Title of Session: Math and Technology
Moderator: David Weksler
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Room: Math Ed Tech Group

DavidWe waves

DavidWe: Hi, folks

DavidWe: How is everyone?

ShaniB: good

DavidWe: I'm in Orlando, Florida

EricaEF: Good, Houston, TX

ShannonU: good and you

ChiahsinL: good

ShannonU: I am from Houston also

RachelSD: Houston too

DavidWe: Fine thanks - I'm at a technology education conference - SITE

SusanR joined the room.

VickiGst2: I'm in WV where it is cold right now

DavidWe understands there has been snow in Ohio

VickiGst2: I'm on the border...it is snowing now but probably won't be much accumulation

EmilyW: I am in Dallas, TX

DavidWe: So, we usually begin with brief introductions...

DeborahJK: I am in NYC

DavidWe: Is anyone here for the first time?

SusanR: I am in Ontario, Canada

DeborahJK: Yes

VickiGst2: yes

ChiahsinL: yes, I am

RachelSD: yes, well to professional development

ShaniB: I am in Houston, Tx and I attend the University of Houston

DavidWe: Say a bit about what you do, what you teach (what age students) and what you are interested in, please

RachelSD: I have to do online chats with my prof.

ShaniB: It's my first time

DavidWe nods to Rachel

ShannonU: I am a student teacher for 6th, 7th, and 8th grade math

RachelSD: student teacher EC-4

EricaEF: I am a student teacher and I am in 3rd grade

ShaniB: I am student teaching in the first grade

DeborahJK: I'm a grad student, taking a technology course and this was one of the recommended sites

RachelSD: student teaching kindergarten

VickiGst2: I teach geometry and pre al to 9th grade students

DavidWe: I may need to physically move my friend's computer that I'm using here at the DoubleTree hotel, but I'll do my best to move quickly

CandiceL: I'm at UH. I am EC-4. Right now I am with Pre-K.

DavidWe: That's great, Vicki

VickiGst2: I'm working on a tech ed masters and am supposed to attend an online event

DavidWe tries to take in all this information

SusanR: I moderate the K 3+ Great Resources sessions..next Tuesday..do check the calendar ..the topic is Poetry Writing and it begins around this time. I do welcome new participants

DavidWe: Does everyone know about DETACHING the chat window so as to make it bigger (taller)?

CandiceL: yes

DavidWe nods

RachelSD: yes already done

DavidWe: Great

VickiGst2: already there

EricaEF: yep

DavidWe: I want to share a few things with you all

DavidWe: But if there are specific topics that anyone has questions about, do let me know

DavidWe: So, I'm at this conference on a lot of this educational technology stuff

KellyBal: I'm in CA and teach 7th grade pre-algebra. I'm interested in implementing technology into my math classes

DavidWe: Not to make you jealous, but here is the web site for the conference I'm attending:

DavidWe: http://site.aace.org/conf/

DavidWe: It's pretty warm at the moment in Orlando and I'm across the street from Universal Studios...but I've not been there - I've been working hard!

DavidWe: So, I'm not sure how much this may be relevant to everyone, but...

DavidWe: That's just for the conference I'm at - not particularly math related

EricaEF: first year attending?

DavidWe: I've been to this conference before

RachelSD: so what are some ways to integrate technology in my classroom with kindergartener's?

DavidWe: Anyone know much about fractals?

RachelSD: no

KellyBal: no

VickiGst2: Fractals end up as pretty pictures

ShaniB: I learned a little

CandiceL: a little

ShaniB: on the elem level

DavidWe: Good question, Rachel

VickiGst2: if u do enough iterations

EricaEF: I have heard the terminology

VickiGst2: and that is about the limit of my knowledge

DavidWe: Well, I heard a great discussion on Friday by a mathematician named Bob Devaney who is at Boston University

SusanR: It's a mathematical object, David

DavidWe: He has a very cool web site - let me share that with you

DavidWe: Good Susan, what else?

DavidWe: http://math.bu.edu/DYSYS

ShannonU: Does that have anything for middle school

ShaniB: what about elementary math?

DavidWe: Well, Shannon, I think you can apply some of the things to middle school - depends a bit on your students...

DavidWe: But it was so cool, I thought I would share it with you to start

ShannonU: okay thanks

DavidWe: Bob mentioned that 7th graders are forming math clubs and using some of the JAVA applets to develop some really cool projects

SusanR: I have created some fractals with Turtle Geometry, David

EmilyW: what type of cool projects?

ShannonU: I just took a peek and there looks like I could use a lot of it

DavidWe: I think almost all this material can be applied to younger students AND older students

ShaniB: what is turtle geometry?

SusanR: use the Logo turtle to create geometric designs

DavidWe: Yes, Susan. You can do a lot of with turtle Geometry with Logo

ShaniB: oh...ok

SusanR: It's Seymour Papert's book on Turtle Geometry..can be used off the computer as well I believe

ShannonU: That is neat

CandiceL: yeah

ShaniB: Oh I see. Would you recommend it for elementary?

DavidWe: Does everyone know LOGO?

KellyBal: no

ChiahsinL: no

EricaEF: nope

ShaniB: Nope

RachelSD: no

DeborahJK: no

VickiGst2: not really

DavidWe . o O (about LOGO?)

SusanR: upper elementary..yes

ShannonU: no

DavidWe: Seymour Papert and others wrote a programming language for children called LOGO

DavidWe: The cursor was a big turtle - in fact there really was a life-size (large) robotic turtle that the students would program to move

DavidWe: Basically, it was quite simple, but they could see the results of their programming very clearly

DavidWe . o O (did the turtle go where we wanted it to go)

DavidWe: It was then adapted for Apple II computers and then others

ShaniB: sounds neat

EricaEF: so is LOGO an acronym or just the name

DavidWe: Mid-80s it was THE thing to do in education

EricaEF: interesting?

RachelSD: neat

DavidWe: Here's a link:

DavidWe: http://mckoss.com/logo/

ShaniB: and it's still being used today?

DavidWe: There are still some very strong adherents of it as a very simple but powerful learning environment

DavidWe: Especially with young children

SusanR: Working with Logo can certainly strengthen math and logic skills

DavidWe: Yes, but it can be harder to find the sources of the software for different platforms

RachelSD: where do we find info?

ShaniB: Oh...I haven't seen it in the schools I have been at

SusanR agrees with David

RachelSD: from that website above?

DavidWe: If anyone is interested, email me and one of my closest colleagues can tell you the current vendors of the software

CandiceL: from the link he just gave us

RachelSD: ok

DavidWe: I just googled that - there are several variants of the software...the above web site is just an intro to programming, NOT the source of the software, hang on a sec...

SusanR: Try it out here http://www.mathsnet.net/logo/turtlelogo/index.html

DavidWe: Thanks, Susan

ShannonU: yes, thanks

KellyBal: thank you

EricaEF: thanks Susan

DavidWe: So, back to fractals

RachelSD: thank you.

DavidWe: The current version of LOGO has evolved into a program called MicroWorlds that is published by LCSI

DavidWe: Here is their web page:

DavidWe: http://www.microworlds.com/

ShaniB: thanks for all of the info

DavidWe: Very powerful software and if people are more interested we could actually devote an entire TappedIn discussion to it - I've got some very good friends to help me with that presentation

KellyBal: yes, thank you

DavidWe: Okay, so, again, there is often much, much, more STUFF out there that you may not have run across

ShannonU: on that last website there are demos you can download

ShannonU: I love demos

DavidWe: Want I also want to do is to let you know WHERE to go for more infomation about math education and technology IN GENERAL

RachelSD: thanks Shannon!

ShannonU: welcome

DavidWe: Yes, they have great demos on the Microworlds site - there is even a WebPlayer for some things, you don't need to actually have the software to see what others are doing

DavidWe: Do most of you know about the Math Forum - www.mathforum.org - it's a huge web site for math education

KellyBal: yes

ShannonU: yes

SusanR wishes children could be exposed to Logo

DavidWe: So, the Math Forum has been around for 13 years and has, among other things, a huge set of links to other sites for math education

DavidWe hopes MORE children may be exposed to LOGO

EricaEF yells excitedly MORE sites!!

DavidWe: If you need to find more information about something in the math world, I would suggest starting there

BrookeM: I LOVE LOGO

DavidWe: It is searchable - there are discussions on lots of topics

DavidWe smiles at Brooke

BrookeM: when I was a kid I was part of the study in NJ

DavidWe: Why do you love LOGO, Brooke?

DavidWe smiles

RachelSD: I can't wait to explore.

DavidWe: Go on...

BrookeM: there is so much you can do with it

CandiceL: like?

DavidWe: Yes, Brooke, "like"?

DavidWe pauses and lets Brooke answer

BrookeM: I own a license on my personal lap top and let my kids play with it during indoor recess

DavidWe: What do they do with LOGO, Brooke?

BrookeM: you can do some simple programming and help kids learn their geometry

BrookeM: and angles

DavidWe agrees heartily

BrookeM: perfect for my 3rd graders

BrookeM: then it can get more complex

DavidWe: Yes, turns, shapes, the ideas of angles without calling things "angles"

DavidWe agrees again

BrookeM: it allows good problem solving skills

BrookeM: and creative thinking

BrookeM: and some of my kids who don't express themselves well in the classroom do well with it

BrookeM: b/c there is a big push to have kids "write about math" and their thinking process

BrookeM: logo allows them to break it down

DavidWe thinks that is an ESPECIALLY valuable aspect of software...it just works better with some children

EricaEF: wow

DavidWe: It is very step by step

BrookeM: now I can hardly make a thing on it

DavidWe: So, let me ask this question, NOW!

BrookeM: breaking it down is good b/c then the kids can't just say "because I know"

DavidWe: Would you be interested if we scheduled the next math and technology discussion to cover more about LOGO? Would you all attend?

DavidWe checks the calendar - next month

DavidWe: I'm happy to make it the topic if people are interested in knowing more

JeffC: They're having a Robotics meeting right now in the K-12 campus... perhaps you might want to coordinate with RobynN and PatriciaCh.

ShannonU: yes

RachelSD: yes

KellyBal: I'm interested in anything that will help my students

DavidWe: We could do that, Jeff

DavidWe: So, Shannon, Rachel, you would be interested in more info and examples of using LOGO?

RachelSD: yes

DavidWe: We could either do it during Jeff's K-20 math session that will be on the first Tuesday of April...

DavidWe . o O (Jeff?)

DavidWe: Or my next session is the 3rd Tuesday of April...

DavidWe checks the date

ShannonU: yes

ShannonU: sorry it took me so long to answer

BJB2 . o O (April 18 is math ed tech)

DavidWe: Thanks, Shannon

DavidWe: April 18

DavidWe thanks BJ for being quicker on the Calendar

JeffC: math group is fine to do it in... yes.

DavidWe: Okay, so...we'll do a full hour discussion on LOGO next month

BrookeM: nice

KellyBal: great

JeffC: or robotics... wherever/whenever works for people.

DavidWe: Check the Calendar ...Jeff's Math group is at 7pm on April 4

BJB2 . o O (7pm EDT)

DavidWe: yes, 7pm EDT

ShannonU: yes what time and what date

DavidWe: If that's agreeable to most, we'll plan for that now

DavidWe better get cracking then

DeborahJK: so, is it the 18th or the 4th?

SusanR: I am quite excited, David

DavidWe: 4 April 2006 @ 7pm EST

DavidWe: Good Susan

DeborahJK: k, thanks

DavidWe: Ihor will be VERY excited that other people are interested

KellyBal: ok, thanks

ShannonU: thank you

DavidWe: We'll have a LOGO-fest

DavidWe: So, again, from the math perspective...

DavidWe: There is so much of mathematics that has become much more accessible to students even before high school

DavidWe: The challenge for those of use who do math professional development is encouraging teachers (especially elementary teachers - don't mean to pick on anyone) who often don't feel very confident in their math backgrounds

DavidWe: I'm not a mathematician and math is hard for me, but part of the fun of solving puzzles is figuring out the answers - it's too easy if you know them already

DavidWe: And to challenge your students AND yourselves with math and also understanding that there are often multiple ways to solve a problem, shows them that math can be creative and not a matter of just doing a lot of problems on worksheets

DavidWe: You can build things - especially with LOGO and other software environments for math

DavidWe: And as you are all aware, building things that you can then show to your fellow students, teachers, become something the students especially are proud of

SusanR . o O (Robotics driven by Logo)

DavidWe nods to Susan

DavidWe: Yes, that is another very cool thing

ShaniB: I really enjoy math but because I am in first grade the skills are not challenging for ME

DavidWe nods

DavidWe: Sure, Shani, although I would think there are ways of coming up with ideas for how to teach young children (first graders will ask, "What's a number bigger than infinity?")

VickiGst2: but Shani...you get the first chance to show them that math can be fun....please be enthusiastic for them

DavidWe: how to teach young children TOUGH concepts - like infinity

DavidWe agrees with Vicki whole-heartedly

SusanR: You can make it interesting...grade ones love to talk about infinity and we even made mobius strips

JeffC: tell them that there are different sizes of infinities... that'll confuse them!

VickiGst2: I teach low level 9th graders. I thought it would drive me batty.

ShaniB: I love teaching them math!

DavidWe: Susan, do you want to remind people about your next Tapped In discussion?

CandiceL: from personal experience Shani has created some excellent teaching materials

ShannonU: I am glad to hear that

DavidWe: Susan leads the K-3 Resources discussion here

RachelSD: good

VickiGst2: But for many of them, I am the first teacher that would explain anything and they are so appreciative

EricaEF: growing up and still today Math is my favorite subject and not because of my teachers

CandiceL: using power point and other programs

ShannonU: math is my favorite

DavidWe wonders if everyone knows about the book, "Math Curse"

BrookeM likes Susan's sessions

ShannonU: but I had great math teachers

JeffC: show them the set of real numbers between 0 and 1 and compare them to positive integers... the fist infinity is larger.

SusanR: I lead the K t0 3+ Great Resources session...which is next Tuesday...the topic is Poetry Writing

EricaEF: But I agree with making it fun

SusanR: Poetry Writing and Tech Integration

DavidWe . o O (math + poetry == ??)

ShaniB: The students love math too...it's challenging and interesting and it applies to them

ShannonU: sounds fun, math and poetry

DavidWe: That's just my idea, I don't know what Susan has in mind

DavidWe smiles

DavidWe: Have any of you seen the children's book, "Math Curse"?

CandiceL: no

BrookeM: yes

ShaniB: I have not

ShannonU: yes a long time ago

SusanR: Math and Poetry...cross curricular integration..

ShannonU: which is a good thing

VickiGst2: I'm not sure..... I think I have seen the book

KellyBal: sounds familiar

DavidWe: http://www.txla.org/groups/tba/annotations/math_curse.html

SusanR: I have read it to my students...they love it

DavidWe: Or there

DavidWe: Everything in a student's day becomes a math problem

KellyBal: sounds fun

DavidWe: I've read it to elementary school kids who tend to howl in laughter at it

DavidWe smiles

ShaniB: thanks...I'll have to look in to that

DavidWe: So, we've got about 5 minutes, left, folks...any other questions?

ShannonU: the books sounds fun

BrookeM: have you ever read the book "A Day With No MAth"

DavidWe: We'll aim to schedule a discussion of LOGO for Jeff's math discussion on April 4

DavidWe isn't sure if he knows that one

KellyBal: ok

ShaniB: I haven't

SusanR: It's about a little girl bombarded with problems that all seem to be related to math.

DavidWe: Is it still in print, Brooke?

BrookeM: yes

ShaniB: These books seem really helpful and fun!

DavidWe nods

ShannonU: what grade did you use it for Brooke

BrookeM: 1-5

ShannonU: oh cool

BrookeM: it is about a kid who hates math

BrookeM: wakes up and wishes it went away

BrookeM: so it does

BrookeM: and causes lots of problems

BrookeM: ie being late

BrookeM: ie bad food cause it is over cooked and wrong amounts of ingredients

ShannonU: thanks for all of the helpful resources

VickiGst2: ok

VickiGst2: thanks

DavidWe: So, feel free to ask other questions, but I want to thank ALL of you for coming this afternoon/evening

DavidWe: I appreciate your interest

EricaEF: thank you

KellyBal: The resources are great -- Thank you

EricaEF smiles

CandiceL: Thanks

ShaniB: thank you

ChiahsinL: thanks

ShannonU: thank you again

DavidWe is happy to share math resources

RachelSD: thank you

ShaniB: it was very informative

DavidWe: So, Tuesday, April 4 for more about LOGO

DeborahJK: thank you

DavidWe: And Susan's K-3 resources discussion has focused on math, too, in the past

DavidWe: You all will get a transcript of the session with the URLs, we've posted

ShaniB: thank you

DavidWe . o O (after you logout)

DavidWe bows humbly

DavidWe: You're welcome

DeborahJK: just going to ask you that, thanks

BrookeM claps

ShannonU: good bye!

DavidWe: I'll hang out for a bit if there are any more questions

EricaEF waves goodbye

SusanR: I will be up in the K to 3 Resource Room if you wish to guide any newcomers up there, David

VickiGst2: of course you have to be a registered member instead of a guest to get the transcript

CandiceL: bye

DavidWe thanks Brooke for her LOGO anecdotes