**Title of Session:** Math Transformers

**Moderator:** Patricia Chen

**Title of File:** 20071009mathtransformers

**Date:** October 9, 2007

Room: Math Transformers

**BJB2**: Welcome to this month's Math Transformers (I love the name!)

**BJB2**: We usually start all Tapped In discussions with introductions

**BJB2**: Hi, Patrick! glad you could make it

PatriciaCh: hello All.... I am Pat ... I teach 7th grade math in Florida

**BJB2**: please tell Pat where you are located and what you teach...and perhaps what brings you to this discussion

**BJB2**: Patrick, a reminder to go to Actions in the top right of the chat and click on detach

PatrickRC: Hey. I am from Michigan. I will probably teach history or physics.

**TaraP**: Hi - I'm Tara - I teach 1st grade in PA - I know this is for middle school, but I am interested in how to differentiate math instruction and what is needed for my young ones

**TaraP**: I'm also studying to be an administrator and need to know more about middle school

PatriciaCh: Differentiated Instructions is for all grade levels and subject areas

**PatrickRC**: I came to this discussion because I haven't been on here in a while and wanted to see different ways discussions can take place.

**PatriciaCh**: this is the place to come

**PatriciaCh**: It will help if someone has a question

**PatriciaCh**: Tara ....how do you think you can use "football" to help you in your first grade class

**TaraP**: I can use it when working with the 100

**TaraP**: 100's chart - we can find the numbers and discuss what they mean - place value

**PatriciaCh**: or even with adding single digit numbers ....

**PatriciaCh**: or concepts of how things goes together

**TaraP**: it can also be great to estimate - scores of next week's game

PatriciaCh: yes ... you are starting to get the picture

**TaraP**: older grades - multiples of 7

PatriciaCh: I use the concept to teach graphs ..mean median mode and range'

**PatriciaCh**: but it doesn't have to be that only

**PatriciaCh**: also... you can use it to teach integers

PatriciaCh: yards gain...yards loss

PatriciaCh: scores and stats are in Monday morning paper ... you can take a small piece

of the game .... and teach a lesson

**BJB2** wonders if Patrick sees any physics connections?

**TaraP**: how would you work with children with IEP's

**PatriciaCh**: for history and geography .... how about where the team is located???

PatrickRC: I think for world history, it would be great for like how the team and the

sport itself originated.

PatriciaCh: yes ...

**FredRe** joined the room.

**BJB2** welcome, Fred

FredRe smiles

PatriciaCh: please tell us about yourself

**FredRe**: High School Math teacher - fairly new (so hopelessly positive)

PatriciaCh: where do you teach

FredRe: New Jersey - US

**TaraP**: stay positive! that's what kids need these days!

FredRe: Actually it helped me a thousand years ago too...

**PatriciaCh**: about the IEP's.... you can use the same technique to help these students

**BJB2** wonders if Fred is exaggerating slightly

**TaraP**: how? would they use manipulatives? smaller numbers?

**PatrickRC**: If you don't mind explaining, what exactly are IEP's? I've heard some about them, but haven't done the research vet.

**TaraP**: Individualized Educational Plans - for children in special education

**PatriciaCh**: what they use and do is up to you as the classroom teacher

**FredRe**: Actually we have students, not in special ed, with various learning disabilities w/ IEPs

**TaraP**: so - what ever would work for the student individually?

**PatriciaCh**: the idea behind differentiated instructions ...is to use different techniques or strategies to assist the students

PatriciaCh: it depends on your class size

**PatriciaCh**: if you have a small class .... you can group the students or give work on an individual basis

**BJB2** . o O ( and whether you have aides )

**PatriciaCh**: that is true too ...if you have paras in your room ...that will be ideal

**PatriciaCh**: grouping is good ...

**TaraP**: understand now

**PatriciaCh**: the work you give ...is by level...

**PatriciaCh**: of course .... for older kids ....give them an option to pick the levels ... and encourage them to strive for the higher level ..

**PatriciaCh**: if you have worksheets .... you can have four levels of mastery

**TaraP**: even though I am in 1st - I can also adapt the wksts. to their level - challenge, grade level, basic, right?

PatriciaCh: yes ...

**TaraP**: I have a question?

**PatriciaCh**: it is more work ....but worth it ... and some subject areas are more conducive to this sort of thing

PatriciaCh: yes

**TaraP**: I use the Saxon math program - it is all scripted. - how can I differentiate with this program

**PatriciaCh**: does you admin require to stay with the script?

TaraP: yes

**TaraP**: but I can tell that some children are higher, and some need more help - what could I do

**FredRe**: any way to let those getting it help the others?

**PatriciaCh**: do you have paras in the classroom

**TaraP**: unfortunately - no

PatriciaCh: and how many students do you have

TaraP: 20

**PatriciaCh**: are you able to photocopy worksheets readily

TaraP: yes

**PatriciaCh**: if you can ....teach the concepts...then group the kids to work ...two's are good ... a higher with a medium level student

**PatriciaCh**: choose the lower ones you want to give the extra help ... then let them work and you can work with a few of the grouped kids

**PatriciaCh**: so that you know the other kids understand as well.....

**TaraP**: never thought of that. when we go to do the follow up wkst - I can group them.

**PatriciaCh**: for the lower level kids ... you may have to create different worksheets ...then scaffold them to the on grade level work

**PatriciaCh**: kids love to help each other

**TaraP**: yes they do! I had to teach them to help not do it for someone else!:)

PatriciaCh: yes ... that is the hard part....

**PatriciaCh**: another thing is ....after the students finish the worksheets..let one of the kids ...come to the board and explain

PatriciaCh: kids love to do that ...even in middle school ...

**TaraP**: I like that idea - instead of me - let them do it - so I know they understand the concept

**PatriciaCh**: when you use a different approach to teach .... the kids will learn

**PatriciaCh**: and they love to participate .... and "show off"

**PatrickRC**: I'm in an education class right now, and that is what she expects us to do for class.

**TaraP**: I am definitely going to try that one tomorrow!

**PatriciaCh**: as a math teacher .... depending on what the content area is ... I always remind the kids that there are more than one way to solve problems

**PatrickRC**: She split our class into several different groups and we each teach a segment of the class. - it is quite effective.

PatriciaCh: my students .. often ask me if they can come to the board and explain ....

**PatriciaCh**: it is fun listening to them and the non-achievers will do the work ...so they can come to the board too

**PatriciaCh**: that is jig-sawing ....

**FredRe**: meaning students changing roles?

**PatriciaCh**: it is hard to do with the younger group ...but effective in high school ...with middle school ...it depends on the class ...maturity is the issue

**TaraP**: I believe it can work with my children. it's like having them repeat directions. repeating steps how they solved a problem

PatriciaCh: no .... students read...different parts of the assignment .... and teach it to each

other

**PatriciaCh**: as Tara said ...it will work for her students ...like repeating directions

**PatriciaCh**: but the true way is ....

**PatriciaCh**: you have a chapter to read ...each student takes a section ...read ... and write a summary and present to their peers ...so everyone doesn't have to read the chapter

**PatriciaCh**: this is an old practice in education ...

PatriciaCh: you have been quiet

**TaraP**: I remember doing this.... it works well with reading

PatriciaCh: yes... it does ...

**PatriciaCh**: it is harder in math :(

PatriciaCh: Fred... what grade do you teach

FredRe: 9th grade who failed the GEPA & 11-12th Trig/Alg3

**PatriciaCh**: what is the GEPA

**FredRe**: The 8th grade assessment standard test in NJ (sorry) :(

**PatriciaCh**: how can I help you ...to help them

**FredRe**: My biggest issue (for all) is completing Homework...

**PatriciaCh**: the age old problem.....

**PatriciaCh**: how long are your class periods

FredRe: 42 minutes

PatriciaCh: how many problems do you give them

**FredRe**: Depends on the class (usually for the 9th 10-20 various types, and 10-25 for

Trig

**PatriciaCh**: I have the same ...issues as well

**PatriciaCh**: for my really low kids ... that is your 9th graders

**FredRe**: Most pick up the concepts as they do them. But then don't put it into long term memory...

**PatriciaCh**: I give about 10- 12..... I teach ... then I start on the homework in class

**PatriciaCh**: I do a lot of repetitive work...also I flex out of the book

**FredRe**: But if they are doing in class - isn't that reinforcing the short term memory?

**PatriciaCh**: yes ....and you assign it again the next day ... about 2 or 3 as warm ups before instructions

**BJB2** . o O ( what about jeopardy type games to reinforce lessons? )

**PatriciaCh**: the kids love that too .... but you have to have the games made up before hand ... that is what I am working on this year

FredRe: Yes I have a "Do Now" which usually is 2-3 review questions from yesterday.

**PatriciaCh**: if I don't start the homework ...grab what I can ... the kids will fail my class

**FredRe**: How many jeopardy questions BJ?

PatriciaCh: you can have as many as you what

**BJB2**: as many as you need...let me show you some examples

**PatriciaCh**: I have 30 questions

**PatriciaCh**: in my game that is

**BJB2**: http://mathbits.com/MathBits/PPT/powerpoint.htm

**BJB2**: http://www.elainefitzgerald.com/jeopardy.htm

**BJB2**: do a google search for math jeopardy games ppt

**BJB2**: the last url has a template

**FredRe**: I've seen a few, but for most high school problems, that would take a nice chunk of the period...

**PatriciaCh**: I use a template and create my own

**PatriciaCh**: it is a good way to review before a test

**BJB2**: great way to review before a test, Fred

**PatriciaCh**: great minds think alike

**FredRe**: Yes, we often play various "team games" before a test.

**PatriciaCh**: I am creating mine ... to parallel the text book

**FredRe**: Jeopardy would work as one option

**FredRe**: so it becomes an ongoing activity...

PatriciaCh: when I allow the kids to do homework in class...it gets done ....

**PatriciaCh**: otherwise ...it doesn't come in

**PatriciaCh**: my thought is ....since they do the work ...if it is repeated enough times ... they have to remember something

**PatriciaCh**: it is not like working with the higher level kids

**PatriciaCh**: also ...kids can remember the concepts ...if they think it was fun ...

**FredRe**: Yes...I try to support that with in-class worksheets, doing problems individually and volunteering....as I keep scaffolding making them more complex...

**PatriciaCh**: and it is visual

**PatriciaCh**: it is hard to motivate the kids .....they know they fail the test .... they do have self-esteem problems .

PatrickRC waves

**PatriciaCh**: I teach a concept ...but use different ways to reinforce the concepts and assess

**PatrickRC**: thanks - time for me to go. bye

**PatriciaCh**: ok good bye

**BJB2** waves bye to Patrick

**FredRe**: Yea, I'm going to try a "Rap" for the 9th graders to remember the negative addition rules.

**TaraP**: thanks! This was very informative for me and helpful! I am going to recommend

Tapped In to my teacher friends! it;s a great outlet!

PatriciaCh: I love projects .....

**TaraP**: I have to get going! again! THANKS!

**FredRe**: It kind of worked for Slope..

**FredRe**: What kind of projects?

**BJB2** likes the rap idea

**PatriciaCh**: good bye .... come back and tell how your class is doing

**TaraP**: definitely!

**BJB2**: our time is almost up, Pat...

**PatriciaCh**: rap ...songs .... to remember concepts

PatriciaCh: yes ... time flies when we are having fun

**BJB2**: Next Math Transformers is November 13

**FredRe**: With the key points repeated, repeated...

**PatriciaCh**: Fred... have the kids write the rap ... or jingle

**PatriciaCh**: do you remember the fraction one?

PatriciaCh: dividing fraction is easy as pie

**PatriciaCh**: let the kids take ownership of the learning

**BJB2** heads to the K-3 Resources discussion. The topic is Math and Tech Integration

**BJB2**: Thanks, Pat. Great discussion today

**FredRe**: Should they all come up with a rap on the same topic, or on a variety of recent topics?

topics:

**PatriciaCh**: well our time is up .

PatriciaCh: try a variety

**FredRe**: OK, thanks for the discussion...

PatriciaCh: but for starters

**PatriciaCh**: do the same one for everyone

**BJB2**: can we talk about raps and rhyme next time?

PatriciaCh: model

PatriciaCh: yes

BJB2: cool

FredRe: good!

PatriciaCh: I can put that on the home page as well

PatriciaCh: thank goodness you all won't hear me sing:)

BJB2 laughs...gotta jet

PatriciaCh: ok ..good night everyone

FredRe ;)

FredRe: Evening!