Title of Session: Math Resources K-20 Moderator: Jeff Cooper Title of File: 20070501math Date: May 1, 2007

Room: Math Resources Group

BJB2: Welcome to today's Math Resources discussion

BJB2: we usually start all discussions with introductions

LeticiaB: I just finished student teaching. I am interviewing for Math 4-8 positions

BJB2: please tell us where you are located and what you teach or hope to teach

MaureenB: Hi Maureen Beyrer 4th grade teacher in Putnam County, NY

LeticiaB: University of Houston

DavidWe: I'm David Weksler. I lead a math education and technology discussion (later this month). I'm in New Jersey, near New York City

AshleyE: Just finished student teaching in Sugar Land. I will be a special ed teacher in the fall

DavidWe: Congratulations, Ashley

AshleyE: My specialty is Autistic students

DavidWe . o O (that's challenging)

AshleyE: I have 3 years of experience and love it

AshleyE: It's very rewarding

BJB2 wonders if David is going to get us started today?

DavidWe: Okay

DavidWe: Welcome folks

DavidWe: Jeff Cooper should join us soon

DavidWe: I was just at a fascinating conference over the weekend on math education and social justice

DavidWe: The keynote speaker was the former civil rights leader, Bob Moses

AshleyE: sounds interesting

DavidWe: Some of you may have heard of him, but in the past 20 years he has become a proponent of teaching algebra to middle school kids in inner cities, especially

DavidWe: The Algebra Project has as its main tenet that math is a civil right

DavidWe: Since it allows you to go on in science, technology, other fields, especially

DavidWe: Not sure if that is of interest to any of you, but here's the web site for the Algebra Project:

DavidWe: http://www.algebra.org/index.html

DavidWe gives the microphone to Jeff

JeffC: I would like to know what the needs of this group are in terms of math support... but we can also discuss the Algebra Project and spend some time on that site as well.

AshleyE: Well I will be teaching autistic students in the fall. What ideas do you have?

AshleyE: They are non-verbal

AshleyE: Pretty low functioning

JeffC nods to Ashley... so we're looking at a combination of SPED and Math here.

AshleyE: Well they need to be taught everything, so yes

MaureenB . o O (wonders the ages of your students)

AshleyE: I know manipulatives and what not, but I want something more

AshleyE: kinder through 2nd

LeticiaB: During student-teaching I was having a little trouble getting the content across to the esl and inclusion students

JeffC: Here's a book you might want to purchase, Ashley: http://www.npr.org/templates/story/story.php?storyId=6860157

LeticiaB: enough for understanding of all students... that is sort-of difficult

JeffC: And here are a couple of websites to explore as well: http://www.specialeducationmath.com/

AshleyE: Ooooohh thanks. That's great

JeffC: <u>http://www.specialeducationmath.com/teaching-autistic-</u> child.htm?tkn=dMHXtJXmAAEKEwi13vjljO6LAhUTAoYKHW5v0jMYASANMNfvo AM4DQ

JeffC: And here's a good one from Education World: <u>http://www.education-world.com/a_curr/curr139.shtml</u>

JeffC: and another: <u>http://www.education-world.com/a_curr/curr139.shtml</u>

AshleyE: Thanks a lot

BJB2: great resources, Jeff.

JeffC: Here's an article on math disabilities: <u>http://www.ldonline.org/article/5896</u>

AshleyE: I always need things like this

JeffC: You've got three things happening... SPED (autism), Math, and K-3.

BJB2: I would think music and math would be an especially good match for your group, Ashley

MaureenB . o O (as an experienced teacher there are some great things there)

AshleyE: I agree BJ

JeffC: I'd recommend joining all three groups here

AshleyE: Ok

JeffC: And Bj's recommendation is also great... using math and music will definitely reach some students you won't reach otherwise.

AshleyE: I agree

AshleyE: Thanks

JeffC: OK... I can get you more resources Ashley... but let's hear what others are looking for at the moment... and of course we can also discuss the Algebra Project when David gets back.

BJB2 wonders if Rik or Leticia has questions? concerns?

LeticiaB: Does anyone know any GREAT places to get hands on exploratory lessons

AshleyE: Well Leticia said something about having problems with her bilingual class earlier right

JeffC: hmm... exploratory? in what way?

LeticiaB: ESL, yes!

MaureenB: here is a site from Apple with music and math <u>http://edcommunity.apple.com/ali/story.php?itemID=10668&version=1543&pageID=383</u> <u>3</u>

JeffC: you're talking about using manipulatives Leticia?

LeticiaB: most of the kids in my area say that the classes are too boring, and they ARE

LeticiaB: if that is what it takes!

AshleyE: Most kids like things that are hands on

DavidWe agrees

AshleyE: what type of lessons are you trying to teach?

LeticiaB: I don't want to be a boring teacher

AshleyE: you don't have to

JeffC: Do you have online access for your students, Leticia? If so... here are quite a few sites that deal with math manipulatives: <u>http://www.mcps.k12.md.us/departments/hiat/websites/math.shtm</u>

LeticiaB: they may visit a lab once a week

JeffC: National Library of Virtual Manipulatives: <u>http://nlvm.usu.edu/en/nav/vlibrary.html</u>

AshleyE: We did a great lesson using fabric when dealing with shapes and dimensions

JeffC: That site is broken down by grade level... and you can even teach the younger kids algebra there.

AshleyE: It was hands on

JeffC: Take a look at Pre-K through 2nd Algebra online games: <u>http://nlvm.usu.edu/en/nav/category_g_1_t_2.html</u>

LeticiaB: I introduced that to my supervising teacher, but much of it was difficult

AshleyE: the fabric?

AshleyE: or something else

LeticiaB: Do any of you know of great lessons on perimeter, area, and scale factor?

AshleyE: Do the fabric. That is precisely what I'm talking about...

JeffC: for what grade Leticia?

LeticiaB: I was told the room/house floor plan was good! 5th through 7th

AshleyE: Take pieces of fabric and the students can measure with a ruler and make shapes

AshleyE: to get the perimeter and area

JeffC: online or off?

AshleyE: off

LeticiaB: off? technology resources are very low here

LeticiaB frowns

JeffC: OK... here's a general site that you can create worksheets for math with: <u>http://edhelper.com/math_grade6.htm</u>

LeticiaB: thank you!

JeffC: unfortunately... edhelper costs \$20 a year.

LeticiaB: is the \$20 worth it? do any of you use collaborative groups

JeffC: Here's a free site to create worksheets Leticia <u>http://www.atozteacherstuff.com/Printables/Math_Worksheets/Area___Perimeter/index.s</u> <u>html</u>

LeticiaB: if so, what type of individual roles do you have in each group etc.

JeffC: Well... "worth it" is a relative term! I'd say... if you have \$20 to spend, then go for it... otherwise... look for the free stuff!

LeticiaB: thanks Jeff

JeffC: A to Z Teacher Stuff is free.

SusanR: <u>www.mathfactcafe.com</u> is still free I believe

AshleyE: What about a perimeter project of the school?

DavidWe: Do you know about "Ask Dr. Math" at the Math Forum - www.mathforum.org - Leticia?

LeticiaB: what is on mathfactcafe?

JeffC: Just make sure that you have Adobe Reader... A to Z uses .pdf files.

SusanR: <u>http://www.mathfactcafe.com/</u> ...is a worksheet generator

LeticiaB: cool ok

JeffC: Here is a Webquest that deals with perimeters of houses, etc.: http://webquest.sdsu.edu/matrix/6-8-Mat.htm

JeffC: Getting kids to do their own home, as well as the school's, etc. might be interesting.

LeticiaB: ooh too cool, I will need that one too

AshleyE: The house could be homework, and the school could be collaborative work between students

LeticiaB: Great activity

AshleyE: See that's not boring

JeffC: Here's another portal site for finding perimeters, etc. ... although based in North Carolina, I'm sure that you could adapt the lesson regardless of what state you're in: http://www.learnnc.org/search?guided=1.0&phrase=perimeter

AshleyE: These are all great sites you are giving us

JeffC: OK... we have 20 minutes left. Rik and Maureen... anything in particular we can help you with today? I'm happy to go along with what we've been doing, but don't want to leave anyone out.

JeffC: Thanks Ashley

LeticiaB: I know but I am trying to STOCK up on good lessons and activities before I start in the fall. I want to do better since most students think Math is boring at the school I want to teach at.

JeffC: Join this group, Leticia! That will make 3 math groups for you here. Then you may post to Discussion, etc.

LeticiaB: Ok!

MaureenB . o O (never feel left out always walk away with something)

KarenPr joined the room.

JeffC: Hi Karen

LeticiaB: great!

JeffC: We've been finding sites and resources based on individual needs... anything in particular you're looking for today?

KarenPr: algebra

JeffC: what grade? and... do your students have online access or do you want offline materials?

KarenPr: 8

JeffC: For starters, take a look at David's resource, the Algebra Project.

KarenPr: we could go online, but I have never tried it

JeffC: http://www.algebra.org/

JeffC: I'd recommend it... I'll paste up some sites for online algebra activities for you.

KarenPr: ok

JeffC: Here are some others... this one is from math.com:

JeffC: http://www.math.com/homeworkhelp/Algebra.html

KarenPr: Thanks

JeffC: also check out: http://www.algebra.com/

JeffC: also: <u>http://www.algebrahelp.com/</u>

JeffC: each one takes slightly different approaches... hopefully we'll find ones that will work for different students.

JeffC: here are some algebra webquests: http://www.nku.edu/~education/technology/edu659/algstudentwebquests.html

JeffC: more algebra webquests:

http://www.brookscole.com/math_d/special_features/ext/internet_activities/wq_algebra/i ndex.htm

LeticiaB: Do any of you teach ESL students? I had difficulty teaching these students problem-solving. They were bright, they just didn't understand some words and phrases?

AshleyE: Most of mine are non-verbal, sorry

JeffC: here are some pre-algebra games: <u>http://www.brookscole.com/math_d/special_features/ext/internet_activities/wq_algebra/i</u>ndex.htm

DavidWe: We know people who teach ESL, Leticia, but usually older students

DavidWe: They may have some resources for you

DavidWe . o O (<u>www.webheads.info</u>)

JeffC: and algebra manipulatives for grades 6-8: <u>http://www.brookscole.com/math_d/special_features/ext/internet_activities/wq_algebra/index.htm</u>

LeticiaB: ok, they would see things like West Mount Houston Highway 249, then assume this number was relevant in solving the problem and perform some operation using "249".... they did things like that! that was so frustrating... because It isn't their fault they are soo bright

LeticiaB frowns

JeffC: one more algebra game (and that's enough urls for now!):

JeffC: http://www.active-maths.co.uk/algebra/games/index.html

EmilyW: wow, I never thought about that Leticia with esl students

JeffC: manipulatives are particularly useful for esl students.

AshleyE: Maybe going over questions first then finding what numbers they should use would be helpful for them

AshleyE: if it's communication

LeticiaB: ok.. I try not to shelter them a bunch because they have to take the REGULAR TAKS test (state test)

JeffC: our time is about up (unfortunately)

JeffC: Science Resources starts in 2 minutes.

AshleyE: Thanks for all of your help today

LeticiaB: Thank you SO SO SO much

KarenPr: Thanks Jeff

JeffC: Thanks all for coming!