Title of Session: Math Resources K-20 Moderator: David Weksler Title of File: 20070306mathk20 Date: March 6, 2007

Room: Math Resources K-20 Group

BJ: Welcome to the Tapped In community, Mel

MelR: thank you

BJ: then we do introductions, Mel...

BJ: let's start officially with introductions...

BJ: I am in south central Pennsylvania and teach remedial communication

FredK: I am a literacy tutor in SE Oklahoma

BJ: Mel, please tell us where you are located and what interested you about the discussion

EmilyW: I am in DC and I am on helpdesk here on Tapped In

MelR: I am in San Diego and am the Assistant Supt. of Secondary Education. I am interested in this discussion because we are struggling with math and math interventions in our K-12 system. Specifically, how are we getting students ready for Algebra.

BJ nods solemnly to Mel...that is a big concern across the country

FredK: Mel do you know about del.icio.us?

MeIR: What are some of the best practices you are seeing? Fred, I do not know about that. What is it?

DavidWe joined the room.

DavidWe waves

FredK: http://www.delicio.us

MelR: I will take a look at it. Is it a resource for students?

DavidWe waves to Mel

BJ waves to David. Mel, David is our resident Math wiz

FredK waves to David

MelR: Hi David

DavidWe: Hi, Mel. BJ just told me that you are interested in K-12 math

BJ . o O (and has come to our rescue. He's about to tell you all about Math Forum)

MelR: Wow, you are all fast

DavidWe: We spent a year working in San Diego (Morse High School) about 10 years ago

MelR: I am familiar with the school

DavidWe: Do you know about the Math Forum - <u>www.mathforum.org</u> - big web site for math education, K-20?

DavidWe apologizes for interrupting

EmilyW: http://del.icio.us/tag/math

MeIR: I do not. I should visit that website. We have a council working on math concerns in our district and I would love to give them some resources.

DavidWe: I am not connected with it anymore, but it is a great resource for math - students/teachers/administrators, etc.

MelR: Thanks. I'll take a look.

EmilyW: http://del.icio.us/tag/algebra

DavidWe: I also lead another math discussion (math education and technology) that is typically the 3rd Tuesday of the month

BJ: we've also seen a major trend, if you can call it that, Mel....

BJ: in spite of NCLB...

DavidWe: I'll be doing it from the NCTM meeting in Atlanta in 2 weeks

BJ: in problem based curriculum

MelR: I will try to visit your discussion, David.

BJ: the students take more ownership for their learning and are more actively engaged in the lessons

DavidWe: I remember when the "math wars" was raging in SDUSD

MeIR: I am interested in the problem based curriculum. However, I won't be in Atlanta

MelR: What were the "math wars" about?

DavidWe: If you want to chat further, Mel, here's my email address: wex@pobox.com

MelR: Sounds good.

BJ. o O (new math vs old math?)

DavidWe: Bright, educated folks (often in La Jolla) were very critical of "new" curricula

MelR: Talk to me about the difference?

MelR: Drill and Fill VS conceptual? Is that the difference?

DavidWe: Parents were actually given space in schools (this is 1996/97/98) to teach a more traditional style of math curriculum

DavidWe: Yes, in some sense

MelR: So, what have we learned from around the country about what makes sense for teaching mathematics?

DavidWe: The NCTM standards (starting in 1989) generated a variety of new curricula (elementary, middle school, high school) which varied in how orthodox they were to how "new wave" they were

DavidWe: People get very excited about it when it doesn't look like what they had in school - especially if the students have trouble with it

DavidWe: We need better (and more) math and science teachers in this country, in general

MeIR: I am very familiar with the standards and have enjoyed the book "Adding it Up". Are you familiar with it?

DavidWe thinks he's seen "Adding It Up" but can't quote from it

MelR: I agree with you. But ones that can teach well are hard to find.

DavidWe: yes

DavidWe: but that, in some sense, is another challenge

MelR: You are correct.

DavidWe: There has been no end to the back and forth about what's "right" or "better"

DavidWe: Students should know the times tables in my humble opinion - it's not an argument - but if that is ALL that math is, then it is not very interesting and students won't want to take more math

MelR: As I think about the skills and habits of mind our students will need to function in our world, they will need the curriculum delivered away from the traditional sense.

MelR: There are some things that are non-negotiable. I agree.

DavidWe smiles

DavidWe: There increasing role of technology (software - especially things like the Geometer's Sketchpad) make things possible that you just couldn't do before

MelR: We are just starting to get into, as a system, the whole technology in our curriculum.

DavidWe: Teachers need time to learn HOW to use the software/how to teach with the software and then the opportunity to teach with these tools

DavidWe: You guys had (may still have) some of the best technology support folks- SD COE

MeIR: We do have good support. Our district has great support also.

MelR: Part of the challenge is not only how but how does it blend seamlessly into our instruction.

DavidWe: Feel free to email me about specific items - I'd be happy to ask questions/gather materials at NCTM on topics of interest to you

DavidWe: Administrative leadership on this stuff IS KEY!!!

DavidWe: finding time for teachers to learn and explore as well - I know that is hard to do

MeIR: You are right, but we also have a cadre of teachers that believe that their way of doing it has provided success for our students.

DavidWe: Do you think they are correct?

MelR: In some ways, some of their practices are valid. We do not have enough engagement and relevancy in our classes.

DavidWe: But that would be something one could measure, I would say

DavidWe: I think it is a national problem across the US

MelR: It is. I'd love to be ahead of it...for our kids.

DavidWe smiles

MeIR: I'd love to pick your expertise again...are there best practices that you've seen? I see the problem based learning.

DavidWe: Well, again, happy to help you in any ways that I can

DavidWe: Yes, there are some wonderful examples of integrated curriculum (math/science/technology)

BJ: Mel, you also might want to look at the PBC archived transcripts at <u>www.tappedin.org/transcripts</u>

DavidWe: I think there are lots of examples of Problem Based Curricula - that can take a real change in teaching philosophy, etc.

MeIR: I love the notion of integrated curriculum. Thanks, **BJ**, I'll take a look at those and invite teachers in my district to do so also.

DavidWe: People are doing it, Mel. Getting your teachers to change needs to be seen as a process

David We . o O (moving them "gently" along)

MelR: One of the challenges is that we are a high performing district and sometimes that need is not as urgent.

DavidWe: okay

MelR: We will continue to work on this.

DavidWe smiles

DavidWe: God luck

MeIR: I am needing to sign off to go to a meeting. I thank you all for your thoughts. I'll try to make it to another meeting. Thanks.

DavidWe: Good luck

MelR left the room (signed off).

BJ: Thanks for bailing us out, David

DavidWe: You're welcome, BJ

DavidWe: Don't know if that was helpful to her, but nice to see administrators logging in

FredK: Reason I mentioned Delicious is that I was challenged with someone asking for help with calculus

DavidWe smiles

DavidWe: What did you find, Fred?

FredK: There are lots of universities putting out good info on calculus

DavidWe: yes

DavidWe: I think there is typically not a lack of resources

DavidWe: Typically, there is inertia for many teachers looking for new ways of doing things

FredK: This HS student was taking an online class and had only 4 questions to answer for his grade

FredK: I told him I could help with resources, but I would have to brush up on my calculus before I could help him directly

DavidWe . o O (practice)

FredK: That's when I showed him what he could do with Delicious and I put in the Math Forum too

DavidWe: Thanks

FredK: I do enjoy the tools and the discussion that comes through

DavidWe smiles

DavidWe: That's good