

**Title of Session:** Math Resources K-20+

**Moderator:** Jeff Cooper

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Room: Math Resources

**PamelaLV:** Hi my name is Pamela, I am a full time student in the University of Texas Pan American and I am majoring in Bilingual (Spanish/English) Education.

**MariaDr:** I am founder and director of Natural Math - we do Math Clubs and different math-related events.

**SusanR** joined the room.

**JeffC:** great!

**JeffC:** Bj and Sue are also on Helpdesk here.

**JeffC:** I'm glad you made it here today, Maria.

**SusanR** waves to Maria

**JeffC:** I attended your Elluminate session last month and am interested in getting a "real" math teacher's insights into transforming the way math is taught.

**MariaDr:** How do I emote again?

**JeffC:** Too often I think that math is taught from the textbook from page one until the school year ends... with little differentiation.

**JeffC:** type a colon first, Maria, followed by words.

**VelvetS:** I would agree because my students are often lost in the inclusion classroom.

**JeffC:** indeed... the two featured sites I have for today are a link to Maria's page as well as another site I really like called "mathway"

**PamelaLV:** Yes I agree and it can be very difficult

**MariaDr** waves

**PamelaLV** waves back

**JeffC:** ok... first things first...

**SusanR**: There are more varied options in math textbooks today than ever before.

**JeffC**: if you haven't joined this group (but would like to), please click the little "i" in the green circle at the end of the "Welcome to Math Resources K-20+" box in the top frame... then click the link to "join this group."

**JeffC**: then... click the "Room View" button to return to the Welcome screen.

**JeffC**: once you've joined, you may post to Discussion... which will allow you to communicate with the other teachers in this group. the Discussion board acts as a mini-listserv... forwarding via email to the other group members.

**JeffC**: there are a number of threads on different subjects relating to math, and as you peruse the room you'll see other links, etc. ...some of which need updating!

**JeffC**: the two sites I wanted to visit today are mathway.com and Maria's page... let's start with mathway and go from there (to give more time to learn about the status of Math 2.0 with Maria).

**JeffC**: so... if you look at the Whiteboard... please click the link to Mathway at <http://www.mathway.com> ...if you click the link in chat, \*please hold down the Ctrl key or your popup blocker will log you out\*! (or accept popups from Tapped In- best).

**PamelaLV**: do we just click on the link on the right upper hand corner?

**PamelaLV**: ok lol

**MariaDr**: Looks like a friendlier Wolfram Alpha-type solver?

**JeffC**: I like mathway a lot because it does step by step problem solving on all math levels, from simple math up to calculus.

**JeffC**: you'd know more about it than me, Maria!

**VelvetS**: This seems great for my sped students.

**PamelaLV**: it seems very helpful...wish I would have had that in high school:)

**JeffC**: now... I've had math teachers tell me that they hope that their students \*never find that site\*! they're afraid that their students will simply do all their homework there... what do others think?

**MariaDr**: don't ask questions if you know answers?

**VelvetS**: There are those that would but others need the reinforcement from more than a

parent or teacher. Plus others love the technology aspect.

**JeffC:** I agree Velvet... personally I think that giving students step by step problem solving will help them grasp concepts.

**MariaDr:** You can assign stuff such as, "Have the site graph  $ax^2-b=0$  for different a and b. What do you notice?"

**PamelaLV:** I think it would actually be good if students use it to check their homework...since it might be a lot more helpful than some math teachers(no offense to anyone).

**VelvetS:** I could see myself linking this into my promethean board and using it for guided work and reinforcement.

**MariaDr:** In the best of worlds, it can push toward higher-order tasks in math (investigate, evaluate, summarize, etc)

**JeffC:** I think that what we really need are more sites like mathway, and more teachers like Maria and Velvet to come up with exciting ways to use these sites!

**PamelaLV:** I think that's a great idea Velvet

**MariaDr:** what's promethean, Velvet?

**PamelaLV:** I agree Jeff

**VelvetS:** another fancy name for a smart board but it works a little different.

**MariaDr:** thanks, I'll check it out

**JeffC:** btw... there's an excellent yahoogroup that deals with smartboards... one second and I'll get the link... one thing I've always thought that are underutilized are smartboard \*collaborations\*... why not have students in math, etc. solve problems collaboratively across the country? let students meet online and solve problems on interactive smartboards!

**PamelaLV:** glad you asked Maria. I didn't know either

**MariaDr:** Jeff, if you want to check out more sites like that, here is a link to Wolfram Alpha dealing with a linear equation  $3x+2=y$ :

<http://www89.wolframalpha.com/input/?i=3x%2B2%3Dy>

**PamelaLV:** oh that would be nice...an interactive math class around the world..sounds fun!

**VelvetS:** That would be so exciting.

**PamelaLV:** it could be students helping students which can often be very insightful!

**MariaDr:** I saw people doing it for social studies (two classes from across the world getting together virtually) - math can work, too

**VelvetS:** Yes kids love peer interaction they would be very engaged

**PamelaLV:** how neat... the power of technology :)...I love it!

**JeffC:** it's doable... I'm still looking for that yahoogroup.

**JeffC:** <http://groups.yahoo.com/group/smartteaching/>

**JeffC:** however... most people who use smartboards haven't really thought about expanding outside their own walls... I think they haven't considered the possibilities.

**JeffC:** that group deals with all things smart board related.

**VelvetS:** Especially with things like Skype you could also start within your district and teachers could work together on the same skills

**PamelaLV:** oh wow

**JeffC:** so I'd recommend joining and possibly posting about the possibility of collaborating via smartboards.

**PamelaLV:** what is Skype?

**JeffC:** of course you'll need to convince your IT people to unfilter Skype, etc. and allow collaboration.

**VelvetS:** that is so true!!!

**VelvetS:** Face to face communication over the web

**MariaDr:** Skype is (for most people) a free way to phone everywhere in the world

**JeffC:** unfortunately... I just got a phone call and have to leave for about 10-15 minutes... Maria... could I hand the floor over to you and have you talk a bit about <http://sn.im/math2.0> ?

**PamelaLV:** ooooh ok thanks I was a bit confused

**MariaDr:** Sure, Jeff

**JeffC:** great!

**PamelaLV:** take your time:)

**MariaDr:** As long as Susan and Bj do some Tapped In handholding (I am still a noob)

**JeffC:** I'm going to promote you to Moderator status here as well... don't worry about the noob thing!

**SusanR:** np

**MariaDr:** Skype is a great conferencing tool

**MariaDr:** It has a whiteboard add-on in it, as well

**PamelaLV:** oh wow

**SusanR:** here are some ideas for using Skype

**SusanR:** <http://www.teachingdegree.org/2009/06/30/50-awesome-ways-to-use-skype-in-the-classroom/>

**PamelaLV:** my professors would use the smart board for math I found that very helpful.

**SusanR:** good idea to play with it yourself ..call your family and friends

**MariaDr:** that's an awesome collection, Susan - thanks

**MariaDr:** I use Skype more than telephones - the quality is better for overseas calls especially

**PamelaLV:** oh wow how interesting

**SusanR:** At NECC Alan November recommended as the #1 free tool for the classroom.. so versatile

**MariaDr:** My favorite part about it is the integration of real-time and delayed-time features (e.g. chats are forever and you can log off and on and still see what other people said when you were offline)

**VelvetS:** I would agree but in my school system filters it and I don't foresee them allowing it.

**VelvetS:** They fear students talking to inappropriate people.

**PamelaLV:** well that's unfortunate,

**PamelaLV:** yup, that they will do...its very hard to monitor everything they do every minute

**MariaDr:** Well, let me talk about Math 2.0 interest group a bit. There is a meeting coming up tomorrow, and in general we meet on Wednesdays at 9pm EST, online. David Weksler will be hosting a Tapped In session soon.

**MariaDr:** <http://mathfuture.wikispaces.com/events> these are events and transcripts and hosts we had so far

**MariaDr:** Tomorrow is a VERY thorny topic. I will don my flame suit :) "Gifted acceleration in math"

**VelvetS:** Gifted students are often neglected as much as special needs students

**MariaDr:** Math 2.0 is like Web 2.0 for math. In the 70s and 80s, math was at the forefront of ed technology, but now it's lagging way behind. There is little or no math in social media!

**MariaDr:** Velvet, it is assumed they will be fine, somehow...

**VelvetS:** But they need to be challenged....

**BjB:** is the answer/solution for gifted 'acceleration' or depth?

**PamelaLV:** I agree Velvet

**MariaDr:** Both acceleration and depth can provide challenges "above and beyond"

**VelvetS:** I would say depth because the pacing in my school system only allows teachers to expose children to math concepts and not fully receive mastery

**MariaDr:** We have a curious situation, though: people who somehow got liberated from such constraints are now doing some wild things - projects, 7 year olds taking calculus, humanistic math, programming coolness.

**MariaDr:** The internet really provides opportunities for kids to do... whatever?

**MariaDr:** [http://www.geocities.com/SoHo/Gallery/1177/g/internet\\_dog.jpg](http://www.geocities.com/SoHo/Gallery/1177/g/internet_dog.jpg)

**JeffC:** back... but there are a number of constraints, Maria... limited access... and then... having to deal with the politics of education. how do you get teachers/parents/admins/politicians/students to "think outside the math box"?

**PamelaLV:** me too...as a student you just get the concepts but there is hardly ever enough time to fully comprehend and master...you just memorize what you will be tested on

**MariaDr:** You can't be completely free of the society you live in, but there are ways to say "no" to some more outrageous things. My question of the day is, how can internet tools help us help students "comprehend and master" (Pamela)?

**VelvetS:** Actually most "stakeholders" really just want kids to pass NCLB tests and aren't concerned with comprehension or mastery.

**PamelaLV:** well they give you other examples to help solve problems they...with internet tools you can implement Skype in classes and have students helping students while the teachers clarify certain things..it gives learning a new meaning:)

**JeffC:** exactly... which leads to boredom in the curriculum, Velvet.

**PamelaLV:** yeah like the taks here in Texas...I think its a waste of time

**SusanR:** Alan November suggests enrolling your children at Stanford University for online learning courses .. all free .. curriculum from Kindergarten all the way through

**SusanR:** Here is the url for future reference

**SusanR:** <http://epgy.stanford.edu/>

**MariaDr:** I did not know EPGY was free

**PamelaLV:** You're right Jeff...boredom for the teacher and the students

**SusanR:** oops maybe not, Maria

**MariaDr:** Oh, it's their Open Enrollment - a new thing: <http://epgy.stanford.edu/district/>

**MariaDr:** or a newly-more-open thing :-)

**MariaDr:** There are lots of online free opportunities, though - like this event now!

**JeffC:** that definitely sounds like one way to step outside the box, Susan, thanks!

**PamelaLV** laughing, your right Maria

**MariaDr:** John Rosasco, the Math 2.0 host tomorrow, will be teaching free Algebra and Geometry classes online this fall. More and more people do that.

**JeffC:** is that the Elluminate session, Maria? do you have the url?

**PamelaLV:** oh wow I didn't know that there were that many resources out there

**MariaDr:** <http://mathfuture.wikispaces.com/events>

**MariaDr:** Pamela, have you seen iTunes U stuff?

**PamelaLV:** no

**PamelaLV:** never heard of it

**MariaDr:** It's where MIT, Harvard and a lot of other places have free videos of their best courses <http://www.apple.com/education/mobile-learning/>

**JeffC:** thanks for the resources Maria!

**PamelaLV:** oh wow thanks for letting me know!:)

**PamelaLV:** I'll check that out!

**JeffC** has to scoot over to Science Resources... which starts in a few minutes. thanks all for coming... don't forget to register here (if you haven't done so already)... and feel free to post to Discussion.

**MariaDr:** This really redefines what "lectures" mean - now everybody "competes" with Ivy League if they JUST lecture. So, universities need to go beyond that. - to participation

**MariaDr:** Jeff, thanks a lot for hosting this!

**SusanR:** Do check this out as well <https://epgy.stanford.edu/courses/math/MOWA/>

**JeffC:** yw

**MariaDr** claps for Jeff and Tapped In

**PamelaLV:** ok thanks it was nice chatting with you guys...thanks again Maria!

**SusanR:** a nice overview

**PamelaLV** claps

**PamelaLV:** lol

**VelvetS:** This was a very informative session.



**MariaDr:** ty Susan - going there now

**PamelaLV:** it was

**PamelaLV** waves bye

**VelvetS** waves bye

**MariaDr** waves