Title of Session: Science Resources - CyberTEAM Project
Moderator: Jeff Cooper
Guest Speakers: Kathryn Hayden and Youwen Ouyang
Title of File: 20081007sciencecyberteam
Date: October 7, 2008

Room: Science Resources Group

JeffC: |** ANNOUNCEMENT: Science Resources starts now. Today we have guest speakers Kathryn Hayden and Youwen Ouyang to discus their CyberTEAM Project, developing resources for 6th grade science teachers. **|

JeffC: before we get started... let me encourage people to click the Actions menu in the upper right of this chat-- Detach.

JeffC: you may then maximize your chat window... I'm thinking there might be a lot of text today, and we won't be using the top frame much (if at all).

JeffC: you may also increase the size of the font that way... Actions-- Larger Text

JeffC: so... Actions-- Detach and Actions-- Larger Text.

ToddB: good to know

JeffC: one other tip... when urls are put up in chat, they're clickable, *however* your popup blocker will *log you out* unless you hold the Ctrl key down when clicking, or accept popups from this site (best) or turn your popup blocker off.

JeffC: OK... we usually start with introductions. If everyone could tell us in a couple sentences who you are, what you teach, etc., we'll get started. I'll then introduce our guest speakers and hand the floor over to them.

JeffC: I'm Jeff Cooper, on Tapped In Helpdesk and facilitate this group (though I'm not a science teacher). I'm in Forest Grove Oregon and have been in education for about 18 years.

DavidW: I'm David Weksler. one of the HelpDesk volunteers. I'm in New Jersey and work with teachers and technology

PamelaG: Hi. My name is Pam and I teach middle school science in Temecula, CA

TuniseG: Hello, I am currently a student teacher for Houston. I am placed in kinder and first grade

ToddB: I teach AP Physics (11th & 12th grade) at Mission Viejo High School. I'm

enrolled in a Master's in Ed. program at CSUSM.

KarenJac: Hi, I'm Karen. I teach high school English learners, and this year I have a new class to teach basic science vocabulary to beginners.

JeffC: Excellent! We have a wide range of educators here today.

DavidW . o O (interesting topic, Karen!)

JeffC: Now... to introduce our guest speakers, I'm going to paste a synopsis for today's session. If you haven't detached your chat, this will scroll your screen.

JeffC: The CyberTEAM Project, funded by NSF, provides professional development and resources for 6th grade science teachers in the San Diego region. In this presentation, teachers will learn about resources used in the project for classroom experiences that incorporate access to visualization tools, collaboration tools, open source applications and resources to enhance the learning of science in middle school. A new tool called the Flash Earthquake Epicenter Location Tool created by computer science students at Cal State San Marcos will be presented. Resources and strategies identified through the project will be discussed. These resources will be available to attendees.

JeffC: I will hang out in the background, and hand the floor over to our presenters, Dr. Katherine Hayden and Dr. Youwen Ouyang.

KatherinLH: In this session, we will briefly present a new resource tool that has been developed by our project, and a few other resources we use for our project in 6th grade science classrooms for the study of Earth Science.

KatherinLH: In our project, We were lucky enough to work with Dr. Debi Kilb, Science Director of the Viz Center to develop a tool for 6th grade science classrooms. We will provide the link to the Viz Center later where there are lots of resources to study Earth science in classrooms. Dr. Youwen Ouyang will present a little about the tool her computer science student created in collaboration with Debi Kilb.

KatherinLH: Youwen...

YouwenO: Hello, I would like to invite you to go to our project web site http://www.csusm.edu/CyberTEAM

JeffC: again... hold the Ctrl key down when clicking.

YouwenO: On the top left corner, there is a link called "Tools"

YouwenO: You'll need Flash Player 9.0 and above to use the resources. Does everybody have it?

KatherinLH: Please say yes if you have the flash tool.

YouwenO: If you do not have Adobe Flash Player 9.0 and above, please go to http://www.adobe.com/products/flashplayer/ and click Download Now.

ToddB: yes

DavidW: what's the easiest way to check if you have the correct player, Youwen?

PamelaG: yes

YouwenO: Good question David. Let me check

KatherinLH: We are presenting a tool for identifying earthquake epicenters.

KatherinLH: Please go to the link and click on tools in the upper right of the screen to try this tool out.

KatherinLH: yes, we will wait for people to try it and come back. When you are back from seeing the tool, please type "I'm back"

ToddB: I'm back

KatherinLH: Todd, you are fast, what did you think of it?

ChristianR: I'm back

KatherinLH: I think Youwen will be sharing more about the development of this tool.

KatherinLH: In the meantime, feel free to ask questions or share feedback.

YouwenO: Have you tried both exercises or just one?

YouwenO: Both exercises use real seismic data for actual earthquakes. The first exercise demonstrates to students that they need multiple stations to identify the epicenter. Have you guys found out how many you'll need from the exercise?

KatherinLH: Say yes, or not sure.

DavidW has an idea

KatherinLH chooses David to share

DavidW: I'm guessing it's three stations to be able to identify the epicenter

JeffC: http://www2.csusm.edu/CyberTEAM/ ... then Tools... then Exercise 1 and find

that epicenter!

PamelaG: Not sure. I clicked buttons (pretending to be a student) and it told me I did it right, but I don't know what I did for sure.

KatherinLH . o O (wonders if that was prior knowledge or based on the tool.)

JeffC: I know the epicenter for the 1989 Quake was the first floor of the 3 story flat I lived in in S.F.!

ToddB: Fortunately, I took a few seismology and plate tectonic courses in geophysics at UCSB while earning my physics degree, so it all looks pretty familiar

DavidW admits to having some prior knowledge and being a little confused by the seismogram

JeffC: hey... no fair using prior knowledge!

KatherinLH: Does anyone know about P and S waves?

MayelaH: I'm back

YouwenO: Were you guys using the first or second exercise?

JeffC: I'm just guessing... but having a lot of fun doing it! and no... I know nothing about physics or P and S waves.

DavidW . o O (1st exercise for me)

PamelaG: I'm bit confused by Ex 2. How do I know where to place the P and S lines?

DavidW would like to learn about P and S waves

ToddB: primary and secondary waves

KatherinLH: Excellent Todd!

ChristianR: The hint is at the bottom when you move the P and the S

YouwenO: There are some visual and audio hints for the P and S waves

KatherinLH: you win a prize.

ToddB: the first are longitudinal, the second are transverse

DavidW appreciates learning the definitions

PamelaG: Thanks Todd!

KatherinLH . o O (it always helps to have a GATE student in the class)

KatherinLH: Soooo, Youwen and a computer science student were able to work with Dr. Debi Kilb on this project which uses REAL data.

KatherinLH: Our goal was to have an interactive tool that required critical thinking on the part of the student

KatherinLH: And...they receive a certificate if they get it right.

KatherinLH: Did anyone receive a certificate when they tried it?

JeffC: I can see this used for a wide range of abilities and classes... from teaching venn diagrams to lower grades, to the actual physics for higher ones.

JeffC: triangulation, intersections, etc.

KatherinLH: Anyone else have ideas for its use?

MayelaH: I am still working on it :)

KatherinLH: We really do like feedback.

JeffC: you mentioned that the focus for this project was 6th grade, right?

KatherinLH: yes, Earth science

ChristianR: I like the fact that you are using real world data

JeffC: have you considered expanding the lessons and modifying them for lower and higher grades?

DavidW wonders if some introduction to the techniques and definition of terms might be useful

KatherinLH: Great idea Jeff! For now, we want to fine tune them for 6th grade as it is part of our funding, but your idea is certainly a great idea for the future.

KatherinLH: We would now like to share some resources we identified as part of the grant resources.

JeffC: how about more earthquakes too? (SF 06, Alaska, etc.)

KatherinLH: Another site we felt was useful is...

KatherinLH: IRIS: Incorporated Research Institutions for Seismology, sponsored by NSF, provides resources and tools to be used by students and teachers in K-12 science education. One of the resources here is the Seismic Monitor. Data from recent earthquakes all over the Earth can be viewed using this tool. Try going to North America and finding an earthquake that occurred within the last few days.

KatherinLH: Try exploring this site for a few minutes and share what you found there.

KatherinLH: http://www.iris.edu/hq/

KatherinLH: Control Click remember

MayelaH: I can see how I can use the data from the earthquakes to teach my students how to graph

YouwenO: David, the assumption was that students would have already learned the definitions before using the tool. We're also trying to include links to various concepts in the link section of the interface.

ToddB: I'm sure you've seen: http://earthquake.usgs.gov/eqcenter/recenteqsus/

DavidW: Thanks, Youwen - I was just wondering about that

YouwenO: Todd, yes, that's a wonderful resource too.

KatherinLH: When you get back, type "I'm back"

DavidW: One early Internet project was to locate earthquake locations on a map of the world over a period of time (1 month, for example) to visualize the "rim of fire" around the Pacific

KatherinLH: Yes David, that is an excellent activity too.

ToddB: I'm Back

MayelaH: I'm Back :)

ChristianR: I'm back

KatherinLH: What did you look at here?

PamelaG: I'm back. Amazing information resources

JeffC worked hard to get his Certificate!

MayelaH: wow did any one get to see the lessons and resources available for teachers?

ToddB: I checked out the seismic monitor map

KatherinLH added a star to Jeff's certificate

KarenJac: This is fascinating, and I wish I could stay the entire time. Have to go now. Thanks for sharing such great resources!

PamelaG: I looked at North America, Earthquake magnitudes,

KatherinLH waves to Karen

KarenJac left the room (signed off).

ToddB: some pretty big quakes near Oaxaca last couple of weeks

JeffC: unfortunately... I have to leave too... Parent/Teacher conference tonight.

KatherinLH waves to Jeff

JeffC: I will stay logged in... and leave it to Bj and David to help with any Tapped In related issues.

JeffC: Thank you very much Katherine and Youwen!

JeffC waves bye and is afk.

KatherinLH: Another tool we are using in the grant is Google Earth. How many of you have used this tool?

ChristianR: The seismic monitor is amazing - especially how it shows earthquakes in the last five years

MayelaH: I use it all the time

ToddB: I've used Google Earth

ChristianR: I use it from time to time

PamelaG: I have. Love it!

KatherinLH: Thanks for sharing Christian, Todd, Pam and Mayela

MayelaH: where can I see the seismic monitor?

ToddB: btw, how do you "wave" at somebody while chatting in Tapped In?

KatherinLH: USGS (U.S. Geological Survey) has created various Google Earth files related to plate tectonics and Earth's structure. For more details, please visit http://earthquake.usgs.gov/research/data/google_earth.php

KatherinLH: This web page highlights a few of them as part of a virtual tour of the 1906 San Francisco earthquake. It is recommended that you turn off all other layers of Google Earth when viewing these files.

MayelaH: wow I just saw it never mind ;)

KatherinLH smiles at Mayela

KatherinLH: Youwen, do you want to add anything before they explore?

YouwenO: To download any of the files to your computer, right click on the link and choose "Save Target As".

YouwenO: Here are a few that I like: Tectonic Plates and Tectonic Plate Boundaries, Tour of the Rupture: The file shows how fast the rupture traveled north from the epicenter (8,300 miles per hour, i.e. 3.7 km/sec), Historic Photographs of Fault and Earthquake Damage: Include 73 photographs taken at known locations, organized into groups showing fault rupture, shaking damage, landslides, and ground failure.

YouwenO: I skipped a step. The files I mentioned was part of the Virtual Tour of the 1906 San Francisco Earthquake

ToddB: http://www.eserc.stonybrook.edu/ProjectJava/Quake/home21.html

KatherinLH: Todd, do you want to share this resource and tell us about it?

MayelaH: To have access to the 1906 San Francisco Earthquake we need to download Google Earth right?

KatherinLH: Yes, I believe so Mayela

MayelaH: ok

YouwenO: Even without Google Earth, you can still visit the page and see what's available

MayelaH: ok :)

KatherinLH: Then you can try it out later

PamelaG: That sounds good. I've used google Earth for a variety of activities, but didn't realize this was on here.

KatherinLH: Glad you are here to find out about it Pamela

KatherinLH: If you are back from looking at the lesson for Google Earth, please type "back"

DavidW wonders if 6th graders might need an introduction to some geometry before doing the epicenter activity

PamelaG: back

DavidW . o O (intersecting circles)

ChristianR: back

MayelaH: back

PamelaG: I agree with David. The geometry would be a good pre-lesson

KatherinLH: Does anyone want to share?

KatherinLH: David, our project teachers almost all teach blocked math/science

KatherinLH: so, for our last sharing

DavidW nods

PamelaG . o O (The math/science block would certainly make it easier to coordinate)

ToddB: back

KatherinLH: We would like to share the resources that Debi uses for workshops she offers for teachers

KatherinLH:
http://education.sdsc.edu/teachertech/community/ttmoodle/mod/resource/view.php?id=3204

KatherinLH: Hopefully this link will work.

KatherinLH: The teachers in our training felt these resources were very valuable.

PamelaG: I get a member login page.

DavidW: seems to need a login - at least for me

KatherinLH: Youwen, do you have that link?

DavidW: Might be able to get there as a guest

KatherinLH:
http://education.sdsc.edu/teachertech/community/ttmoodle/mod/resource/view.php?id=3204

MayelaH: I am also getting the login page

PamelaG: I tried as guest, also

DavidW: nope, no guests

MayelaH: it does not allow guests

KatherinLH: While we check that...

KatherinLH: Here is the link to the Scripps Viz Center

KatherinLH: http://www.siovizcenter.ucsd.edu/index.php

YouwenO: The workshop resource link is
http://www.siovizcenter.ucsd.edu/workshop/resources.html

MayelaH: Are all the resources that you are providing us for upper grades?

KatherinLH smiles at Youwen and says "Thank you"

MayelaH: Ok thank you for the resources see in a little bit professor Hayden :)

PamelaG: Thank you Katherine LH and Youwen O. I'll look forward to adding these resources to my teaching.

KatherinLH: Thank you all for coming to hear about our project resources.

KatherinLH: David, thanks for facilitating

KatherinLH: and participating

DavidW: Happy to help

DavidW: Have you seen the Beyond Penguins web site (and project)?

ChristianR: Thank you for these wonderful resources.

KatherinLH: Are there any questions?

KatherinLH: No David, is it good?

KatherinLH: I will need to transition to my office to meet with my students now. This was very fun.

DavidW: It's a project to focus on polar regions during the Int'l Polar Year

DavidW: http://expertvoices.nsdl.org/polar/

DavidW: We've been having a regular discussion of the project in TI - target group is K-5

DavidW was thinking there might be some overlap, perhaps

BJB2: Thanks, Katherine

YouwenO: Thank you for having me. I need to leave too.

KatherinLH: Thanks for sharing David.

BJB2: and thank you, Youwen

DavidW: Thanks, Youwen, Katherine - good discussion

KatherinLH: See you all soon.

BJB2 waves goodnight

YouwenO: Bye.

KatherinLH smiles and waves

DavidW waves bye