

Title of Session: Math and Technology

Moderator: David Weksler

Title of File: 20070619mathedtech

Date: June 19, 2007

Room: Math Ed Tech Group

VanessaG: I'm really looking forward to this session.

JeffreyRD: This is my first session

VanessaG: I'll also be visiting the Learning from Lyrics session.....this is my first session as well Jeffrey

JeffreyRD: How did you find out about this Vanessa?

DavidWe joined the room.

VanessaG: From my college instructor. As a requirement for the class we have to participate in Tapped In....she really loves it.

DavidWe waves

DavidWe: Hi, folks

VanessaG: Hi David :)

DavidWe: Who is your instructor, Vanessa?

JeffreyRD: Me too Vanessa

JeffreyRD: Hi David

BJB2 cheers...and heeeeeeresssss David!

DavidWe . o O (the one who "really loves it")

DavidWe smiles

DavidWe waves from the Apple Store in Soho (downtown Manhattan)

DavidWe thanks Bj "Ed McMahon" Berquist for the big intro

BJB2 winks

DavidWe hopes the conversation will continue

DavidWe: We've got 12 minutes before we are starting

VanessaG: Jeffrey...my instructor is Dr. Garcia-Obregon

JeffreyRD: What school do you attend?

VanessaG: Texas A&M University-Kingsville

VanessaG: You?

RaulRe: I am from Texas A&M University- Kingsville too!

JeffreyRD: Gannon University, It is in Erie PA, but I live in Pittsburgh, PA

DavidWe: Does A&M have more than two campuses (Kingsville and College Station)?

DianeO: Jeff are you taking the online computer class also?

VanessaG: There's a few more....just to name a few....Corpus Christi, Laredo, Commerce

JeffreyRD: Yes

DavidWe: What are you studying, Vanessa?

JeffreyRD: For Virginia Arp

JeffreyRD: Who is your instructor Diane?

DianeO: No I am taking it from Kathy Kingston, but Virginia's name appears on some of the material

VanessaG: I'm studying Interdisciplinary Studies for Math grades 4-8

VanessaG: You?

DianeO: I think it is the same class

JeffreyRD: Yes, she is one of the three instructors for the course, along with Scott Shw, and Dr. Kingston

JeffreyRD: It is the same class

DavidWe: Interesting topic, Vanessa

JeffreyRD: I am in the Cranberry Cohort

RaulRe: What exactly do you do in Interdisciplinary studies?

DianeO: I am in the Erie Cohort

DianeO: I teach up in the Erie City School district, but I live in McKean

RaulRe: what do you teach Diane?

JeffreyRD: Cool, I live in Pittsburgh, and teach in Homestead at Propel Charter School

DavidWe: What do you teach, Jeffrey?

DianeO: 8th grade math the past 4 years, but I am moving up to the high school next year, what do you teach?

JeffreyRD: I teach Kindergarten

DavidWe: cool!

DavidWe: Do you like it?

JeffreyRD: I love it!

DavidWe mostly teaches teachers

VanessaG: Awesome

VanessaG: Little ones great

DavidWe: I guess I'll start to say a few things...

JeffreyRD: They are a lot of fun!

DianeO: you must have a lot of patience

DavidWe: Do most/some/any of you know about the Math Forum - www.mathforum.org

DavidWe: It's a big web site for math education

JeffreyRD: Not me, but I will save the link

VanessaG: Same here

DavidWe needs a lot of patience at times for teaching teachers

DianeO: no

KellyMO: I've heard of it, but never been on it

DavidWe: So, I was one of the group of people who began the Math Forum (originally called the Geometry Forum) in 1992 at Swarthmore College (near Philadelphia)

DavidWe: No one had really heard about the Internet in 1992, so, first, we needed to help teachers get online and learn how to use tools like email

DavidWe: We actually ran workshops mostly about technology with a little math thrown in

DavidWe: Have any of you used seen/used/taught with the software, the Geometer's Sketchpad?

DianeO: yes

KellyMO: No

JeffreyRD: no

RaulRe: what's the Geometer's Sketchpad?

DavidWe: That was built at Swarthmore College over a 5 year period preceding the start of the Geometry/Math Forum

DavidWe: It's a way cool piece of software for doing geometry on a computer

VanessaG: I'm not an educator at this point, I'm a student but I'll be keeping this in mind

DianeO: I was trained to use the Geometer's Sketchpad

DavidWe: It's published by Key Curriculum Press - <http://www.dynamicgeometry.com/>

SharonKi: I also was trained to use Geometer's Sketchpad and have used it in the past, but....

DavidWe listens

SharonKi: I don't have a lot of time in my class to use it...

RaulRe: what exactly does the geometer's Sketchpad do? how can it be utilized in the classroom?

DavidWe: Hang on a sec, Raul...I'll come back to that question

BJB2: most of you have already done intros...

SLI: Hi, I'm Sherri from Virginia

BJB2: but, let's do quick introductions for the transcript please....

BJB2: . o O (where you are located and what you teach or what brings you to the discussion)

KirstenG: I'm Kirsten from PA, hello Sherri

DavidWe: I'm David Weksler. I've been helping teachers learn more about educational technology for 15 years. I'm a HelpDesk volunteer for Tapped In and I'm the leader of this discussion. I'm in New York City at the moment

KellyMO: Hi I'm Kelly from WI. I teach 4th grade and I am here for a grad class that I am taking through NLU

DianeO: Hi, I am Diane from Pennsylvania. I currently teach middle school math and will be teaching at the high school level next year

JeffreyRD: Hi I am Jeff from Gannon University, I am in Pittsburgh, PA, I teach Kindergarten, I am here for my Principal Certification Program

DavidWe notes that Jeffrey is considering going over to the "dark side"

VanessaG: Hi, I'm Vanessa from Texas A&M University-Kingsville...I'm pursuing a degree in middle school math and I'm here to learn and for participation for a class in college.

DavidWe is kidding

JeffreyRD: That's true David

DianeO: I am also here for a Principal Certification class

Jayneeb: I am Jaynee from Fredericksburg, Va. I teach secondary mathematics.

RaulRe: I am Raul from Kingsville, TX. I am taking a computer course in which I am attempting to learn about new technology/methods/tools that can be used in the classroom as an educator.

KirstenG: I'm taking the principal cert too

SharonKi: I'm Sharon from Spotsylvania County, VA. I currently teach Geometry and Calculus at Spotsylvania High School and am currently getting ready to start summer school next week teaching a 20-day new course of Geometry (to 30+ students, so I found out today!)

JeffreyRD: I guess a lot of us are going to the Dark Side David

DavidWe . o O ("Luke, use the force!")

SLI: I teach HS math, AP Stats, PreCalc and Alg II. I'm taking a graduate class in Instructional technology and thought this looked really interesting.

JeffreyRD: Being a Principal ain't like dustin crops!

Jayneeb: What is Dark Side David?

DavidWe reminds himself that SLI is Sherri, right?

SLI: yes

VanessaG: Nice to meet you all

DavidWe: I'm just joking, Jaynee, but sometimes administrators (principals) are on one side of a debate with teachers on the other

RaulRe: Teaching =the dark side.

DavidWe smiles

Jayneeb: Understood!

KirstenG: Hey, I'll be working with gifted kids this upcoming school year, so any input regarding math would be great

DavidWe: so, if everyone is introduced, let me just further mention that if I post a URL (web address) it will show up in blue

DavidWe: Raul asked me a question a minute ago and I just want to give him the following URL for more information about Geometer's sketchpad

DavidWe: <http://www.keypress.com/x5521.xml>

JillJ: I teach in Raleigh, NC

DavidWe: Raul, that's the beginning of a great deal of material about Geometer's Sketchpad - I can tell you more later on

RaulRe: I would certainly appreciate the URL

RaulRe: thank you

DavidWe: So, let me start you all thinking a bit...

DavidWe: What comes to mind when you think of technology in math teaching?

VanessaG: Perhaps the use of a Smart Board

KirstenG: real world application of math is what I think of

DavidWe: What do you use as a teacher, what have you used as a student, etc?

DavidWe: I'm interested in your own experiences

JeffreyRD: My first thought is using a Smart Board for large group instruction by using math based web sites

SLI: calculators, applets, spreadsheets

DavidWe nods to Jeffrey

KellyMO: We use excel to teach the students how to graph

JeffC: I think that although there are a number of interactive sites for math, I don't see a lot where students may actually write equations.

JeffreyRD: One nice sight is coolmath.com

DavidWe: I like Sherri's answer a bit better - stuff that can be used for curriculum...actually teaching something

KellyMO: Program- Math facts in a flash

DavidWe: okay

JillJ: I would check on mathplayground.com for real world application

DavidWe: Not for long, Jill, but thanks for sharing that

DavidWe: Raul asked a question earlier about Geometer's Sketchpad

DavidWe: So, let me re-post the Math Forum site for people who came in afterwards

DianeO: graphing calculators, cbl's Geometer's sketchpad, excel, A+ Math

DavidWe: The Math Forum - www.mathforum.org - is a HUGE web site, K-20, with all sorts of stuff

KirstenG: firstinmath.com centers on challenge 24

DavidWe: It's an online library for math education that includes some mentored problem solving (costs \$\$) and a range of resources for students, educators, parents

VanessaG: Sounds neat

DavidWe: The Math Forum has been a site on the Internet for close to 15 years

DianeO: I have used many different technology tools in my classroom and in my studies. I am lucky to be teaching where I am right now because we just got a huge grant through GE with a focus on math and science

DavidWe: There is a huge amount of information there - there is a search engine just for the site itself

DavidWe: Sounds great, Diane

DavidWe: More people need to get that grant from GE

JoanKD: Hi. I'm new to his site bear with me while I get used to things

JayneB: I think math in the real world simply means being able to think or to find resources to help you solve a problem that is not necessarily on a page of text.

JillJ: I am too.

DavidWe: Bj, Jeff and I are HelpDesk volunteers, Joan. We can help you along

KellyMO: Don't worry me too!

JoanKD: Thanx

DavidWe smiles

VanessaG: Diane, what's GE?

DavidWe: I'm going to be in Atlanta on Friday...

DavidWe . o O (General Electric?)

DianeO: General Electric

KellyMO: How did you get the grant?

VanessaG: Oh wow, that's a nice grant

DavidWe: at the National Educational Computing Conference - the big conference for the ed. tech folks

DianeO: the grant is \$27 million spread out over 5 years

DavidWe: Go ahead, Diane.

KellyMO: Wow!

JeffreyRD: Wow that's a lot of money!

VanessaG: That's wonderful

JillJ: Diane, what did you purchase with that grant?

DavidWe: To whom was it awarded, Diane?

RaulRe: wow...

DianeO: There was a lot of paper work that the central office did

JoanKD: my school just got a huge grant too. We all got new laptops, smart boards, it's nice to have these resources

DavidWe: resources are great

DavidWe: Teaching with NEW resources can be a challenge at times

DianeO: We just got the grant and the sky is the limit, we are just creating focus groups to decide what to get

DavidWe: New ways of doing things

KirstenG: Our school just received Classroom for the Futures grant \$; not 27 mil, though!!

DavidWe . o O (new things can break, etc.)

DavidWe smiles

VanessaG: True David hehe

DavidWe: any grant is good

JeffreyRD: sometimes teachers just are not willing to change, or look for new ideas

DavidWe agrees WHOLE-HEARTEDLY with Jeffrey

KellyMO: It is very time consuming to learn new things!

JeffreyRD: or put in the time to search for grants!

DavidWe: That's why administration support is essential to successful implementation of technology in schools

DavidWe: That still hasn't happened in the majority of schools I know about

TiffanyH: Where can I find information to present to my school for grants?

DianeO: I agree, so the dark side does have benefits

JoanKD: I'm looking forward to the smart board. We train next week. Just being able to emphasize something in writing from the power point without it being just my finger is going to be awesome.

DavidWe: Diane, can you share with people any information about the GE grant program?

JeffreyRD: Would be nice if we were given professional development days for things like this instead of the same old classroom management things!

DavidWe: Absolutely critical, Jeffrey

JillJ: IMG also awards grants to teachers

TiffanyH: That would be nice Jeffrey

DavidWe: So, folks, hold on a sec.

DavidWe: Here's one thing I can offer you

JoanKD: Does anybody know about loan forgiveness programs for math teachers.

DavidWe: I was thinking of having you take a look at the NECC Conference web site

JeffreyRD: Joan, I use my smart board and power point for sight words, math equations, and letter identification

JeffreyRD: The kids love it!

VanessaG: In my computer literacy course we were introduced to the use of the smart board and I absolutely enjoy it. We are going to teach our first lesson to the class in our individual disciplines and it is exciting to think about using it in the future

DavidWe holds up his hand for a brief time-out

DavidWe: Hang on!

DavidWe: I promise you can talk more in 5 minutes

DavidWe doesn't cross his fingers behind his back

DavidWe: I'm going to be at the NECC conference in Atlanta this coming week

DavidWe: My guess is that numerous programs for funding will be discussed

DavidWe: I am happy to pick up literature and either send it to you or have another discussion on that topic when the conference is over

DavidWe: How does that sound?

KellyMO: Great

DianeO: The grant is in the early stages and we are looking to set the parameters. I know that I was told to think big, we are trying to incorporate technology into the classrooms. I do not have specifics at this time

TiffanyH: That sounds great

DavidWe smiles

JeffreyRD: Cool David!

DavidWe: So, in return, will you do me a favor?

DavidWe: Here is the web site for the conference program:

TiffanyH: Sure

KellyMO: Since you asked so nice...of course!

DavidWe: <http://center.uoregon.edu/ISTE/NECC2007/program/>

DavidWe does his best to be on good behavior, especially in New York City

DavidWe: Take a look at some of what is going on (there's a lot)

KellyMO: I can't seem to get my links to open, even with the control key

DavidWe: If there are particular things you find interesting, feel free to email me

DavidWe . o O (wex@pobox.com)

JeffreyRD: turn off your pop-up blocker

KellyMO: Thanks!

DavidWe: Hang on, Kelly, we'll help you figure that out

Jayneeb: Do you want us to go to the Oregon link? or stay with geometer's sketchpad?

DavidWe: Don't worry about sketchpad - that really was just for Raul - the question he asked

DianeO: The GE grant is going to provide more professional development. Which is much needed.

DavidWe: You can look at the NECC site (Oregon) at any time you prefer

DavidWe: The conference starts on Sunday, so, if you want to let me know something to keep an eye out for, email me before Sunday

DavidWe: It gets REALLY busy once the conference starts - I'm a real social butterfly

DavidWe: Just so you know, Jeff C (Cooper) and I are doing a 6 hour workshop about Tapped in at the conference on Saturday

KellyMO: Got it, thanks Jeff!

JeffreyRD: no problem Kelly

TiffanyH: I'm a brand new teacher. This will be my third year teaching.

DavidWe: But, I specifically will look for grant opportunities and Bj and I will figure a time to have a "Report from NECC 2007" discussion

TiffanyH: I'm in need of assistance with incorporating technology and mathematics

DavidWe: Good luck, Tiffany

JeffC: You're all welcome to attend online here... I'm still hoping to get a few more "break out" sessions going for the latter part of the workshop.

DavidWe: Do you want to say a bit more about the workshop to this group, Jeff?

DavidWe . o O (we do have a NECC2007 discussion group, right?)

JeffC: We'll be looking at online collaboration, a number of Web 2.0 tools, and going beyond NCLB requirements in the classroom.

JeffC: right... there's a group room here as well.

DavidWe smiles

VanessaG: No Child Left Behind?

JeffC: yup

VanessaG: I see

DavidWe is thinking the beginning of July for a "report from NECC" discussion in Tapped In

VanessaG: Sounds great

DavidWe: NCLB has influenced how professional development days are allocated

DavidWe: What had been going for technology training has sometimes been moved to better ways of doing test preparation

DavidWe . o O (different priorities)

VanessaG: Oh

JoanKD: Ugh!

JillJ: How can we get back on track?

DavidWe agrees with Joan

DianeO: The GE grant is looking to focus more on technology training

DavidWe: What do you mean, Jill?

DianeO: we are lucky

DavidWe: yes, the training is critical otherwise the hardware just collects dust

JillJ: to more technology training

DavidWe: Many teachers need to feel comfortable with hardware/software before they feel comfortable teaching with it

JoanKD: And for those of us who haven't a clue about tech stuff and it can get downright intimidating

TiffanyH: I agree with you David

DavidWe: I'm not sure I know the answer to that issue, Jill

DianeO: I am currently training principals in my district how to utilize 4-sight

VanessaG: That's very true

DavidWe: It's time and money and those are ALWAYS in short supply in schools

DavidWe: It takes leadership and vision to come up with a plan that is sustainable and is sustained over a number of years

DavidWe: It just isn't "instant coffee"

DavidWe: so, let me mention a couple of other neat web sites that some of you may not know about

JeffreyRD: Very True, I think money is often spent on one-day workshops with guest speakers that have no relevance

VanessaG: Very true. My mother is an educator and I've learned a lot of insight about the lack of funding and the constant change of software for teachers to utilize.

JillJ: I agree with Vanessa

DavidWe: There needs to be coordination between the teachers (users) and the purchases (administrators)

JoanKD: every time a new curriculum is adopted, new stuff all the way around

JillJ: That is what we are lacking at my school

DavidWe: and they need to allocate the funding for technology training

TiffanyH: To add to the irrelevance of workshops, I've been to the same one four times, with the same speaker

VanessaG: Once she learns a particular program, the school district decides to introduce a new one and the cycle continues

JeffreyRD: Boring!

DavidWe: So, administrators need to be "educated" too, but in **SLI**ghtly different areas

DavidWe smiles

JillJ: The cycle is frustrating Vanessa

DavidWe: How many of you have come across the National Library of Virtual Manipulatives?

KellyMO: Nope

TiffanyH: That would be frustrating

JoanKD: what's that sounds cool

VanessaG: I'd love to hear about it

TiffanyH: never heard of it

JayneB: That is a cool website. Many applets to look at on many levels.

JillJ: Can you tell us more about it?

DavidWe: So, by grade levels, by math topic, this is organized - a lot of online applets

SLI: I had just heard of it, but haven't had time to play - just look quickly

DavidWe: Here's the website:

JeffreyRD: never heard of it

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

VanessaG: Thanks

DavidWe: Take a few minutes to explore it

DavidWe: It's a SUPERB resource for math - and it's all web-based (could be good and bad)

JillJ: Thanks - this looks great and even applies to my grade level K.

DavidWe: apparently you can also get it on a CD, now

JoanKD: we are losing our computer lab this year. could students go on at home without help?

DavidWe: Yes, they have tried very hard to cover all grade levels K-12+

RaulRe: The newer programs many times facilitate how everyday tasks -time consuming tasks- can be targeted to make the teacher's teaching time more well-managed, such as the NLVM

KellyMO: Wow, why didn't I know about this

DavidWe: Well, they could get there at home, Joan, but they might need some guidance

Jayneeb: David there is another website that I have found cool....
Explorelearning.com....many Gizmos

DavidWe: You need to come to this discussion more often, Kelly

KellyMO: I guess so!

DavidWe: Remember, I've been doing this for 15 years

DavidWe smiles

DavidWe: Jaynee, do you mind saying something more about ExploreLearning and their "gizmos"?

TiffanyH: Wow, that website is so neat!

DavidWe: Explore Learning is usually 6-12 grade-level wise

DavidWe: <http://www.explorelearning.com/>

RaulRe: David, I am 20 yrs. old...during the time in your life when you were a student, what technologies were available in the classroom?

DavidWe: It is now a commercial site but I think you can get a free trial to see what is there

Jayneeb: Both websites are very cool! Explorelearning you have to join so cost is involved. NLVM is for everyone.

DavidWe: Raul, I learned how to use a **SLI**de rule in 9th grade in 1973

VanessaG: I'll be taking a look at these websites

DavidWe: I've had to keep learning NEW technology ALL THE TIME

Jayneeb: Both have very creative interactive ideas for teachers.

DavidWe: That won't stop, I honestly believe that

DavidWe: Sorry, Jaynee, keep going

JeffreyRD: Wow that NLVM site is really cool! I found some really cool resources already that I can use on my Smart Board

VanessaG: I agree. Technology is the future of course.

KellyMO: I agree, technology changes quickly

DavidWe: How have you used it in your teaching, Jaynee?

Jayneeb: I graduated from HS with a **SLI**de rule in 1974.

DavidWe smiles

Jayneeb: I just got turned on to the explorelearning website.

DavidWe: Don't worry, Jaynee, you may be older than me, but I think you aren't the oldest person here

Jayneeb: I like both of them.

DavidWe: yes

DavidWe: So, here's a question for you all...

VanessaG: Are you all familiar with TI-83 Plus? or TI-89?

DavidWe: What's the coolest thing you have seen in your life?

DavidWe knows a bit about TI calculators

JoanKD: In what way?

Jayneeb: I feel that the NLVM is more engaging for younger students and that the explore site is more interactive.

DavidWe: For me, the coolest thing I've ever seen happened in 1969...

KellyMO: I'm not sure...

VanessaG: Neat, I was just wondering if they were available throughout the country, or only in Texas.

DavidWe nods to Jaynee

JillJ: David, any more suggestions/website resources for incorporating technology in the area of problem solving?

DavidWe . o O (even though I'm a New Yorker, it wasn't the Mets winning the World Series)

JeffreyRD: I agree Jaynee I teach kindergarten, and I will use the site for sure next year!

DavidWe: Oh, yes, Jill

DavidWe wants some answers to the "coolest thing" question

JillJ: Jeffrey - I teach K too. Do you have any good math sites?

TiffanyH: It's hard to think of just one cool thing that has happened

RaulRe: a ti-83 puls

TiffanyH: My mind can't focus on just one

JeffC: woodstock?

DavidWe: well, think of 3 things, Tiffany

DavidWe smiles

DavidWe laughs

DavidWe: Good one, Jeff!

KellyMO: missed that one

DavidWe tells everyone that Jeff was born in Berkeley, California

JeffC: Neil Armstrong pretending to walk on the moon?

DavidWe: Yes!!!

DavidWe: I still think that's the coolest thing I've ever seen

JeffreyRD: The coolest thing I have ever seen was a Pittsburgh Penguins playoff game versus the Philadelphia Flyers, it went 6 overtimes, and lasted until 3:00am, I was at the game with my dad

DavidWe: Two guys walking on the moon and then coming home

JoanKD: the birth of my kids, my first new car when I was 21, the SD Padres going to the world series and seeing Trevor time

DavidWe: We did that 38 years ago

DavidWe acknowledges that the birth of one's kids must be pretty amazing

DavidWe: Padres?!?!?!?

DavidWe: Oh, c'mon, the Padres?

JeffC: I recall that it preempted "Hogan's Heroes" at the time.

DavidWe laughs

TiffanyH: I'm a weather person, a neat thing that comes to mind is watching heat lightning when it goes across the sky.

RaulRe: an iPod G5...a device that can substitute for a shed full of records, atrac, and tapes

DavidWe likes Jeffrey's Dad staying at the hockey game until 3am

JoanKD: don't go there, David

JeffreyRD: They ran out of beer, it lasted so long!

DavidWe: Yeah, but nature is always more interesting - when we build stuff we are imitating nature

TiffanyH: I've also recently visited the space center in Houston, TX and I got to see the astronauts that just took off into space. They were taking their picture for the shuttle.

DavidWe laughs

DavidWe: No more beer! Game OVER!

VanessaG: Tiffany, that's awesome

DavidWe apologizes for all the things Bj will edit out of the transcript of this session

JeffreyRD: Sorry BJ!

DavidWe: I met one of the woman astronauts at the NCTM meeting in Atlanta in March- she had been to space 4 times - very cool person

VanessaG: Wow

DavidWe: Thanks for playing along with that question

DavidWe: She retired because she wants to spend more time with her kids, but she would go back to space in a minute

TiffanyH: Sounds cool, I would like to meet one face to face

DavidWe: She also said there are over 50 astronauts who have NEVER been to space, so she thought it would be fairer to them if she stepped aside

VanessaG: I would have loved to have met Christa McAuliffe

DavidWe nods

JillJ: We had NASA do an assembly at our school - neat to meet the astronauts - we won a contest

DavidWe: Isn't there another teacher going up on a shuttle flight soon?

JillJ: I thought so

JeffreyRD: Did not hear that

TiffanyH: I didn't hear that either

RaulRe: I have a question...even with all the technology available, are the kids really learning more in the long run, or are they just learning what we, as instructors, know but using a different method?

DavidWe: http://science.nasa.gov/headlines/y2002/12dec_teacher.htm?list572349

DavidWe: Good question, Raul

DavidWe: If I can go back to the Geometer's Sketchpad as an example...

RaulRe: sorry to twist the topic abruptly

JoanKD: Raul has a good point. I find that when I teach algebra I teach it the way I learned it, but with new gizmos

DavidWe: Sketchpad was developed to do Euclidean Geometry on a computer...

DavidWe: Students (and older people) have discovered new geometry with the software...

DavidWe: It's not that you couldn't do it without the software, but the software makes certain repetitive tasks SO easy, it allows for further exploration

SLI: I think the technology - if used correctly - let's them explore more on their own and possibly (but not necessarily) learn more.

JeffreyRD: Raul, I think that the use of technology really engages the students, I feel that this trick to teaching is this: Get the kids to do what we want, by making the subject matter be something they want to do

TiffanyH: I find myself teaching things in math the way I was taught also. Sometimes it's hard to try and teach the students what the textbook wants you to teach

VanessaG: Therefore you're able to teach the students so much more?

DavidWe: Mathematicians feel that software LIKE Geometer's Sketchpad (and a similar program, developed in France called "Cabri") have opened up new areas of mathematics to exploration

JillJ: Software also increases students' motivation to learn

SusanR . o O (adds another dimension to what you are learning)

DavidWe: That's very common, Tiffany - the model we have of teaching is from our own experience

TiffanyH: I agree with you Jeffrey

KellyMO: I agree Jill, and motivation is a big thing

JeffreyRD: Technology helps the kids want to be active learners

JeffreyRD: Thanks Tiffany

DavidWe: That's why teacher training on online professional development (in places like Tapped In) can hopefully supplement your basic instincts

JoanKD: Motivation is everything with 8th graders, so many do have a whole bunch of it.

SharonKi: I've found it better to use Geometer's sketchpad in a group...we don't have time to get our students into the lab, teach them how to use the software, and then explore with it.

DavidWe: Sherri, what other software do you use?

SLI: The biggest problem I see is that we often don't have enough time to truly let them explore - we are always moving on to the next topic

VanessaG: What percentage of the class time do you feel technology is necessary?

SharonKi: I've also tried to use Cabri, Jr, on our TI calculators....that seems to work better with individual students

DavidWe: Ideally, everyone (students, teachers) should have their own computer (ideally a laptop) that they can pull out whenever needed

KellyMO: Lab time is a big issue. With only one lab in the building it makes it hard to get into it

DavidWe: I'm not sure I can answer that question in any intelligent way, Vanessa

RaulRe: to add to Vanessa's question, at what age is it appropriate to introduce students to technology

SLI: I use Minitab, a number of Statistical applets and Sketchpad for Trig explorations. I also use LabPros from Vernier to model real life stuff like sound waves

JillJ: SL, our district has adopted a math program that is supposed to be a cycle and keep coming back to revisit math concepts

JeffreyRD: I use technology all the time, In fact I use my smart board, as my chalkboard with the use of the markers

DavidWe: Do any of you use something as simple as Excel - spreadsheets are very powerful - algebra, etc.

JeffreyRD: The kids love it!

LuanneK: I bet they do Jeff

KellyMO: We are getting smart boards next year and I can't wait to use it

DavidWe admires Sherri's toolbox

TiffanyH: I think kids should be introduced as young as possible. Technology is their future so you want them to be comfortable with it.

JeffreyRD: They are the best Kelly, every teacher should have one in their room

SharonKi: Don't I wish!

LuanneK: That would be great!

DavidWe: again, I think the heart of the matter is really the teacher

JoanKD: I agree, smart boards are the bomb. Can't wait to start using one next year

VanessaG: No worries, but I was just wondering if you all feel that it is still important to teach students algebra and geometry simply by hand? I know I took one class this past semester and we had to work out our problems by hand...yet in other classes, we depended on calculators and technology so much.

KellyMO: I just asked and we got them...see it never does hurt to ask

DavidWe: The teacher needs to be engaged, excited about what s/he teaches - students respond to that

JillJ: Tiffany, I agree. My young learners love anything with technology.

DavidWe: What do you think about that issue, Vanessa?

JoanKD: I didn't use calcs at all this year. They can't use them during a test, why take the time?

DavidWe . o O (Cuisenaire rods are "technology")

RaulRe: technology always leads to the notion of a smarter generation...with all of the advances that we are seeing in the classroom do you think it is plausible that someday we will live like the jetsons?

SharonKi: I think that both should be taught...by hand first, then with the use of technology. Students still need to know HOW things happen, not just the answer.

VanessaG: Very good point Sharon.

DavidWe believes that people should know the times tables in her/his head

VanessaG: I agree with that method as well.

SharonKi: Amen to David!

DavidWe smiles

VanessaG: Oh yes.

TiffanyH: Amen

JeffreyRD: I have my students write out their problems by hand, but I only teach kindergarten, don't you think that if we get the basics down in the primary grades, then calculators can be used in the higher grades after students understand the concepts?

JoanKD: it's amazing how many don't

DavidWe: It just has to be presented in a positive way - not DRILLED and KILLED

SLI: Students need to understand the concepts and ideas, if the calculator or computer helps do the tedious stuff - it's fine. If it gets in the way of learning the concepts, we need to hold off using it.

LuanneK: I agree--it's the basis of future skills

KellyMO: We just had a discussion in grad class about is technology taking over the role of the teacher and should it

DavidWe wonders why so few people have opinions

DavidWe winks

TiffanyH: I think so. If students are just taught with calculators and they won't be able to use them on a certain part of a test they will have to take in life, how will they know which equation to use.

DavidWe: What may happen to the teacher if there is more technology in the classroom?

ChristinTr: one thing we have learned is to have the students write the steps and then let the calculators do the math this has helped in algebra

JeffreyRD: Technology can not teach values, care, or give students encouragement when they struggle

DavidWe agrees

SharonKi: No, technology should not take over...it should complement

JillJ: Technology enhances are ability to reach the students - not a replacement

VanessaG: SL, I see your point. I love learning new technology and exploring its opportunities, but I also agree with incorporating the basics of handwork as well. Great opinions from everyone

DavidWe: So, it's the "sage on the stage" vs. "the guide on the side", right?

JeffreyRD: we will never be replaced, our job is too important

LuanneK: Struggling students can not always grasp basic skills, much less understand with enrichment activities

JeffreyRD: We do so much more for our kids than teach numbers and letters

DavidWe: Clearly no teacher knows everything

JoanKD: I agree Christin. I did let them use calcs for math because I wanted their focus to be on the algebra.

DianeO: Technology can supplement the learning

KellyMO: But what about the fact that my students still can't multiply 8x8, do I give them the technology. Is it that they can't do it or....

JoanKD: I like the guide on the side

DavidWe: With search technology (Google) it may not be important to memorize the 50 state capitals, right?

LuanneK: much less pass PSSA Math tests

DavidWe: I think they need to be able to multiply 8 x 8

JayneB: Sometimes teachers reach for the calculator toooooo fast! Age appropriate is the key!

JoanKD: They were never held accountable in third grade?

JeffreyRD: not everyone has a computer David, I teach in a very poor community

DavidWe: just another thing to teach if they can't do it

SharonKi: But I do think that a student should know what the capital of their own homestate is!

DavidWe nods to Jeffrey

DavidWe: Maine decided 6 years ago to buy 30,000 iBooks (the Mac laptop I'm using)

TiffanyH: What do you mean Joan?

JillJ: Jeffrey, how many computers do you have access to for the kids?

DavidWe: If it costs \$10,000/year to educate a student and a reasonable laptop costs \$1500 and will be useful for 4 years...do the math

VanessaG: I agree with Jeffrey, my school district wasn't very advanced in technology, so I'm hoping I'll be able to have the resources to teach my children the wave of technology that is being introduced.

RaulRe: and along with access to a computer, a different problem is posed, access internet

ChristinTr: but in a state the size of PA buying computers for everyone is quite expensive

DavidWe: We just have to see that the modern world is built on people having access to technology

DavidWe . o O (cell phones, iPods, etc.)

KellyMO: I don't think that was the case Joan, I think we can sometimes set our standards for our students to low

JoanKD: Tiffany, having come from first grade up to 8th, I'm seeing the holes in learning that have occurred and no one at home is addressing them

JeffreyRD: We have a new school, (I teach at a charter school) so there is no established computer lab, we have three computers in the classroom, as well as a laptop cart with 30 laptops for the primary department to sign out

DavidWe: People are developing educational games to run on cell phones

KellyMO: I agree, home plays a huge roll

DavidWe appreciates the wide-ranging scope of this discussion

JillJ: Jeffrey, at least they are getting access at school and from you

ChristinTr: at the secondary level there is quite a problem of cell phones in schools tho

DavidWe: So, we have about 10 minutes left, folks

JeffreyRD: No doubt about it Kelly, I did my kdg screening today, and my new students did not know things that my own three year old knows how to do

DavidWe: Does anyone have specific questions?

DavidWe: Something you are looking for, want to know how to do better, etc?

DavidWe: So, everyone here is a member

TiffanyH: Joan, at my school I had a lot of trouble getting the parents engaged in their child's education. But the minute something would go wrong, they were at school in a heart beat

JoanKD: I had many conversations with 7th grade parents talking to them about websites and flash cards for those without computers to get their kids up to speed. The basics have got to be there or they will fall further behind and the content becomes more complicated.

KellyMO: When did parent stop being parents?

VanessaG: Sometimes the computer is a babysitter in a home, not a learning tool

TiffanyH: That's what I want to know Kelly

JeffreyRD: When the dads stopped staying around Kelly

JoanKD: Kelly, that's the 64,000 question of the century

TiffanyH: Good point

DavidWe: You are welcome to join the MathEdTech group, but isn't necessary for receiving a transcript

JeffreyRD: I had three dads this year out of 20 students

KellyMO: It's frustrating! I am a parent and in my house school comes first...

JillJ: Vanessa, I agree - we need to help educate parents on academic websites for the students to visit

SharonKi: Sometimes we as teachers are the parents.....

DavidWe: sometimes teachers substitute for missing parents

LuanneK: we had several "Moms" as students

KellyMO: Now, I have to disagree with the dad thing...I was a single parent for a long time and my son is still top of his class

JeffreyRD: Single, young moms do not know how to be parents, We have often taken over the role for them

DavidWe: Way to go, Kelly

SLI: Can any of us keep up with the fast changing world of technology? The kids are always in the fore front. I think the way we teach is going to have to change significantly to keep up in the very near future. The testing we do for the most part is not testing what the kids need to know. What can we do to deal with that?

TiffanyH: I was the parent for about five of my students this year. I don't think they would have succeeded as much if they didn't know how much I cared about them.

ChristinTr: Kelly it is about priorities that you have that many people don't have

DavidWe: When I was in 5th grade...because I was a "good" student...

DavidWe: I got out of class to get the film projector and thread the film

JillJ: SL, good point. The kids are getting more advanced with technology.

DavidWe: Whether my teacher could do it or not wasn't the point

DavidWe: I was on the A-V patrol as a little perk and I was helping the teacher

JeffreyRD: You are an exceptional parent then! Most of the moms in my school community have many issues

KellyMO: No worries, it's just everyone wants to blame the single parent right away and I have some very messed up students that come from a traditional home!

DavidWe: Kids should be doing the same thing with technology

LuanneK: It should be a team effort: parent-student-teacher

DavidWe: It happens where I went to college - dorms have a resident technology person to help with the 3am computer crisis

DianeO: We can learn a lot from the kids

Jayneeb: There is no substitute for feeling like you are NUMBER ONE in a parents eyes. Whether you have one or multiple parents. Number ONE feels awesome.

DavidWe hopes we get beyond the blame game

DavidWe: Remember, the students only grow up once

DavidWe: The trick is to make the environment they are in as FERTILE as possible

JeffreyRD: We are past the blame game here David

DavidWe: School should turn students ON and not OFF

LuanneK: Students need support from teachers

JeffreyRD: We can only do our best with what we have

JillJ: And as nurturing and a place they can succeed

JoanKD: It's not so much about assigning blame as it is solving the problem. But when you are required to teach a 7th grade math curriculum and the kids don't have those basics, you don't have the time and they don't want you going backwards.

VanessaG: Good point Luanne, we should do our best to motivate the parents so they can encourage their children at home with these new math problems so they both feel like they're succeeding together.

TiffanyH: I had a lot of students this past school year that it doesn't look like they've done much, but when you look at where they were at the beginning of the year, it was tremendous.

DavidWe: yes, Joan, but that requires the school system to allow for more communication up and down the grade levels, right?

JeffreyRD: Joan, That's why I teach Kindergarten, Its the ground level

SharonKi: Try teaching a year's worth of Geometry to 12th grade inclusion students!

DavidWe: what comes before K, Jeffrey?

KellyMO: Back to the technology thing...A fellow teacher did an interesting survey with her class...she asked the students how many thought they were experts at the internet and almost all of them thought they were

LuanneK: I teach High School-----

DavidWe . o O (5+ years of some kind of LEARNING)

RaulRe: kindergarten is the foundation to which a successful education is built

LuanneK: learning is ongoing

DavidWe checks his abc's

ChristinTr: cute Jeff

DavidWe . o O (i, j, k, l, m....right!)

SharonKi . o O (Everything you need to know you learned in kindergarten.)

DavidWe smiles

DavidWe: Okay, folks

DavidWe: What do you want to do next time?

KellyMO: After completing a project with the internet she asked the same question...only about 70% still thought they were

DavidWe: I promise we will have a "news from NECC" discussion at the beginning of July

JeffreyRD: I liked the sharing of web resources

TiffanyH: I would like to talk about the conference you're about to attend

RaulRe: cool

KellyMO: so do we assume students really know more than they do when it comes to technology?

BJB2 looks at the clock on the wall

JeffreyRD: That is what I will take from this session

TiffanyH: I loved the web resources also

VanessaG: I'll be looking forward to the NECC discussion

DavidWe: I will work on collecting as much information about technology grants as I can when I'm at the NECC conference in Atlanta

VanessaG: That'll be very helpful

BJB2: The next MathEdTech discussion will be on July 17

JoanKD: I live in a county with 46 elementary school districts. The high schools look at the middle school, the middle schools, the elementary. Finally the high schools passed a resolution that they will hold back 9th graders who don't have C.s in math and English

DavidWe: Do email me - wex@pobox.com if there are talks, presentations, etc., that interest you at the conference

DavidWe: <http://center.uoregon.edu/ISTE/NECC2007/program/>

RaulRe: I need to go research that Geometer's Sketchpad

DavidWe: I'm happy to check things out for anyone who lets me know about a specific topic

VanessaG: Thank you so much everyone for those great websites and opinions

JoanKD: Yea we were cheering. Finally the students will be held accountable. It

RaulRe: thanx Dave

DavidWe: Raul, feel free to email me

JillJ: Thanks David for the new websites - especially nlvm. I am always looking for appropriate sites for my K kids.

KellyMO: thanks for the great chat everyone!

DavidWe: I can get you a LOT of information about Geometer's Sketchpad (GSP)

KellyMO: I can't wait to use the websites

RaulRe: got it

JeffreyRD: Thanks David!

DavidWe: Hope they are useful, Kelly

DavidWe: You're welcome, Jeffrey

TiffanyH: Thanks David

Jayneeb: Thank you all

JillJ: Nice to experience Tapped In for the first time.

SLI: Thanks

DavidWe: Thanks for pushing me to think a lot, tonight, folks

VanessaG: Same here, my first session was really enjoyable.

JoanKD: Thanx David and everyone. Got some good info

LuanneK: Yes it was nice to experience Tapped In for the first time

DavidWe: I hope we can continue many of these topics in future discussions

ChristinTr: thanks for the good discussion.

DavidWe: I appreciate everyone participating

RaulRe: this was my first session as well and I got a lot out of it