Title of Session: Math and Technology Moderator: David Weksler Title of File: 20070717mathedtech Date: July 17, 2007

Room: MathEdTech Group

ShaneAH: I am looking for the Math and Tech forum

DavidWe: You found it, Shane

DavidWe: Have you participated in any Tapped In (TI) discussions before, Shane?

ShaneAH: yes

ShaneAH: I am here for a EDUC tech class, however I am a math teacher

ShaneAH: 8th grade

DavidWe is glad to hear Shane is a math teacher

DavidWe: Where do you teach?

ShaneAH: Ramona, San Diego

RobinPa: I teach in Fredericksburg VA

RobinPa: As you can see I do not teach typing, I teach High School Math

MaureenB: couldn't figure out the sound on my computer than I realized it was the announcement

DavidWe: I'm David Weksler. I'm one of the HelpDesk volunteers for Tapped In and I lead this math education and technology discussion. I just got back from the NECC Conference (this year in Atlanta)

DavidWe: Maureen, would you introduce yourself, please?

MaureenB: I teach 4th grade in Putnam County, NY

DavidWe is in New Jersey, near New York City - south of Maureen

BjB : I teach communication in Pennsylvania

DavidWe thanks Bj and Maureen

DavidWe: So, before we begin, just a little self-promotion...

BjB blows the trumpet and rolls the drums

DavidWe: Do you know about the Tapped In Festival - next Wednesday, 25 July - 11 hours of discussions starting at 11am EDT/8am PDT

MaureenB: yes

ShaneAH: no

DavidWe . o O (Bj's timing is perfect)

RobinPa: yes, but I would like to know more

DavidWe: Some really interesting things will be happening

DavidWe: Does everyone know how to view the TI calendar of events?

RobinPa: yes

ShaneAH: yes

DavidWe: Bj will post the web page for a description of the festival in a second

DavidWe smiles

DavidWe: Great

DavidWe: but the sessions are listed on the calendar

DavidWe: So, what would you all like to know - any particular questions, issues, topics you are hoping to learn more about?

DavidWe: I hope to make this as interactive as possible. Happy to share with you some of the things I know

MaureenB: What's new at NECC or is that for another discussion

ShaneAH: I am interested in Interactive math websites

DavidWe smiles

RobinPa: We are discussing Active Learning in my class. What are your feelings about this topic.

DavidWe: Okay

DavidWe: Anything in particular, Robin?

DavidWe: So let me start with my "home" on the web - the Math Forum - www.mathforum.org

RobinPa: There is much debate about how to handle Active Learning in a low level class.

DavidWe: Do all of you know about the Math Forum?

ShaneAH: yep

MaureenB: yes

RobinPa: yes

DavidWe: Tell me more about "active learning", Robin

DavidWe was part of the team of people who started the Math Forum in 1992

RobinPa: Active Learning is when students learn by doing. It is not simply a lecture environment.

DavidWe: Do all of you know about the (recently upgraded) National Library of Virtual Manipulatives?

ShaneAH: yes

RobinPa: It is wonderful

DavidWe: and it is harder to do active learning in a low-level class?

ValerieT joined the room.

DavidWe waves to Valerie

DavidWe: Hi, Valerie. Welcome

ValerieT: hello

DavidWe: We've just begun - would you quickly introduce yourself, Valerie, please?

RobinPa: But we feel active learning is more important to that level than any other level.

DavidWe would agree

ValerieT: Hi I am from San Diego and I teach a computer class for students K - 8

DavidWe: Thanks, Valerie

RobinPa: What type of programming do you teach?

DavidWe: Shane is in the greater San Diego area, just so you know, Valerie

ValerieT: I teach basic computer skill to the students

DavidWe: So, perhaps I can share a couple of things with you that you may not have come across

DavidWe: There were some interesting things at NECC this year, but I saw something in the Financial Times today that looks very cool

DavidWe: Any of you teach statistics or include statistics as a topic in your classes?

ShaneAH: yes

ValerieT: not really

RobinPa: not really, But I will pass it on.

DavidWe: Interesting Swedish scientist has developed some visualization software for statistics - Google recently bought it

DavidWe: Take a look at:

DavidWe: http://tools.google.com/gapminder/

DavidWe: takes a few seconds to load - at least on my computer

DavidWe smiles

BjB: cool site, David

DavidWe: yes!

DavidWe: There's a lot behind that little animation, but apparently Google is going to develop this tool for educational use

ValerieT: I am still trying to get there

DavidWe: The author, Hans Rosling, has a web site...

ShaneAH: looks cool

DavidWe: Tell me if you can't get there, Valerie

RobinPa: I am going to try after the session. I keep getting blocked.

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

DavidWe: No problem, Robin

ValerieT: Looks like fun

DavidWe: You all know that the transcript with the web site addresses will be in the transcript you'll receive after you logout

ShaneAH: yep

RobinPa: great

DavidWe: statistics can be powerful for getting people to think about all sorts of situations

DavidWe: It's perfect for interdisciplinary topics, too

DavidWe waves to Carol

CarolGi: Hello all

DavidWe: Carol, would you quickly introduce yourself to the group, please?

CarolGi: I currently teach MS Math (math8, alg1and geom) to a bunch of obnoxious 8th graders

CarolGi: love the age group

DavidWe: So, I'll mention a couple of things...

DavidWe laughs

DavidWe: How obnoxious are they, Carol?

MaureenB. o O (they are 8th grade that says it all)

CarolGi: typical hormonal adolescents

DavidWe agrees

CarolGi exactly

DavidWe: You're a brave woman, Carol

DavidWe: How about this:

CarolGi: Brave and Stupidity are very close in my definition

DavidWe: I did a presentation on the Math Forum to my former middle school teachers about 10 years ago

DavidWe: Mrs. Stanley, MY 8th grade English teacher (I thought she was pretty old when I was 13) was still teaching. I hope she got something out of my presentation, but at the end, she did say, "David, that was a very nice presentation."

DavidWe: I felt like I was 13, again

DavidWe: Doing okay, Carol?

CarolGi: love that modern technology - computers

DavidWe hopes one of Carol's students isn't pulling the network connection out of her computer

DavidWe: So, here is something I hadn't seen before - a computer-based system for math education

DavidWe: http://www.aleks.com/

DavidWe: There is a free trial you can take advantage of

RobinPa: Tell me more.

DavidWe: sort of computer-based tutor, I believe

ValerieT: What about that last website

DavidWe: Here's a one paragraph overview:

DavidWe: http://www.aleks.com/about_aleks

ValerieT: should we just experiment

DavidWe: Don't do it now...unless you really want to - I just hadn't known about until the conference in Atlanta 3 weeks ago

CarolGi: will definitely peruse the website in more detail later

DavidWe: it sounds a bit more sophisticated than an automated system with built-in assessment

RobinPa: This looks interesting. It looks like it has a lot of potential

DavidWe: Here's the overview page with makes me a bit more interested:

DavidWe: <u>http://www.aleks.com/about_aleks/overview</u>

DavidWe: I actually asked the exhibitors if they might consider doing a presentation about ALEKS in Tapped In

DavidWe . o O (they know more about it than I do - at least at the moment)

DavidWe: We'll keep you posted if that can get arranged

ValerieT: This looks interesting

DavidWe smiles

DavidWe: I'm glad

DavidWe: Bj wants to highlight something that is coming up during the TI Festival next Wednesday

BjB: If anyone is planning on participating in the Tapped In festival...

BjB: the Squeak and Scratch discussion should be excellent

MaureenB: looks great

MaureenB: I am

DavidWe . o O (Squeak is...)

ValerieT: Have you tried aleks.

BjB: but, you are requested to download the software before the event

BjB: you can access the urls for download from the calendar description of the event

DavidWe: Not at all, Valerie - I'm interested in learning more, but I just learned about it at the recent NECC Conference in Atlanta at the end of June

DavidWe: partly it caught my eye because my nephew is an "Alex"

DavidWe: Did you want to say anything more about Squeak, Bj?

RobinPa: I would like to know about Squeak. What is it?

BjB gets the information...just a sec

DavidWe: Can't say too much about it, Robin, but...

DavidWe: Here's the URL:

DavidWe: http://www.squeakland.org/

RobinPa: Thanks! I will look it up.

DavidWe: it is a programming language for young kids - similar to LOGO in some ways

CarolGi: I thought about signing up for that session just to play with Squeak and Scratch

DavidWe: it's more multi-media friendly, I believe

BjB: there is a demo in the eToys room in the student campus

DavidWe smiles

DavidWe: I think that should be a good discussion during the TI Festival, Carol

IhorC joined the room.

DavidWe: So, have any of you - HI, Ihor! - heard of the Mind Institute?

DavidWe waves to Ihor

ValerieT: Is there a link when you type in a website in a discussion

BjB waves to Ihor!

DavidWe: I'm not sure what you mean, Valerie?

IhorC: What's up at the mind institute, David?

DavidWe: when the URL shows up in the chat and is in blue, it is clickable

DavidWe: Does that answer your question, Valerie?

ValerieT: I am trying to check out the website and being lazy I don't want to type in the whole name

ValerieT: yes

DavidWe: Here's the web site for the Mind Institute - www.mindinstitute.net

ValerieT: it doesn't seem to be working that way Oh well

DavidWe: They have some pretty cool stuff - mostly focused on K-8 - they have a curriculum that also combines math and music

CarolGi: I had issues the other day with my computer

DavidWe: We can help you with that later on, Valerie

CarolGi: Today it is letting me click on the links

DavidWe: You'll have the web site addresses in your transcript

ValerieT: Is most of this free or do you have to subscribe

DavidWe nods to Carol

DavidWe: Aleks is not free - but there is a free trial

ValerieT: cool

DavidWe: Squeak is free, I believe

DavidWe: The mindinstitute has curriculum that they sell...

DavidWe: That Math Forum is mostly free

DavidWe: The National Library of Virtual Manipulatives is free

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

DavidWe may not have posted that web site, earlier

DavidWe tries to remember what he was going to discuss next

DavidWe: Ihor, want to mention something about math at the CIESE web site?

DavidWe: Everyone, my colleague Ihor Charischak and I were both at the NECC Conference

DavidWe: He's worked in middle school math education for over 25 years - both as a classroom teacher and a professional development person

IhorC: Yes, Squeak is free. But now there is also Scratch at <u>http://scratch.mit.edu/</u> an offshoot of Squeak. Very cool.

DavidWe nudges Ihor

DavidWe: Anyone know about the software program Green Globs?

CarolGi: no

RobinPa: It is great!

ValerieT: I think I have it but haven't used it

DavidWe: Robin, want to tell Carol something about it?

RobinPa: It is wonderful for teaching linear functions.

ValerieT: what do you like about it

DavidWe smiles

DavidWe . o O (#1)

IhorC: Globs is the best algebra software ever written!

DavidWe: EVER!

ValerieT: Wow

RobinPa: The students are given globs on a grid and they have to devise the equation that will zap the most globs

IhorC: Try it if you want to get 8th graders hooked on non-linear equations!

DavidWe . o O (make the function "hit" the globs on a coordinate grid)

RobinPa: Zap sounds more like a video game:)

DavidWe smiles

DavidWe: true

DavidWe: Speaking of video games...

DavidWe remembers what he was going to mention next

CarolGi: kids love anything when it comes to computers and VIDEO GAMES

DavidWe: Ihor, how can people get Green Globs if they don't have it

DavidWe: ?

RobinPa: It used to be published by SUNBURST?

DavidWe types slowly to let Ihor chime in

DavidWe agrees with Robin

CarolGi: Robin - does Spotsy co have this software in the schools?

DavidWe: So, there was this company at NECC, Tabula Digita, that I'd never seen before...

RobinPa: We used to I do not know if we still do. We used to have the apple version when I first started teaching many moons ago.

IhorC: Globs is still available from Sunburst. They are working on a Mac OSX version.

DavidWe: they have a new video-game based math "environment" called DimensionM

CarolGi: Thanks

DavidWe: Since the conference (I guessed I signed up when I was there) I've received several emails about an online interactive conference call to help learn more about DimensionM

DavidWe: Here's the web site:

DavidWe: http://www.dimensionm.com/

IhorC: If you like to use video games for teaching math I suppose its OK.

ValerieT: As long as the students are learning it is a fun variety

David We: I've not played with this at all - I'm trying to get Alex Keller, my nephew, to give me a review of it from the math perspective (do you learn anything) and from the video game perspective (he's very good at that) - he's starting 9th grade in the Fall

DavidWe: Well, that's what they claim:

DavidWe: "Students become so captivated in solving problems that they forget they're learning but they don't forget what they've learned."

DavidWe . o O (good advertising copy)

IhorC: I'm not a big fan of this approach because the fun is in the game playing not the math... you have to do the math to get somewhere... like its a chore you have to do before you can play.

DavidWe doesn't disagree with Ihor

DavidWe: Just wanted to let people know about this - again, I've not really had a chance to play around with this

CarolGi: We teach 90 min blocks - we have to play to get through a whole block - alive

DavidWe: but, game-based "learning environments' are becoming a very hot topic

IhorC: Globs on the other hand gets the kids interested in the math which makes the game so exceptional.

DavidWe: Carol, you teach geometry, is that right?

CarolGi: Yes

ValerieT: You have definitely sold me on green globs

DavidWe: Do you use (or know about) the Geometer's Sketchpad software?

IhorC: There are good learning games and not so good learning games. Sometimes it's a challenge to see the difference.

DavidWe agrees with Ihor

CarolGi: I don't use it as much as I should - Geom Sketchpad

RobinPa: I use geometers Sketchpad frequently

DavidWe: That was built at Swarthmore College - a project that came before the Geometry/MathForum

CarolGi: This year we have Class COWS so I am incorporating more Tech in my classes

DavidWe nods to Robin

DavidWe . o O (COWS?)

CarolGi: Computers on Wheels

DavidWe: thanks

ValerieT: How many

DavidWe smiles

RobinPa: One problem with the COWS is that they only have a one hour battery life. Then they have to be plugged in.

CarolGi: We will have 2 COWS with 15 ct on each cart - wireless and a printer for each cart

CarolGi: I am veryveryvery excited

DavidWe: Electricity is key

IhorC: Do you mean laptops in carts on wheels?

DavidWe: Ihor, did you want to mention something about CIESE - in general?

CarolGi: They last longer depending on what software you are running - battery

DavidWe posts the CIESE web site

ValerieT: Do you have to book it for a class or is it for every class

DavidWe: http://www.ciese.org/

CarolGi: Laptops in carts on wheels - COWS......they even moo when you turn them on

DavidWe smiles

ValerieT laughs

IhorC: CIESEmath is an alignment of technology activities to Everyday math at the 6th grade level. See <u>http://www.ciese.org/ciesemath</u>

CarolGi: You can book them for a day or just class period - 2 periods in a row - would have to use backup power source

RobinPa: CIESE looks interesting.

DavidWe smiles

IhorC: I'm working on updating a lot of the material right now.

DavidWe: Want to mention the Noon Day project, Ihor?

DavidWe: Very cool online collaborative project for measuring the circumference of the earth

IhorC: you can learn more about the math projects I do at www.ciese.org/mathprojects

DavidWe . o O (basic geometry)

IhorC: Noon day is linked to the site I just mentioned.

DavidWe smiles

DavidWe: Thanks

DavidWe: So, we have about 5 minutes left, folks - anyone have a particular question/comment?

ValerieT: Not really I will have to take some time to visit all these sites

CarolGi: Thanks for some fun/educational websites

IhorC: It's a collaborative project that gets students from around the world to take shadow measurements in order to measure the circumference of the earth.

CarolGi: Noon day - time to measure shadows?

DavidWe . o O (famous experiment from Ancient Egypt)

RobinPa: Would that be similar shapes in geometry?

IhorC: Something Eratosthenes did 2200 years ago.

CarolGi: Amazing Mind - 2200 years ago

IhorC: You can read all about it in "The Librarian who Measured the earth" - a children's book by Kathryn Lasky. It's wonderful.

DavidWe: So, I'll remind you about the TI Festival next Wednesday - beginning at 11 am EDT/8am PDT

IhorC: you can find references to that and other related things at www.ciese.org/noonday

DavidWe: My next math education and technology discussion will be Tuesday, 21 August - same time

ValerieT: Well thanks I got to go

DavidWe: Noon Day gets classes of students from around the world to participate

RobinPa: Thank for some interesting stuff!

IhorC: You can also have your class participate in September when we run the project again.

DavidWe: If anyone has questions, feel free to email me - wex@pobox.com

DavidWe: You're welcome, Robin. Thanks for logging in

CarolGi: I bookmarked that website to look at in more detail later

DavidWe smiles

DavidWe: Good deal, Carol

CarolGi: Thanks for a nice chat

DavidWe thanks Ihor for participating and mentioning some cool online projects

DavidWe: You're welcome, Carol

DavidWe hangs out for a few more minutes to answer any last questions

IhorC: Thanks.

DavidWe: The trick, I think, is to try to answer the questions/respond to the comments in order...even if there is a back-log, I try to answer the first ones, first

DavidWe: I also will ask people to hold on while I answer one thing - and then get back to them

DavidWe: It can easily get overwhelming

IhorC: it's still very disorienting... but I don't let it bother me anymore.

DavidWe: When we were facilitating large groups of people interacting, we sometimes had a 2nd person (Bj for example) cue up the questioners in private chat

DavidWe: otherwise too much text is scrolling past faster than you can even read it

DavidWe: but, in a real classroom, if everyone starts speaking at the same time, the same chaos will ensue

IhorC: What I'd like to do is what Adam Sandler did in Click (the movie) use the remote to freeze everyone until I finish typing! :-)

DavidWe: yes!!

DavidWe: That's what one needs

BjB waves bye

DavidWe waves

DavidWe: Cool

IhorC: bye, BJ