Title of Session: Science Resources K-20+ Moderator: Jeff Cooper Title of File: 20070703science Date: July 3, 2007

Room: Science Resources K-20 Group

JeffC: ok... welcome to Science Resources.

**JeffC**: and... there is a lot there.

**JeffC**: and I'm hoping... that all of you will contribute to this room, perhaps not now, but in the future.

**JeffC**: Tapped In is a lot more than chat.

**JeffC**: This is one of the 800+ professional development groups, university and K-12 classrooms here.

**JeffC**: I give tours on Saturday morning (11 a.m. Pacific) on how to create your own K-12 class here.

JeffC: This room of course is dedicated to science.

**JeffC**: and blowing things up.

JenniferAr: cool

**JeffC**: of course, if you come right down to it... aren't fireworks an excellent way to teach chemical reactions?

AdrienneS: cool

AdrienneS: yup

JenniferAr: sure is

**JeffC**: as discussed in math resources... we look for ways to make subjects interesting to students.

**JenniferAr**: they would really love that

AdrienneS: stuff blowing up definitely gets kids attention

**JeffC**: now... don't go to school with a gallon of lighter fluid and a battalion of green army men, a match, and tell them I sent you!

**JeffC**: but yeah... learning \*should\* be fun.

JenniferAr: I agree

**JeffC**: you could take some fireworks to school, have the kids "dissect them" under your supervision... analyze what is there, and eventually blow things up (within reason).

BJB2 . o O ( plug for TI Festival July 25 Playing to Learn )

JeffC: exactly... as Bj points out, our annual festival focuses on bringing fun into the classroom...

JeffC: Playing to Learn is an excellent concept.

JenniferAr: must look into it

AdrienneS: hands on is always a lot of fun

**JeffC**: we all loved playing (still do)... and learned quite a bit doing it... why should school take that out of it?

**JeffC**: learning then becomes mundane... a "task"... and any time I hear the word "task" I immediately think of the word "onerous."

JenniferAr: I think kids get more from hands on

AdrienneS: that's the best way to have the information stay in the brain

JeffC: I was an English teacher after all.

AdrienneS: because they see it and touch it

**JeffC**: ok... now... I'm going to reiterate a few sites that are indeed fun for kids... they're also in the top frame. <u>http://www.yucky.com</u>

NicoleCM: Electricity is another great hands-on topic (supervised of course)

**JeffC**: <u>http://www.brainpop.com</u>

**NicoleCM**: I love brainpop!

**JeffC**: well... I think it's best to throw a lot of volts into the least popular kid, as well as the most popular kid right off the bat.

## AdrienneS: oh it looks cool

JeffC: then... have the students do a survey of their own reactions to their screams.

**JenniferAr**: that would be interesting

**JeffC**: <u>http://www.surveykey.com</u> and <u>http://www.surveymonkey.com</u> ...if you ever do global science projects, those are good sites to create surveys and collect data.

**JeffC**: also... a more general note... if you don't have a google account (for email, documents, and much more), you should.

**NicoleCM**: When I tried to explain the rock cycle to my students...they looked at me like, "riiiight...rocks change. oh sure." But brain pop has a rock cycle animation that is perfect to illustrate what happens!

**JeffC**: excellent

AdrienneS: I always learned a lot from Bill Nye the Science Guy

**JeffC**: now... the one "task" I have for all of you... aside from my desire that you join this group, is for you to put up one great idea for science, or a site, or a question, etc.

JeffC: Too bad about Mr. Wizard dying.

NicoleCM: Did you know that Mr. Wizard just past away? so sad.

AdrienneS: no I didn't

AdrienneS: how sad

NicoleCM: You beat me to it Jeff

JenniferAr: so sad

**BJB2**: oh, dear...I didn't know that either. Bummer

JeffC: Indeed... get some old videos of his show and show them.

AdrienneS: yup

JeffC: I guarantee that having kids watch tv for a day will be a break for everyone!

NicoleCM: OK...my plug for good hands-on science is FOSS.

JeffC: regardless of grade level, interest, or ability.

AdrienneS: hah true

**JeffC**: tell us about FOSS, Nicole (is there a url)?

JenniferAr: I am going to share these sites with my kinder teacher friends

JeffC: btw... Bill Nye: <u>http://www.nyelabs.com/</u>

JenniferAr: they are always looking for sites for fun things in science/ss

JeffC: Mr. Wizard: http://www.mrwizardstudios.com/

**NicoleCM**: FOSS has a website (I'll find it..hold on) but it also is a series of hands-on learning kits that are sent to your classroom (materials included!) It is completely hands-on and student-centered

JeffC: <u>http://www.fossweb.com/</u>

**JeffC**: thanks Nicole... could you point out a few links in that site or ideas of how you've used it?

**NicoleCM**: One of the biggest problems with teaching science is time and materials. FOSS sends complete kits (huge boxes)

**JeffC**: how pricey is it?

**AdrienneS**: is it expensive?

AmberML: SEPUP also has great kits

JenniferAr: you beat me Jeff

**JeffC**: I'm pretty quick at the keyboard (usually).

**NicoleCM**: If you are teaching magnets and electricity, for example, you receive parallel circuits, series circuits, electromagnets, light bulbs, batteries, and the makings for a telegraph for the whole class.

JenniferAr: what is SEPUP

BJB2: the NASA resource room in the SAC has some good lessons

NicoleCM: Then you go on the website and there links that help you to teach the unit

JenniferAr: how much do the kits cost?

NicoleCM: good question! it depends on the kit.

BJB2: <u>http://www.sepup.com/</u>

JenniferAr: does your school buy them

**BJB2**. o O ( similar idea to FOSS )

JenniferAr: got it

**NicoleCM**: I don't know, but I do know the life science kits cost more than the rest (approx 100-220 dollars) because they come with live animals

JenniferAr: WOW

AdrienneS: what?

**NicoleCM**: Yes...my district pays for them, and teachers go to trainings so they know how to use them

NicoleCM: I teach the science trainings at my site

AdrienneS: what kind of animals

JeffC: Nicole, would you consider setting up a FOSS group here?

**JeffC**: or even leading a Science Resources group meeting on it? I could probably get some representatives from FOSS in here by next month.

**NicoleCM**: Animals depend on the grade level. For example, I teach ecosyastems, so I get animals for an aquatic ecosystem (snails, elodea, frogs, and animals for a land ecosystem...

JenniferAr: I would be interested Nicole

AdrienneS: how cool!

**NicoleCM**: 3rd grade teaches structures of life, so they get crayfish and they learn about the individual structures of arthropods

**JeffC**: That way, "trainings" could be ongoing, and participants could meet here from all over, compare notes, etc., support each other and possibly collaborate on projects.

JeffC: do they get to eat the crayfish after?

AdrienneS: hah

NicoleCM: Each grade level gets things dependent on their standards

**JeffC**: I mean... set up a barbecue... use the fireworks, etc.

**JenniferAr**: good thinking

**JenniferAr**: like that idea Jeff

**NicoleCM**: Funny! No, but the "day of animal delivery" is a hilarious day at my site...especially when a squeamish teacher opens her box

JeffC: hehe... and live crayfish jump out at her and attack her!

**JeffC**: well... that's my hope anyway.

**NicoleCM**: The animals only come in the "life science" rotation. All the other kits are animal-free

AdrienneS: I got a cool mental picture of that Jeff

**NicoleCM**: My principal is from New Orleans. She seriously considered eating the crayfish at the end of the year.

**JeffC**: So... Nicole gets a gold star and a free room here. Let's hear it for Nicole and FOSS!

AdrienneS: YAY!!!

JeffC: and for Nicole's Cajun principal!

**JeffC** applauds for Nicole.

**JeffC**: OK... like I said... I'd like to return to FOSS and really follow through in coming months with it.

JenniferAr: Jennifer also applauds Nicole

**JeffC**: I'd also like to hear some ideas, questions, etc. from others today...we have a half hour left.

**NicoleCM**: if any of you want more info....k-12 science alliance is a national organization and they sponsor FOSS trainings

JeffC: Are you a member of K-12 Science Alliance, Nicole?

NicoleCM: yes

JeffC: uh... would you like to be a Moderator of this room?

AdrienneS: do you science teachers have to teach the other subjects as well or just science

NicoleCM: hahahah. I'm going to listen for a while

JenniferAr: how do you become a member

NicoleCM: sheepish grin

**JeffC**: again... I'm just an old English teacher who is better to quote Dr. McCoy saying "I'm just an old country doctor" and really prefer having science teachers lead events here rather than myself.

NicoleCM: I'm not sure how you become a member.

JenniferAr: you have a lot of good info Nicole

AmberML: I teach 7/8 science and an elective that I make mostly science stuff

**JeffC**: no problem... scroll down the top frame and click the little "i" in the green circle in the "Welcome to Science Resources" box (it's next to a link for this group.)

**NicoleCM**: I am the science coordinator for my elementary school, so I became a member through one of the summer trainings I attended for my school

JeffC: then click the link to "join this group."

**JeffC**: indeed... I really would like it for the 138 members of this group to take a more proactive role, as you are all doing now.

JenniferAr: I guess I better do a google search

**NicoleCM**: Amber, how do you like middle school science? I have thought of moving in that direction

AmberML: love it, the kids are difficult at times, but fun

NicoleCM: what content do you teach?

**JeffC**: if one in 10 teachers did one meeting a year and hosted something like FOSS, or the National Science Alliance, we'd have a much stronger group and focus...please think about it people... if you (or know of others) who could commit to "making science fun, etc." ... just contact me and I'll set you up.

AdrienneS: do you dissect animals in middle school Amber?

AmberML: 7th is life science 8th is physical (astronomy, chemistry, physics)

AdrienneS: I dissected a frog, a fish and an earthworm and thought it was very interesting

AmberML: this year I did a worm, other classes did frogs, clams, sharks

AmberML: have you been to froguts.com?

AdrienneS: a shark? cool

NicoleCM: does your class smell like Formaldehyde, Amber?

NicoleCM: froguts.com sounds cool

**AmberML**: only for the day

NicoleCM smiles

JeffC: yes... there are several "frog dissection" sites.

**AmberML**: there may be a fee for student use, the website says a school site license is \$300

**JenniferAr**: do the kids behave while doing a dissection

NicoleCM: do the students have to sign a parent release to dissect?

JenniferAr: good question

AmberML: no, I put them in groups and there is only one willing to do it

AmberML: the others can watch, but they usually join in

JeffC: here's one of the dissection sites: <u>http://herbertasbury.com/frogguts/</u>

**AmberML**: if they choose to opt out for personal reasons, they can do it virtual via the web

**JeffC**: there are others, and I recall some sites are highly interactive with java or flash, and free.

JeffC: and on that line... are you familiar with the new display at OMSI?

**AmberML**: froguts has lots of dissections to pick from. It says there is fly genetics coming in fall

AmberML: OMSI?

JeffC: forget about frogguts for the moment and get into: <u>http://www.omsi.edu/</u>

JeffC: body worlds 3: http://www.omsi.edu/visit/featured/bodyworlds/?thumbURL=http%3A%2F%2Fwww%2 Eomsi%2Eedu%2Fvisit%2Ffeatured%2Fbodyworlds%2F

**JeffC**: one sec and I'll snip that

JeffC: http://snipr.com/bodyworlds3

JenniferAr: that's cool

AmberML: it was here is San Diego (may still be)

AmberML: they had a free preview for teachers night, but I couldn't make it.

JeffC: right... it's here in Portland Oregon now.

AmberML: A couple of students went and said it was great, especially the lungs

**OmarR** : that looks wild.

**JeffC**: ok... how about any others? yeah... I think the kids would get a kick out of the skateboarder as well.

NicoleCM: I have heard about that

JeffC: I mean... here are plasticized human bodies... you wanna talk science !?

JenniferAr: no joke

AmberML: my kids begged for me to take them on a field trip

JenniferAr: they would have loved it

JeffC: my kid's been begging me to get on the computer.

**JeffC**: so... aside from reminding people to join this group, post to discussion, and most importantly, \*come back\*, I'm going to take my leave for the day.

**OmarR** : that would be so interesting

**JeffC**: ok... I'm going afk... have fun everyone! Bj will be here for any TI related issues... and I'll stay logged in and respond to questions later.

OmarR : ok

JenniferAr: thanks Jeff

**JeffC**: Again... join by clicking the little "i" in the green circle in the Welcome box... then the link to "join this group." There is no commitment when you join. However, if you really would like to be active, simply email me or make note of it here in chat and I'll promote you to Moderator, and we'll talk later.

JeffC: you're welcome.

JeffC: Please continue to post ideas as well...

JeffC is now afk.

BJB2 listens for more discussion

BJB2: Jeff does have a lot of resources in this room...

**BJB2**: and, as he mentioned in the Math discussion, the discussion board is an archive of wonderful resources

JenniferAr: I agree

BJB2: but, the resources come from the group members!

JenniferAr: so true

**BJB2**: which is one reason he would like you all to join the group and add your ideas, favorite sites, questions, etc.

**AmberML**: I am still learning about tapped in, I see there is a lot, but I just haven't had the time to figure it all out yet

**OmarR** : me to

AmberML: I need to attend one of those tours

BJB2 nods to Amber. Did you participate in any of the tips and tricks?

JenniferAr: I am with Amber

BJB2 nods to Amber.

**BJB2**: tours help a lot...if for nothing more than to help you feel more comfortable in exploring

BJB2: you all know how to access the calendar?

NicoleCM: yes.

JenniferAr: I need to do a tour

**OmarR** : yes

AmberML: yes

BJB2. o O (Tapped In tab and then calendar in the blue bar)

JenniferAr: yes

OmarR : ok

BJB2: and you made sure your calendar is set to your time zone?

**OmarR** : yes

JenniferAr: yes

**BJB2**: excellent! That's half the battle! ;-)

**BJB2**: Do you know about the Tapped In Festival?

OmarR : no

**NicoleCM**: what is that?

**BJB2**: July 25

JenniferAr: no

**BJB2**: theme is Playing to Learn

JenniferAr: what do you have to do

BJB2: 12 hours of discussions all based on the theme

**OmarR**: 12 hours

JenniferAr: for that day

**BJB2**: anyone who participates in three events is eligible to get a Certificate of Participation

JenniferAr: cool

AmberML: I will have to check that out

**BJB2**: let me get you the webpage

**OmarR** : that's worth it

**BJB2**: there is also a podcast contest

BJB2: http://tappedin.org/tappedin/web/festival/

**BJB2**: there is a link to a flyer you can print out

BJB2 . o O ( use it as a handout for your colleagues )

**OmarR** : printing

BJB2 tries not to print more than she has to!

**JenniferAr**: to let them know about tappedin

BJB2. o O ( but some people are still tied to sheets of paper as security blankets ;-) )

OmarR : haha

JenniferAr: yup

**AmberML**: thanks for your tips, maybe I will see you at tips and tricks later this week! I gotta run, I am supposed to be at an online class for SDSU

BJB2 waves bye to Amber

OmarR : good luck

**BJB2**: thanks for participating in the discussion

JenniferAr: bye Amber

**BJB2**: nice thing about online classes..no travel time

NicoleCM: Bye Amber

JenniferAr: I agree save money on gas

**BJB2** nods

**OmarR**: any saving in gas is good

BJB2: anyone have any other questions on anything?

**BJB2**: oh...just a sec...I have something to show you related to gasoline

JenniferAr: not really only that the math session was great

BJB2: <u>http://worldwithoutoil.org/</u>

BJB2: I believe that site is closed now to participation...

**BJB2**: but it is a very cool idea for a project based lesson

**BJB2**: there is an archived transcript about the project. It was one of the Social Studies Forum events

BJB2: www.tappedin.org/transcripts

JenniferAr: you answered my question

JenniferAr: thanks for all the good info, I will share it with all my teacher friends

**BJB2** waves bye and heads for Michael's Tips and Tricks

OmarR : ok. me to

NicoleCM: good bye all

JenniferAr: bye to BJ and Jeff