

Title of Session: Science Resources K-20
Moderator: Jeff Cooper and David Weksler
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Room: Science Resources Group

BjB: We usually start all Tapped In discussions with introductions.

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

DavidWe waves

BjB: I'm an art teacher in Pennsylvania

DianeWP: I am new to this. This is the first time I have joined a chat I teach in GA

TessaKW: I live in the D.C. area and teach 4th grade in Maryland. I teach all subjects.

KarenDel: 7th grade science in NJ Also teach art in the summer (as well as integrate into what I do!)

JimHi: 7th grade science teacher in KY

BjB: what do you teach, Diane?

FredK: Hi everyone. I tutor for a literacy organization in SE Oklahoma.

MichelleW4: 8th grade technology integration

DianeWP: I teach spec ed in high school. Team teach a self contained Biology class, just beginning the Plant kingdom

KarenDel: Diane...good time of year for that!

DavidWe is a HelpDesk volunteer and lead a math education and technology discussion in Tapped In

DianeWP: Yea that's what I thought. Good thing things are in bloom in GA now

SusanR: Occasional Teacher..kindergarten today and facilitate the K to 3+ Great Resources twice monthly sessions here at TI..

DianeWP: I am looking for some ideas to get kids to really enjoy Biology and integrate tech where possible.

MichelleW4: Have you used any Vernier technology Probes and sensors for data collection

TessaKW: I don't know if this will help, but I have recently been really looking at digital microscopes. The one I use is by Intel Play. It is great for young kids!

DianeWP: Vernier tech probes? what is that

DavidWe knows teachers who use various probes for collecting real data - temperature, pH, etc.

JimHi: We have used them for a couple of years now

MichelleW4: Tessa, I did some Intel workshops and they gave those out for free, can't seem to get them to work right with our computers

KarenDel: I use PASCO

DavidWe: <http://www.vernier.com/mbl/>

DavidWe: That's a web page for their interfaces/probes

DianeWP: thanks

MichelleW4: Karen are the pasco probes interchangeable with other systems

KarenDel: I have the older version of PASCO...and it is somewhat cumbersome to set up...they've made many improvements

KarenDel: Michelle, I don't believe so.

JimHi: Vernier has some new easier to use probes as well

DavidWe: TI calculators have probe attachments for data collection, too

TessaKW: Michelle, try going to this site: It is great!
<http://micro.magnet.fsu.edu/optics/intelplay/simulator/index.html>

KarenDel: Sometimes it seems easier to use the old fashioned method first...so they understand the concept.

MichelleW4: I want to use the vernier this spring outside to collect water samples, but the PDA's we have are so old and hard to read

JimHi: which do you use

KarenDel: I know pasco now has handhelds

KarenDel: We have PDAs sitting in a closet collecting dust...were obtained with grant money to help ADHD kids with organizational skills...but they kept losing them! lol

MichelleW4: Tessa, Thanks for the site I'll check it out some more later

TessaKW: I still don't understand what vernier is. I know that may sound silly.

KarenDel: Tessa...it's a data collector

TessaKW: for anything specific?

KarenDel: I think the company makes various probes...thermometers, etc.

JimHi: There are specific probes for different types of collecting

TessaKW: ok, thanks

JimHi: We have done some data collection on the Ohio river with them

KarenDel: In pasco, I have probes for pH testing (which rarely work!), thermometers, pressure, light, etc.

TessaKW: do you take the pH level, etc?

TessaKW: Jim, what grade do you teach again?

JimHi: 7

JimHi: We have been able to run some summer programs using them

MichelleW4: I want to make the data collection more exciting by using them outdoors but I worry about taking the laptops outside with 8th graders

JimHi: in conjunction with NKY Univ

KarenDel: I use them when we are doing independent science projects. We only have one set-up that we use with an LCD

TessaKW: I teach ecosystems in 4th grade of the Chesapeake Bay, this would be perfect...it seems.

KarenDel: When doing ISPs, they can take turns using it at a regular computer.

JimHi: The vernier allow you to sample several different things at the same time

KarenDel: I think pasco does also.

MichelleW4: Next year I was promised enough for each science class to have 10 stations set up in the science room, we'll see

KarenDel: It's neat, b/c the kids can watch the data be graphed. But I still think they need to learn to graph data themselves...rather than watching it happen.

JimHi: We have always done that early in the year

KarenDel: That's what I do, too!

JimHi: but technology integration is a key component in all we do

MichelleW4: The hardest part for me is that teach all content areas, not just science, so I'm weak on content

DavidWe: What do you mean, Michelle?

KarenDel: Very true...but the kids need to understand the concepts, too

MichelleW4: David I team teach with middle school content area teachers to integrate technology for all subjects

KarenDel: Michelle, have you visited the NSTA site...they have a great series called "Stop Faking It"

DavidWe nods

DavidWe: I think the technology should serve the content area you are trying to teach

KarenDel: There is a book for many of the subject areas---electricity, etc.

TessaKW: I took a class and discussed a virtual program called like River City or something like that that goes with all of this. Does anyone know what that is? It is for middle school

DavidWe: But in science it seems as though the technology integration would be much simpler...you need tools to measure things

KarenDel: Michelle, I would think your science teacher would take the lead role in the content area.

DavidWe: I would hope so

MichelleW4: I work with science teachers one day and social studies the next. It's sometimes hard to be on top of all the curriculum areas at once.

KarenDel: I've met astronomers w/ doctorates that couldn't name the planets!....we can't be great at everything!

DavidWe would like to meet one of THOSE astronomers

MichelleW4: They do take the lead, but don't always know where to integrate technology, so that part is mine

KarenDel: Do they let you know how you can help...or do you need to "come up" with stuff?

KarenDel: Wow...you answered me before I asked!

DavidWe smiles

KarenDel: David...it was a project called AstroNova...

DavidWe . o O (pre-cognition)

DavidWe smiles

MichelleW4: It depends, most of the time I "come up" with it. we have 2 new science teachers in 8th grade. both first year teachers.

KarenDel: The teachers felt inadequate working with them...and they were sharing the "fears" they had working with us!

DavidWe: Do any of you use the educator's stuff that comes with the PBS program, NOVA, for example?

JimHi: What fears did they have?

KarenDel: YES!!!! I did an entire webquest based on that site...FIREWORKS!!

KarenDel: Jim...that the kids would ask them to name the planets in order! lol

KarenDel: They were so into deep space astronomy that they were far from the middle school level astronomy!

MichelleW4: This has been great, but I need to get back to my course and finish my homework

KarenDel: Are you in Walden?

MichelleW4: Yes you

DavidWe: Here's the web page for the Teacher's Guide for NOVA:

DavidWe: <http://www.pbs.org/wgbh/nova/teachers/>

KarenDel: Yes...Jim's class?

MichelleW4: What course are you in now

KarenDel: Integrating Technology!

KarenDel: masters in middle level education

KarenDel: Visiting here was an optional assignment!

MichelleW4: I'm in the last one Technology leadership and vision for future

KarenDel: I'm enjoying it...

MichelleW4: I'm in the home stretch, done in less than 4 weeks

TessaKW: congratulations!

KarenDel: good luck....the nova site is good....also...I have our computer teacher help with chemistry brochures, teaching excel for graphs, etc.

BrentGst8: I feel like I have been listening in on your conversation. I too, am a Walden student - last course with Karen. I have enjoyed listening - thanks.

MichelleW4: This has been a great program, but I'm ready for a break

MichelleW4: Brent, how many courses are they running at one time

KarenDel smiles

KarenDel: I'm ready for spring break, in general! lol

DavidWe: Who isn't, now that it is Spring!

BrentGst8: As far as I know just one at a time - one right after another with no breaks. I'm sure there are many different classes.

MichelleW4: there's no such thing as spring break at Walden

KarenDel: So I've noticed!

TessaKW: I would love to hear about more ideas for helping students with science. I am actually in a class as well on professional development and I am trying to come up with 10 ways to use technology to encourage students to love science and really learn it!

KarenDel: Tessa...right now we are researching the science behind our favorite things....

DungN: what are some of the 10 things to learn science with technology?

DavidWe: Do you all know about the WHY FILES?

KarenDel: They find out what materials make up their favorite thing (skateboard)...learn that wheel are made of urethane and then go to a site called macrogalleria and find out

BrentGst8: No, what are the Why Files?

KarenDel: Yes...and howstuffworks.com; madehow.com

DavidWe: <http://whyfiles.org/>

DavidWe: Science behind the news

JimHi: We did a Physics of Sports Unit which worked well

TessaKW: so far I have come up with united streaming, digital microscopes, digital cameras, etc. Mostly online resources and peripherals

KarenDel: Also americanplastics.org

TessaKW: what are why files?

DavidWe: Explanation of things that are appearing in the news

KarenDel: exploratorium has a great set of files on sports and cooking

DavidWe: It's been online since 1996

DavidWe: Exploratorium (and other science museums - Franklin Institute in Philadelphia) have GREAT web sites

DavidWe: <http://sln.fi.edu/>

KarenDel: Tessa...what about virtual dissections?

DavidWe: That's the Franklin Institute's web site

TessaKW: this sounds great, thank you Karen, David, and Jim!

BrentGst8: Anyone know of a good website on cells?

KarenDel: I know exploratorium has one on the eye

DavidWe smiles

DavidWe: What kind of cells, Brent?

KarenDel: chem4kids

DavidWe: There's a great virtual frog dissection - one of the early web sites

TessaKW: yuck! But I am sure it is great! Do they show the inside of a frog and stuff?

BrentGst8: animal and plant - introductory stuff for grade 8

KarenDel: try...chem4kids also has a sister, biology4kids

DavidWe: <http://froggy.lbl.gov/virtual/>

SusanR: we have a site up here in Canada that takes the news and offers a science perspective to it!!

SusanR: http://discoverychannel.ca/_home/index.shtml

KarenDel: The exploratorium one is dissection of a cow eye

DavidWe: The Lawrence Hall of Science (science museum and education outreach at the University of California, Berkeley also has great stuff

BrentGst8: Susan, I am in Canada - where are you?

KarenDel: Also NASA is a GREAT resource!

SusanR: oh hi Brent..Ottawa

DavidWe: <http://lhs.berkeley.edu/>

BrentGst8: I'm in Fergus -just North of Guelph

KarenDel: I've also noticed a lot of good stuff from Australia...esp. on environmental issues

BrentGst8: What is the Canadian site you mentioned

KarenDel: Tessa...what topics r u covering?

SusanR: Brent Phillips???

DavidWe . o O (Discovery Channel - http://discoverychannel.ca/_home/index.html)

SusanR: Discovery Channel, Brent

TessaKW: I am looking at anything that the staff at my school can access to help

BrentGst8: This has been a great experience - I feel like one of my students chatting on MSN

KarenDel: Is your email posted? I could send you the list of sites I've collected.

SusanR: I watch the TV show each evening..marries the web to the TV show quite nicely, could be used in the classroom

TessaKW: so far I have things like united streaming, web cams, more peripherals. I wrote that I will use online resources. Some of these tonight will be amazing!! Thank you soo much!

JeffC: http://discoverychannel.ca/_home/index.shtml

SusanR: The Daily Planet <http://www.exn.ca/dailyplanet/>

KarenDel: chemistry.org

DungN: unitedstreaming.com is a very good website

KarenDel: brainpop

DungN: I'm using it to teach science for my Kinder

KarenDel: Tessa..yes..if you would like me to send you my list of sites that I use.

JeffC: There are about 200 science links in my public bookmarks folder at <http://www.mybookmarks.com/public/coops>

KarenDel: Also NIH.gov has tons of FREE resources for health/science!

TessaKW: that would be great! Thank you!

JeffC: btw... if you put up a site here, be sure to include <http://> etc. so that it will hyperlink.

DavidWe: <http://www.nsta.org/>

DavidWe: National Science Teachers Association web site

TessaKW: I love brainpop Karen. My school unfortunately won't subscribe to it!

DavidWe wants to ask the group a question

KarenDel: Jeff...can your students access that link? I guess so, huh?

SusanR: You get one free access per day, Tessa

KarenDel: I tell the kids to try it at home!

DungN: only one

DavidWe: Has anyone done collaborative science projects with a group of students at another school?

KarenDel: You mean like JASON...or individually?

DavidWe: Either

JeffC: Karen... I don't teach science... I just have links.

DavidWe: Why would you use the Internet to do a science project - what does it mean to work collaboratively with other folks?

JeffC: ... but anyone could connect to my bookmarks.

KarenDel: Years ago....when teaching 4th grade (long before Internet...1980's) I worked with a city school (we are a rural school)

TessaKW: I have researched about the JASON project and also Message in a Fossil, which I think is for younger kids

DavidWe: There was a great watershed project done a long time ago in Texas to pinpoint the source of pollution along a river. The students actually helped identify and localize the source of the pollution which then helped improve the ecology of the river

DavidWe: The education had value far beyond the classroom

KarenDel: We were hoping to do NASAExplore, but our supt. missed the deadline!

KarenDel: We wrote "penpal" type letters to the other class. We taught the same chapters of the textbook. Then, they took a class trip to our school...and we had a cooperative "scavenger hunt" to find specimens...and then worked together to identify.

DavidWe: teachers can bring k-12 students into TappedIn (in a controlled manner, in a safe part of the TI campus) and they can interact here, as well

DavidWe: That sounds great, Karen

KarenDel: I noticed that on the sign in page...where would we go for info on this?

DavidWe: Info on...?

KarenDel: k-12 students at TappedIn

DavidWe: <http://tappedin.org/tappedin/web/help/students.jsp>

DavidWe: There

KarenDel: thanks...that was obvious!

DavidWe: That's a link from the main TappedIn web page - www.tappedin.org

DavidWe smiles

KarenDel: I've been working w/ middle school students for so long...I'm becoming one!

DavidWe smiles

DavidWe: It seems as though the collaboration has been a big plus of the Internet - scientists are now more interested in getting involved in K-12 science since they can do it from their own offices/labs using the Web

SusanR: . o O (I have worked with grade one and two for so long I have trouble thinking at a higher level)

KarenDel: My kids find a lot of info on company sites...including careers. Loreal has a nice site that has video of ppl talking about careers

DavidWe: Eat more garlic, Susan

SusanR: Thanks, David

KarenDel: The companies that the kids have written to requesting freebies and info have also responded.

KarenDel: We even did a live chat with someone from Clinique!

DavidWe: Very cool

DavidWe: . o O (did they send free samples?)

DungN: Clinique, Make up company?

TessaKW: that is really cool!

KarenDel: Unfortunately, no....but I think L'Oreal did

DungN: wow

DungN: what does did have to do with science?

SusanR: isn't that too commercial

KarenDel: I have them email from my account....they write using only their first name...and then I write a closing paragraph..

KarenDel: COSEMETICS IS NOTHING BUT CHEMISTRY!!!!!!

DungN: oh

DavidWe agrees

KarenDel: Sorry!

KarenDel: You should come to my class!...or visit our science expo...the girls will convince you!

SusanR: true, Karen

DavidWe: If anyone can turn on NOVA, the program tonight is about the satellite that is sending back pictures from Titan, a moon of Saturn

DavidWe: . o O (AMAZING!)

KarenDel: cool!

SusanR: you are endorsing clinique products, Karen

DavidWe: http://www.pbs.org/wgbh/nova/teachers/programs/3309_titan.html

KarenDel: Dung...the main career oppty at a cosmetics company is a chemist...especially formula chemist

DavidWe . o O (the teacher's guide for tonight's program)

KarenDel: They were asking questions about the product.

DungN: now I got it

SusanR understands

KarenDel: The student found the chat feature and asked if we could do that.

KarenDel: Like an interview

DungN: I only thinking at the level of K because I been in there for so long

SusanR nods

KarenDel smiles

TessaKW: Ok, thank you so much for the help. Time to eat some dinner. I really appreciate all of your suggestions! They were great!

DavidWe smiles

DavidWe: Take care, Tessa

KarenDel: The kindergarten students come to the science expo...and the "big girls" teach them about the science of it! Sometimes they get to put homemade make up on a paper face...or the girls braid hair while explaining the science!

DungN: when does it offer? the science expo?

KarenDel: We have stations on skateboarding, candy....\

SusanR: that's actually quite novel, Karen

KarenDel: I swore I'd never do a traditional science fair if I ever taught science!

KarenDel: Last year a group of boys did the chemistry of beds!

DavidWe chuckles

SusanR: Wow!

KarenDel: I asked what they were passionate about and they said sleeping!

DavidWe laughs

DungN: hihi

KarenDel: It was amazing....I learned so much...you'd never believe the amount of science (and history) that goes into making beds!

SusanR: They really don't function in terms of learning until 10:00 in the morning

SusanR: anyways

KarenDel: Another popular topic...paintballs!

KarenDel: They are made from the same stuff as gel-capsules!

SusanR: I can see why they are concerned about sleep

KarenDel: We got samples of beds (like they have on display) from a store....so they could run tests.

DavidWe: Should make a web site about the project, Karen

KarenDel: We do all this in class...and then have a "Family Science Night" that is open to the community!

SusanR agrees with David

KarenDel: The kids actually LOVE "science fair"

KarenDel: I don't judge it...just a pizza party at the end.

KarenDel: Never thought about it!

SusanR: not competitive...I like that

KarenDel: Of course, they ask the little kids, on the bus next day, whose projects they liked best!!!

KarenDel: I've found that taking away the competitive side of it allows all kids to work to their potential.

KarenDel: The kids come up with "interactive" ways of presenting their knowledge...some allow the visitors to do a mini experiment, others demo...some have tasting booths.

BjB: almost the end of the hour...any parting comments?

KarenDel: Thanks for inviting me in!

BjB: you might want to participate in Nuts About Nature

BjB: on April 18

KarenDel: You are good promotor, Bj!!!

BjB . o O (environmental science)

BjB: thanks, Karen

SusanR: Thanks Karen. You have opened my eyes to some unique science activities

KarenDel: I think its 14-18

KarenDel: You are welcome! I guess you can tell I LOVE this job!

KarenDel: Well...I better be back to what I'm supposed to be doing!! Thanks all!

SusanR: nice discussion

DavidWe: yes

DungN: good stuffs

DavidWe: Thanks for joining us, Dung

DungN: thank you for having me

DungN: wish everyone to have a wonderful night

KarenDel: My students are IM-ing me questions about their projects!!! Bye!

DavidWe: Bye

DungN: bye