apply to any sciences in particular

PatriciaSu: I was looking for more of a presentation of information on the topic and then a Q&A part.

DavidWe: Well...feel free to stay and see how it goes, Patricia, or...

DavidWe: feel free to leave if you feel this format doesn't suit your needs

DavidWe: It's really up to you

TiffanyMS: I would like to find some site that instruct my students on calculator usage

PatriciaSu: I'll stay on board for a while to see what develops.

EricDM: I am hoping to find new ways to use technology to introduce fractions and finding more pages to link to my own website for resources for both students and parents

DavidWe: Well, Texas Instruments is a sponsor of the Math Forum, now, Tiffany, so...

TiffanyMS: Perfect

DavidWe: Thanks, Patricia. I hope you will find this beneficial

LauraFD: I would like some math tech info that young students can use in the classroom

DavidWe: The other thing I would like to mention before I really begin is that we are all quite interested in collaboration in teacher professional development

RachelJa: I'm just looking for anything to use with elementary students to help them learn math

DavidWe waves to Emily

DavidWe: Tapped In is a "community of practice" - or at least that's the goal

TiffanyMS: Yeah, my chem students could always use a refresher in basic algebra skills

DavidWe: We hope that members BRING to Tapped In their questions and comments and also their own experience that may benefit others

DavidWe: I think we will help you with that, Rachel

RachelJa: okay

DavidWe: I also want to mention that if it would help to focus these sessions on elementary math (and technology) or high school math and technology I am happy to do it

PatriciaSu: I am teaching presservice math teachers and really could use some useful websites on incorporating technology in lesson design

DavidWe: We often get a range of folks and at times it can be not always pertinent for different age levels/grade to hear about the same thing, but, on the other hand....

DavidWe: Math education is a developmental process

DavidWe: Thanks for that comment, Patricia

DavidWe: That's essentially my REAL job - helping teachers learn about using technology

TiffanyMS: I'm up for anything...

DavidWe: So...

DavidWe: Do you all know about EDUTOPIA - the free publication from the George Lucas Educational Foundation?

RachelJa: no

EricDM: Yes

SharonR: No

PatriciaSu: no

LauraFD: no

DavidWe: http://www.edutopia.org/

EricDM: I have not used it for a while

TiffanyMS: I have heard of it but never used it

DavidWe: Anyway - Edutopia - is a wonderful magazine that you can receive for FREE

DavidWe: I came across an interesting one page article in the current issue that I wanted to share with you

PatriciaSu: What kinds of help does it provide?

DavidWe: About math education - written by a Norwegian University professor

DavidWe: It tells stories about schools and technology, largely...

PatriciaSu: Success stories of integration of tech?

DavidWe: But as George Lucas is good at telling stories ("Star Wars") they highlight interesting educational efforts even if they don't include technology

DavidWe: Here's the web page about the current - yes, Patricia - not exclusively, but mostly -

DavidWe: Here's the web page called "Do the Math"

DavidWe: Take a quick look

DavidWe: http://www.edutopia.org/magazine/ed1article.php?id=art 1599&issue=sep 06

DavidWe: Mostly it's a rationale for encouraging students (especially in high school) for taking more math

DavidWe: By the way, here is a link to the subscription page for the magazine if you are interested in receiving it:

EricDM: Just scrolling through I like the fact that I see the article on gender issue

DavidWe: http://www.edutopia.org/php/sub.php

PatriciaSu: The National Library of Virtual Manipulatives is one good resource I know of

DavidWe: They've ranged quite far a field in topics

DavidWe: Yes, Patricia. That's excellent

DavidWe: Do you know the URL for that?

DavidWe: Perhaps you can post that for everyone else

PatriciaSu: No

DavidWe: Okay, then, I'll do it

DavidWe smiles

TiffanyMS: It looks good enough to post on the wall - twelve reasons to take more math - I think I will share it with the other math and science teachers at my site as well as my students

DavidWe: Yes, Tiffany. That's what I was thinking

EricDM: Tiffany I was just thinking the same thing

RachelJa: It is really good

DavidWe: I was impressed that it was written in Norwegian and translated for some other English journal

DavidWe: Anyway, I can honestly say that I ALWAYS find something of value in EDUTOPIA

DavidWe: It's very well written

DavidWe . o O (and produced)

EricDM: Thank you for the great source

DavidWe: So, since it is going for FREE, take them up on it

PatriciaSu: Yes, thank you David

SharonR: I will it sounds great!

DavidWe: It highlights ed-tech conferences (and others) and really draws from best practices in education from around the country

DavidWe: So, let me follow up on what Patricia mentioned - the National Library (your tax dollars at work, AGAIN) of Virtual Manipulatives

LauraFD: What a wonderful resource

DavidWe: Besides Patricia, have any of you come across this before?

TiffanyMS: No

RachelJa: no

SharonR: No

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

EricDM: I have used it before but I forgot about it

LauraFD: no

DavidWe: So, these are JAVA APPLETS that illustrate some very basic mathematical

principles

TiffanyMS: Excellent - algebra

DavidWe: You need to have JAVA running on computers - but if you are using Tapped

In you have JAVA running in order to be able to see the chat applet

DavidWe: This is a tremendous resource of little JAVA programs

RachelJa: I've seen it I just didn't remember what it was called

DavidWe: It's well organized - by topic, grade-level, etc.

PatriciaSu: Good for kinesthetic learners who need to move at their own pace.

DavidWe: And it keeps getting contributions and additions

TiffanyMS: Oh, I just made a handout with some screen shots to assist students with

downloading Java. Is there a way to post it for everyone?

EricDM: I have used it before to introduce the basics of fractions

LauraFD: how exciting!

RachelJa: It a great site

EricDM: tiffany that is great you are using the CSUSM ideas

DavidWe: Can you say a bit more of what applets you have used, Eric, and how it worked with your students?

DavidWe: I'm not sure I follow your question, Tiffany. Is there a way to post WHAT for everyone?

PatriciaSu: What exactly is an applet?

DavidWe: A little software program written in the JAVA programming language

DavidWe: Instead of actually installing the software on your computer....

DavidWe: ...like Microsoft Word or Internet Explorer...

DavidWe: When you click on a link to an applet - the software actually downloads to your computer at THAT time

DavidWe: It allows for the distribution of software in a much more fluid way

EricDM: If you click on the number sense section and then to the fraction manipulatives. I have projected them on my screen and then showed the students the true meaning of a fraction

TiffanyMS: A how to guide? In my office I guess? Many of my students do not have Java enabled on their home workstations. This is an issue every year to get them up and running. I was just offering to share a handout that instructs students on how to install java.

DavidWe. o O (A How-To Guide to using Java?)

PatriciaSu: Thanks for the info. David. Gotta go now.

DavidWe: That would be great if you want to share the hand-out, Tiffany

DavidWe waves to Patricia

PatriciaSu left the room (signed off).

DavidWe: Thanks, Patricia. Take care

TiffanyMS: To installing Java on your work station if you do not have it already.

EricDM: This was the site that I have used http://nlvm.usu.edu/en/nav/frames asid 103 g 1 t 1.html

DavidWe: I know Firefox (alternate browser) will ask you whether you want to install it if you don't have it installed already - walks you through the whole process

DavidWe: I'm sure we could come up with something, Tiffany, if it doesn't already exist out there on the Web

TiffanyMS: Excellent

DavidWe: Thanks, Eric

LauraFD: For all of the CSUSM students- I am adding all of these sites to my Yahoo bookmarks LOL

TiffanyMS: Smart

EricDM: That is a great idea

DavidWe: Tiffany, remind me at the end of the session (I'll give you my email address) and I'll do some Tapped In Homework

DavidWe: Great, Laura. It's nice to share

DavidWe: Do any/some/most of you know about the NCTM Illuminations web site?

LauraFD: heard of it haven't been there

RachelJa: not sure

DavidWe: http://illuminations.nctm.org/

DavidWe: There you go

SharonR: I have seen it in class a few times, I think!

DavidWe: Take a couple of minutes to explore that if you don't know it - A LOT OF

GREAT RESOURCES

DavidWe: Actually - WAIT!

DavidWe: Before you go and explore...

DavidWe: Any resource is only valuable to you if you have time to look at it, play with it, think about it and then actually use it

DavidWe: There is so much out there that you can spend a large amount of valuable time SEARCHING for the perfect thing - something you can just print out and immediately use in your classroom

DavidWe: Sad to say but those PERFECT things are few and far between in my humble opinion

TiffanyMS: Which is why the transcripts are great - we can refer to the sites at a later date when we have more time.

LauraFD: Very neat. I clicked twice and now I have about ten or more I didn't scroll down yet lesson plans!

DavidWe: You know your students; you know what they have access to - you still are the teacher and need to figure out HOW to use a lot of this stuff

EricDM: The cool thing about illuminations is that you can manipulate some of the geometry sites

DavidWe agrees with Eric

DavidWe: Yes, the transcripts save you from frantically copy/pasting

RachelJa: The tech lady where I use to work showed us this site when she did a Smartboard demo but she didn't say where it was I think it is a cool website

DavidWe smiles

DavidWe: Again, the more you use it, the more you can feel confident that it will help you

DavidWe: That Math Forum - for example - is HUGE - there is so much stuff there

EricDM: I have used the site and just let the students explore before we have started the unit and then come back after we have discussed the information and the students really understand what has gone on.

RachelJa: I actually had been hunting for it. Thanks

TiffanyMS: The Best Fit Line is a neat Applet on Illuminations

DavidWe: We could (and I would be happy to) spend a session just exploring one of the BIG web sites - to highlight the features

DavidWe: We used to run week-long workshops for teachers to familiarize them with a lot of the Math Forum features

TiffanyMS: Wow, sounds like a lot to share

DavidWe: Absorbing the information for yourself is one thing - thinking about how you would teach with it takes time

DavidWe: Well, there is - the challenge is there are only so many hours in the day and you all have lives in the real world

DavidWe lives a lot of his life in Tapped In

EricDM: It really helps if you think with the end in mind and then you know exactly what you need to look for. Backward lesson design

DavidWe: Some of you may know that you can actually create your OWN discussion groups here, as members

LauraFD: so true, especially for the young kids you really have to bring it to their level of understanding as well

DavidWe: If you wanted a more particular focus, say, on elementary math and technology - that could be an outgrowth of this discussion

DavidWe: Some of you elementary folks should know that Susan Roseman, who is a superb online discussion leader, leads a twice-a-month K-3+ resources discussion

LauraFD: I just took the tips and tricks tour and we talked about that

DavidWe nods

EricDM: How would we go about starting our own discussion?

DavidWe: Susan's next session is next Tuesday at 8pm, EDT

DavidWe: As a Tapped In member you can OWN two groups

DavidWe: I am the owner of this group

DavidWe: Creating the group is very easy

DavidWe: The group could be for just the teachers at your school, for example...or it could be a public group that is open to anyone

DavidWe: Again, the idea of a community of practice where you share "best practices" or "things that DID NOT work" is one of the IMPORTANT ideas behind Tapped In

EricDM: I have a benchmark meeting this week with my district and this would be a great way to talk without having to meet

DavidWe: It can be really exciting interacting with teachers in different parts of the country, the world, etc.

DavidWe: It doesn't absolutely take the place of a real meeting - I would still rather see you all in a room with refreshments, but...

DavidWe:given the geographical distribution (and tanning possibilities in Yuma) it would be hard to arrange

LauraFD: That is right we could have some drinks out by the pool here though...hmmm

DavidWe pauses to let his fingers rest and field any questions

DavidWe smiles

DavidWe . o O (good thought, Laura)

LauraFD: airfare is expensive

TiffanyMS: www.terc.edu/mathequity/gender.html Eric here is a site about gender issues in math.

DavidWe: TERC is a fantastic place - thanks Tiffany

TiffanyMS: They talk about starting math clubs (Muffin Man)

DavidWe knows some of the people who work at TERC

LauraFD: Great Idea Eric, we could all be there in our minds, just the break I need

EricDM: We have the math club tomorrow

TiffanyMS: Is it just for the girls?

EricDM: No, I have it for everybody this year

DavidWe: Do you folks, especially elementary teachers, know about Family Math?

SharonR: No

DonnaRo: no

LauraFD: no

DavidWe: Oh, my goodness!

RachelJa: no

DavidWe falls off his chair

EricDM: yes, we have family reading at our school but maybe we should look at the math aspect

TiffanyMS: David is funny.

DavidWe: So, let me first show you the web page for the Lawrence Hall of Science (LHS) - the science museum at the University of California, Berkeley

LauraFD: I did see a web site for family science

DavidWe: http://lhs.berkeley.edu/

DavidWe: Here's the Family Math web page:

DavidWe: http://lhs.berkeley.edu/equals/

DavidWe: This is a stunning program that involves families in math (early elementary on

up)

DavidWe: There are published books, there are people giving Family Math training

workshops, fantastic project

TiffanyMS: Is it a book or a program?

DavidWe: Translated into Spanish if that helps anyone

DavidWe: Both, Tiffany

DavidWe: More K-6 than high school, I would say

DavidWe: But, there are a bunch of other very good science projects that emanate from

the Lawrence Hall of Science

DavidWe: EQUALS is the umbrella program that has been running that addresses equity

issues in math education

TiffanyMS: I want to check put Grossology after Sept 30th.

DavidWe: Big focus on getting FAMILIES involved in education

DavidWe smiles

IhorC joined the room.

DavidWe: Some of you may be aware that NCTM just announced a new "initiative" on math education and instruction

DavidWe: Ihor!

DavidWe waves

EricDM: My kids are extremely interested in this conversation I think that they will be digital natives

IhorC: Chose you over Einstein.

DavidWe: It's called

DavidWe blushes and bows humbly

DavidWe: I'm impressed

DavidWe lets everyone know there is a program on public TV in NYC on Einstein at the moment

LauraFD: my kids are keeping track of this too!

TiffanyMS: Tevo

DavidWe: I think NCTM is calling it Curriculum Focal Points

DavidWe grins at Tiffany

DavidWe . o O (TIVO?)

TiffanyMS: OOPs

DavidWe: It tries to re-focus pre-K to 8 math education

EricDM: Tiffany didn't Jan say that NCTM was a profanity in CA?

DonnaRo: I need to write a paper on integrating technology into math...can anyone give me some ideas

TiffanyMS: Why?

DavidWe: I'm not OVERLY interested, but here is the web page:

DavidWe: http://www.nctm.org/focalpoints/

DavidWe thinks Donna has a paper due

DonnaRo: not until a month

DonnaRo: but we need research

DavidWe smiles

DavidWe: Check out the Math Forum, Donna, and do a search there for integrating

technology

EricDM: I believe that it was because they want to do their own thing.

DavidWe . o O (<u>www.mathforum.org</u>)

DavidWe: Sorry for the computer problem

EricDM: Donna if you google technology in math there are many sites

DavidWe agrees with Eric

DonnaRo: thank u

DavidWe: Many, many sites

TiffanyMS: Donna have you ever used ERIC

DonnaRo: yes

DavidWe: So, while Donna is collecting resources from our helpful group here...

DavidWe: Let me point out that we have about 10 minutes (officially - I can stay longer)

left in the discussion

DavidWe: What I AM INTERESTED IN is....

DavidWe: What other topics/ideas/issues in math education would be useful to explore

and discuss in future sessions of my discussion

DavidWe. o O (big picture is MATH EDUCATION AND TECHNOLOGY)

DavidWe: I'm really interested in what would be helpful to YOU ALL

EricDM: How can we convince admin. that technology is the wave of the future?

DavidWe: Great question, Eric

DavidWe: That's been one of the main challenges of my job for the past 10 years

DonnaRo: that's a great question

LauraFD: what I would like to know is how do you set up working groups doing math education and technology with young children and only one or maybe two computers

DavidWe: It comes down to getting administrators on your side - showing how you (and your colleagues) are already using technology and that you need support

DavidWe: That usually translates into money (\$\$\$\$) which is a scarce commodity and TIME which can be even scarcer, sometimes

DavidWe reads Laura's comment

EricDM: We have a sup. that is all for tech. but the people under him still think that texts and whiteboards are the way to teach kids. Meanwhile the kids are falling asleep and falling further behind with the old ways of teaching.

DavidWe commiserates with Eric's dilemma

TiffanyMS: Laura, rotate pairs into the work station throughout the day?

DavidWe: I have lots of examples and people you could talk to Eric, but ultimately, you have to get people on board with you

DavidWe appreciates Tiffany's suggestion

LauraFD: yes, I was thinking a parent helper as well to monitor the key pounding

DavidWe: When you have to change someone's BELIEFS, that is a big challenge

SharonR: As a student teacher, I have noticed that teachers are not even using technology like I thought they would be, so how do you get administrators to?

DavidWe: Show and tell

TiffanyMS: Hand holding

DavidWe: For those of you interested in knowing more about this, I'm happy to recommend people who might be more local to your area than I am in New Jersey

DavidWe agrees with Tiffany

DavidWe: Ultimately, show them how it makes their lives easier

EricDM: In today's world I think that we should take away the admins. technology and see how they function, or not function

DavidWe: That's a tough job, but there are people (HERE, for example) to help you do that

DavidWe: It's why we volunteer to work with Tapped In - we really BELIEVE in this stuff

DavidWe: Eric, you know about CUE, right?

LauraFD: This really is such an amazing resource

DavidWe . o O (Computer Using Educators)

EricDM: yes

DavidWe: I'm just reading over the program announcement for the Spring conference - good people there

TiffanyMS: It's about getting the teachers to actually implement technology. Show and tell, and even training, is not always enough.

DavidWe: You are not too far from San Diego, right, Eric?

DavidWe agrees again with Tiffany

EricDM: We had to stop going because the district would not help us use the technology

DavidWe: Some people WON'T change

TiffanyMS: Grass roots, one person at a time

DavidWe: It's a tough time in education these days, given the requirements of NCLB and the increased focus on testing

DavidWe: In the 90s when all of this was brand new (AND there was money) people were more willing to take risks and learn new stuff

DavidWe: Anyway, seriously, email me with some of these CHANGE questions and I am more than happy to help

LauraFD: I really think that you are right Tiffany, and the fact that the tech kids we are raising will insist on it!

DavidWe . o O (wex@pobox.com)

SharonR: Sorry everyone, wish I could stay, but I really have to go. Thank you David for a great discussion!! I really enjoyed hearing what everyone had to say. Thanks to all of you! (I will get a transcript, right)?

TiffanyMS: I am going to check out the sites that have been introduced today, share them with my colleagues, and implement them in my classroom.

EricDM: I do see a change coming though with all of the new teachers that are entering the field

DavidWe: The kids can help the teachers get through the sticky parts of using the technology - the teachers need to know what they are trying to teach

DavidWe: Thanks, Tiffany

BJB2: The next Math and Tech discussion will be October 17

DavidWe: Let me just say, for people who need to go after an hour of reading what I'm typing, that we'll call it a session

LauraFD: Thank you David for all of the info!

DavidWe: I think the ONE THING I encourage you all to keep in mind is...

DavidWe: YOU ARE NOT ALONE

DavidWe: That's the purpose, ultimately (I believe) for Tapped In

TiffanyMS: Thank you David.

DavidWe: Allowing people to share the struggle

DavidWe: Thanks, folks. I had fun

SharonR left the room (signed off).

EricDM: No, thank you

TiffanyMS: Sometimes it just takes diving in

LauraFD: bye everyone thanks for the great discussion

DavidWe waves to Laura

DavidWe: Thanks, Laura. Stay cool

LauraFD: HA

RachelJa: Thanks for all the info it was great

TiffanyMS: Bye David.

DavidWe: Take care, folks Thanks again for joining me