

**Title of Session:** Math and Technology

**Moderator:** David Weksler

**Title of File:** 20071218mathedtech

**Date:** December 18, 2007

Room: Math Ed Tech Group

**DavidW:** We'll begin in just a minute - would everyone please introduce themselves, where you are, what you teach, what you are interested in?

**BJB2:** . o O ( and a reminder to go to Actions and click on detach )

**DavidW:** I'm David Weksler. I'm in New Jersey, near New York City and I help teachers learn more about math and technology

**BJB2:** I teach remedial communication and am located in Pennsylvania

**SherylM:** I am a teacher, content provider, and parent. I live in Kansas. I took a look at Ihor's link at CLIME blog; cool pic and info;)

**IhorC:** I'm Ihor and just woke up from a nap

**BJB2:** then you should be well rested, Ihor!

**DavidW** runs out to get Ihor a Venti cappuccino

**DavidW:** Ihor Charischak DOES have a pretty cool web page - I was thinking he might like to share some of the things he has been working on recently

**DavidW:** Ihor, since Sheryl asked, do you want to say a few things about CIESE and CLIME?

**SherylM:** . o O ( very cool idea )

**IhorC:** which one? :-)

**DavidW:** If you want to talk about the database of projects you've been working on...otherwise, your choice

**IhorC:** I just "retired" from CIESE that's why I'm able to take a nap.....

**BJB2:** so that's what I have to look forward to in retirement...NAPs!?

**DavidW** smiles

**SherylM** smiles

**IhorC**: CIESE is the Center for Innovation in Science and Engineering education at Stevens Tech in Hoboken NJ

**IhorC**: I was the mathematics project manager there from 1990 through last September.

**SusanR**: what's new at CIESE

**IhorC**: Before I left we finished a database of lessons and activities that i was using over the past 15 years.....

**IhorC**: <http://www.ciese.org/math/database>

**IhorC**: if you click on all activities you will see a list of 75 of them

**IhorC**: one of my favorite videos tops the list titled  $13 \times 7 = 28$

**DavidW** . o O ( Abbot and Costello? )

**IhorC**: if you have never seen Abbot and Costello teach math watch the video!!!

**IhorC**: I use this video to teach students about place value!

**IhorC**: I just realized there are two other parts to the video

**SherylM**: very cool; looking at 7th grade data analysis;) estimating height, etc

**IhorC**: The entire video is at <http://www.ciese.org/ciesemath/A&C.mov>

**IhorC**: Another favorite of mine is the darts activity.

**SherylM**: I see you can click on the grade to see all activities in that grade; very well organized

**IhorC**: <http://ciese.org/math/activities/fractiondarts/fractiondarts.html>

**SusanR** looks

**DavidW**: My sense is that a lot of these activities may be recommended for middle school grades but might easily be used in elementary or even high school classes

**IhorC**: yes.

**IhorC**: The database needs a lot of polishing as I just discovered from the first link I clicked.

**DavidW** smiles

**SherylM** . o O ( I think it is great )

**SusanR**: love it..math fractions are so tedious to teach

**BJB2** . o O ( coming out of retirement, Ihor? )

**IhorC**: I'm continuing to update them as part of my work at DMC press.

**IhorC**: Retirement? What's that?

**BJB2** grins...when you get to take naps!

**DavidW**: Many of the activities are web-based but some of them will require having specific software (Geometer's Sketchpad, for example)

**IhorC**: DMC press stands for Dynamic Math Classroom press and is located at <http://dmcpres.org>

**IhorC**: I'm working on it in my spare time (between naps)

**BJB2** nods solemnly

**IhorC**: I'm learning to use iWeb in the process.

**DavidW**: One of our concerns that was heightened at the most recent NCTM meeting was a diminishing presence of technology-based activities and presentations

**SusanR**: I should learn iweb as well..put it on my list of many things to learn

**IhorC**: that's one of the fun parts of my new "job" I get to learn new stuff..

**IhorC**: David and I are trying to help with technology at the NCTM math conferences

**IhorC**: CL

**DavidW**: It's difficult if teachers don't have an opportunity to have some hands-on experience with new software (or new ideas using existing software)

**IhorC**: My wife just delivered me some coffee so I hope improves my typing

**SherylM**: There is new software on the web, so many teachers can access them

**DavidW**: NCTM decided this year to not set up a computer lab for just this purpose and

we're looking for ways to make it easier, cheaper for them to still provide for some hands-on presentations at future meetings

**DavidW:** True, Sheryl, but it often helps to have some guided examples for many people to see how you would use those tools in your own classroom

**DavidW:** What's beginning to get some people excited is game-based math learning environments

**SusanR:** any examples David

**SherylM:** Squeak?

**DavidW:** I think the appeal is that students are so comfortable with video games - use that format and embed some curriculum-related concepts in the game itself

**SherylM:** I know it isn't a game; but it has powerful potentiality

**DavidW:** Squeak (like Logo) is more of a learning/building environment

**DavidW:** have any of you seen Tabula Digita?

**IhorC:** Squeak is today's version of what Logo was in the 80s...

**SherylM** agrees

**IhorC:** an opportunity for students to build their own games and share them.

**SherylM:** then there is croquet to use to develop a universe for the projects

**DavidW:** These are really "immersive" games - you are in an environment with a problem to solve - the problems just are math-related in this case

**IhorC:** This is more consistent with Web 2.0

**DavidW:** Here's the web site:

**DavidW:** <http://www.dimensionm.com/>

**SusanR:** similar to the tv series Numbers

**DavidW:** Yes

**DavidW:** You may know there a few teachers who develop lessons based on the plots of each episode of "Numb3rs"

**DavidW:** Here's that web page:

**DavidW:** <http://www.weallusematheveryday.com/tools/waumed/home.htm>

JeffC: pricey, David... \$15 per user license with a 10 license minimum.

**DavidW:** Yes, I think it is, Jeff -

**IhorC:** there are lots of good stuff that is free that resulted from funded projects.

**DavidW:** Did you want to mention a few things about CLIME, Ihor?

**SusanR:** you might be interested in a radio series that is quite popular here..called "Math Radio"

**SusanR:** <http://www.cbc.ca/allinaday/mathradio.html>

**DavidW:** That looks quite cool, Susan

**IhorC:** The Seeing Math project has some excellent examples.....

**IhorC:** [http://seeingmath.concord.org/sm\\_elementary\\_dynamic.html](http://seeingmath.concord.org/sm_elementary_dynamic.html)

**SherylM:** . o O ( many cool shows there mmm shades of green )

**IhorC:** The broken Calculator activity is one of the best.

**DavidW** agrees

**IhorC:** You can see my broken calculator lesson at

**IhorC:** <http://ciese.org/math/db/broken2.html>

**IhorC:** The program was originally written by Judah Schwartz in the 1980s for Sunburst.

**SherylM:** You know I was just thinking of MECC and all their wonderful math and science programs that have been abandoned and could be reworked

**SusanR:** for the web

**IhorC:** There is a thorough discussion of broken calculator in an On-math article at...

**IhorC:** [https://my.nctm.org/eresources/view\\_article.asp?article\\_id=7457&page=1](https://my.nctm.org/eresources/view_article.asp?article_id=7457&page=1)

**SherylM:** . o O ( yes that would be cool )

**IhorC:** On-Math is wonderful math tech on line journal put out by NCTM

**DavidW:** Sheryl, do you know about the applets collected at the Shodor Foundation?

**IhorC:** woops - I forgot you need NCTM membership to get On-Math

**DavidW:** There are some excellent ones that are similar to some of the MECC programs there

**SherylM:** I have been to Shodor, but I don't remember any at the moment

**DavidW:** <http://www.shodor.org/interactivate/activities/>

**DavidW:** Ihor, did you want to say a few things about CLIME?

**IhorC:** I have mixed feelings about Shodor...

**IhorC:** Woops ... CLIME? I thought I did before.

**IhorC:** here's a site to get a sense of what clime has been doing over the years....

**SherylM .** o O ( yes, they are like the mecc software )

**DavidW:** That's what made me think of them when you mentioned MECC

**IhorC:** Go to <http://clime.org> and click on Clime story...

**IhorC:** it needs updating.....

**IhorC:** something I plan to do..... between naps.

**DavidW** smiles

**DavidW:** and cups of coffee

**DavidW:** Sheryl, do the teachers you work with know where to go to look for relevant web-based resources in math education?

**DavidW:** My concern is that there are many different comprehensive sites, but unless you have some direction, they can be overwhelming to navigate

**BJB2** thinks they should be able to come to this group room and see them all posted as featured links

**DavidW:** I will make some featured links

**DavidW** smiles

**IhorC**: that sounds like a request...:-)

**SherylM** . o O ( yea, that is a good idea;) )

**DavidW**: Ihor, thanks for talking about your projects

**BJB2**: thanks, David and Ihor and everyone for your contributions to the discussion

**DavidW** agrees

**SherylM**: Yes, Ihor! Nice to meet you and thanks for telling; important work and cool too

**DavidW**: I get worried about making lists of links, but, I'll get to work on that

**IhorC**: stay tuned... more to come at future sessions

**SusanR**: Thanks David and Ihor ..we should revisit these sites and look at them in depth

**BJB2** cheers for Ihor...wonderful!

**SherylM**: Great evening, David!

**DavidW**: Thanks to all for participating

**BJB2**: Teaching with Data Simulations helps students visualize abstract statistical concepts and see dynamic processes behind the gathering, analysis, and interpretation of statistics. Each sample activity includes instructions, teaching tips, assessment ideas, and references. In one activity, students design a blind taste test of two sodas. In another, students learn that larger sample sizes produce better estimates and develop an appreciation for factors affecting sampling variability. (SERC, National Science Foundation)

**BJB2**: [http://www.free.ed.gov/resource.cfm?resource\\_id=2007](http://www.free.ed.gov/resource.cfm?resource_id=2007)

**BJB2** . o O ( just read that on the EdInfo newsletter )

**SherylM** . o O ( how does she do that? )

**BJB2** winks

**IhorC**: now I gotta go and finish decorating the tree. Happy holidays everyone!

**DavidW** smiles

**DavidW** waves to Ihor

**SherylM** waves to Ihor