

Title of Session: Science Resources K-20

Moderator: Jeff Cooper

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Room: Science Resources Group

LizT: great! Holidays are here in NSW so finally have time to undertake some indepth exploration with you guys

JeffC: Elizabeth, have you been able to use your classroom here with your chemistry students?

DrChristo: Yes, I have regular office hours.

JeffC: great

DrChristo: In fact, I'm supposed to be there now, but no one is there, so I came here.

JeffC: how about in school? Any opportunity to bring all your students online for lessons, etc.?

DrChristo: I've thought about it, but I haven't done it yet.

JeffC nods

DrChristo: I was thinking of having everyone log on during a lesson

JeffC: Welcome to Science Resources K-20+ everybody. Let's start with introductions.

JeffC: What I would like to know is who you are, where you're from, and what you're looking for.

JeffC: Lessons/Sites/Collaborative Partners, etc.

JeffC: I'm Jeff Cooper and on Helpdesk here and I facilitate this group, but I'm not a science teacher. I'm in Forest Grove Oregon with three great kids... who currently aren't yelling at each other. I look for ways to get teachers to support each other here, and support a number of professional development groups as well as university and K-12 classrooms.

LizT: high school teacher NSW, Australia, looking to learn about tapped in to use as a resurce in future

DoloresG: Computer Lab Teacher, K-8 St. Louis, MO - ideas to use with students to

reinforce and expand upon homeroom lessons

DrChristo: My name is Elizabeth, I teach chemistry at a private Catholic girls school in Connecticut. I'm looking for resources and ideas.

JeffC: great

JeffC: first thing... if you haven't already done so please join this group

LizT: my name is also Elizabeth so slightly confusing until I sorted out who Elizabeth was referring to /laughs

JenniferR1: jennyr/tamuk(student-junior)here for educational exploration--I want to find future teaching tactics so I can have for my future students. ideas as well

JeffC: click the little "i" in the green circle at the end of the Welcome box to pull up this group's profile, then click the link to "join this group."

JeffC: then click the "Room View" button to return to the Welcome screen.

JeffC: once you've joined, you'll be able to post to Discussion which acts as a mini-listserv-- forwarding via email to all the group members.

LizT: clarification please - are transcripts of these chats sent to our email address?

JeffC: then... take a look around at the resources/links here... and post to Discussion if you like. yes... transcripts are automatically sent, but I'm talking about Discussion posts... those will be sent to your email address as well if you join this group.

LizT: thanks

BJB2: . o O (the email address you have on your membership form)

JeffC: I'm going to leave you in the capable hands of BJB and Susan for 10 minutes while I fly out the door to pick up my oldest son... please join, look around (the Whiteboard has three other sites I'd recommend registering/visiting) and I'll discuss when I get back in 10.

JeffC flies out the door and is afk.

LizT: . o O (can you change email addresses as I think the one I have provided will quickly be overwhelmed)

BJB2: yes, Liz

BJB2: go to the ME tab at the top of the web window...then click on Settings in the

yellow menu bar

LizT: will transcripts be lost if I change while online or best to set up new account later?

BJB2: if you change the address before you log out, the transcript from this discussion will go to the new address

JenniferR1: when I was on Tapped In last time, my transcripts got sent to "spam"mail...why is that?

BJB2: . o O (logging out is what triggers the script to be sent)

BJB2: Jennifer, did you add the TI address to your address book?

BJB2: . o O (yahoo likes to put TI messages in spam)

JenniferR1: no..is that why?

BJB2: but if you add the TI address you should be ok

BJB2: mail-service@tappedin.org

JenniferR1: great...I will do that...I was wondering why...I couldn't find it and by chance before I erased all my spam, I checked it and there it was...thank you for the info

BJB2: you're welcome. Hotmail does the same thing

LizT: just for future reference, the NSW DET portal doesn't really like TI messages either - gives a warning message as it doesn't recognise TI as legit

BJB2: can you edit that portal to accept TI?

LizT: only the internet gurus can edit portal so Ill switch providers and bypass using a different provider

BJB2: nods...that works

BJB2: you also might want to look at the TI FAQ page...

BJB2: and pass that on to your 'gurus'

BJB2: <http://ti2.sri.com/tappedin/web/help/faq.jsp>

LizT: try to but they aren't too happy with teacher discussion boards etc from many places

LizT: on a more immediate basis will I need to block pop-ups here or I may lose you again

BJB2: another resource for you, Liz, is Dianne Allen. She's in Kiama so at least she's closer to your time zone.

LizT: thanks for the contact

BJB2: Dianne is a helpdesk volunteer

LizT: lives in a very nice part of the world too

BJB2 smiles. One of these days I'd love to visit!

JeffC is back... reads what's transpired.

BJB2: networking, Jeff ;-)

LizT: just think white sandy beaches, basalt headlands, coastal drives and beautiful weather for about 360 days of the year

JeffC: looks like... and one more issue about accessibility... most districts *do filter Tapped In*! (unfortunately)... and the process to get it unblocked is often a hassle.

JenniferR1: well I hate to leave but I must go...my little girl needs me...she fell so she is crying...nice chatting with you all..good night

BJB2 waves goodnight to Jennifer

JeffC: gnite Jennifer... please stay logged in if you can.

LizT hugs to daughter

LizT: sorry should have been an action

JenniferR1 left the room (signed off).

JeffC: what I'm going to suggest is something to start getting you thinking a bit outside of the box regarding what you do with your science class.

JeffC: Elizabeth has already created a virtual classroom here...

SusanR listens intently

JeffC: I'd recommend that more science teachers do the same... then arrange for an intercontinental science project.

LizT: or exercise like calculating the size of the planet using shadows?

JeffC: many science related projects involve experiments... why not come up with a group of science classes... have them find an appropriate experiment that would have differences around the world (due to climate, etc.) and then collaborate here?

JeffC: that sounds like a great idea too Liz... how many ideas can we come up with for teachers/students/classes collaborating on experiments, etc.?

DrChristo: I'm thinking something that relates to climate change.

DrChristo: Like maybe CO2 levels in the atmosphere

JeffC: we have the links here, the tools and people... why not teach outside the boundaries of your own class? exactly Elizabeth... climate change is a major topic and could easily transfer into social studies, etc... lots of stuff to look at, analyze, report and discuss.

JeffC: btw... if you haven't done so already, please join this group by clicking the little "i" in the green circle in the Welcome box in the top frame, then the link to "join this group."

LizT: what about carbon stores in different environments?

JeffC: carbon stores?

LizT: we have different tree growth to you guys in the northern hemisphere

JeffC: that sounds interesting

LizT: carbon stores - sorry I'm a bit excited re this prospect and the fingers have a mind of their own at times

JeffC: it's moments like this that I wish I was a science teacher, because I'm not familiar with the term "carbon stores."

SusanR: <http://news.bbc.co.uk/2/hi/science/nature/3667979.stm>

SusanR: we have to reduce our carbon footprint

JeffC: right... ok.

JeffC: how about utilizing some of the sites that discuss carbon footprints, have students do various projects and report back results.

LizT: carbon stores or sinks - where the C is held in the environment eg oil, coal

LizT: trees and soil are also sinks

JeffC: Liz... both **DrChristo** and Dolores have K-12 classrooms here... I'd love to have you create one as well... and then I can facilitate collaboration between the classes (and find more) that are possibly interested.

LizT: can we talk later re how to set one up?

DrChristo: We could compare carbon footprints for schools in different areas.

JeffC: unfortunately... I have to run out the door again and probably won't be back! I'd love to have you all discuss carbon stores, collaborating, and the sites in the Welcome page etc. I will be happy to help you set up a classroom later, Liz.

JeffC: thanks again for coming everyone... sorry I have to run! afk

DrChristo: By Jeff

LizT: Or maybe compare the C storage in different soils?

DrChristo: How would you measure it?

BJB2 wonders how that would be done also

LizT: C can be measured by measuring mass of the dry soil (after evaporating the moisture) and then burning the soil - this converts all organic matter to CO₂, difference in mass before and after burning is a relative indication of C content

LizT: some of the organic matter converts to charcoal so method gives a relative indication not an absolute

BJB2: ack...I was going to suggest setting the soil on fire...but figured that would exacerbate the global warming problem

BJB2 . o O (and I thought you would laugh at my silly suggestion ;-))

DrChristo: Can you do it on a small sample size?

LizT: you only do small samples eg half an evaporating basin maximum

LizT: not silly as you can see

BJB2 nods solemnly

BJB2 . o O (been participating in too many TI discussions!)

LizT: did this back in uni when doing soil science subject and have found it useful in a number of situations

DrChristo: Can we connect C content in soil to climate change?

LizT: one of the current discussions over here is how to increase soil C to decrease atmospheric CO₂ and how much impact would it have

LizT: Oz soils are traditionally low in C and depending on farming techniques can be almost impoverished

LizT: more C apparently helps to increase numbers of microbes and worms

LizT: maybe we could start with a comparison exercise to see if soils do differ across the globe in C content?

DrChristo: That's a great idea. I was thinking that, too.

DrChristo: I wonder if C content changes - we could test at different times of the year, too.

LizT: could also compare 'natural' or undisturbed ecosystem soil with disturbed ecosystems?

DrChristo: City vs. country?

DrChristo: Could we also test CO₂ in the air - though I'm not sure how.

LizT: I'm in an urban area so have access to relatively undisturbed areas, orchard areas cropping areas and stocked areas

LizT: stock = cows and sheep a fairly diverse economy here

DrChristo: We have both city and country around here.

LizT: fingers are getting excited again

LizT: what type of country?

DrChristo: Orchards, too

DrChristo: Small farms

LizT: ours are stone fruit - mainly cherries

DrChristo: Apples, mostly here.

LizT: this could be interesting and could easily get bigger than ben hur if we don't keep a tight rein on direction

DrChristo: Yes.

DrChristo: Let's start small - test some soil.

BJB2 is excited just listening!

LizT: what type?

SusanR finds the discussion interesting

LizT: as in school yard?

DrChristo: On campus, perhaps.

DrChristo: What type of campus do you have?

LizT: grass oval + treed areas

SusanR . o O (wonders if you can purchase carbon credits in your neck of the woods)

DrChristo: Lots of cars around, so it would be sort of urban.

LizT: not enough trees unfortunately

DoloresG: Yes, this is interesting, but way above the level where I will be working, so, I am going to leave. Thanks, and good-night to everyone and I hope your well-laid plans will work out very well .

DoloresG left the room (signed off).

LizT: campus is in middle of town on side of hill, but grass oval is flat

DrChristo: The depth of the soil would matter, wouldn't it?

LizT: yes and is a variable that will need to be controlled - say 15 cms to top of sampled area?

DrChristo: We would probably need to take several samples around the campus and see if we can get an average.

LizT: it will depend on depth of top soil as well

LizT: samples will need to be from similar environment to reduce confusion

LizT: if the averages are significantly different, it could indicate we are onto something or nothing at all!

DrChristo: I think the key would be in having enough samples that we could make definitive comparisons.

BJB2 wonders if Liz and Elizabeth would give permission for me to use this dialogue in the October TI Newsletter?

DrChristo: Sure.

LizT: areas that are regularly fertilised would need to be excluded if the fertiliser includes

LizT: sorry just had a phone call that distracted me

DrChristo: Liz, let's plan a time to get together to talk about this more.

LizT: if the fertiliser has C in it, the fertiliser will upset the C soil content

LizT: good idea maybe think through what we want and how first?

DrChristo: Right.

LizT: can I email you direct or use the discussion board? I'm new to this

DrChristo: My email address is echristophy@sha-excelsior.org What's yours?

DrChristo: I have an office here - we can meet there.

LizT: LizTelford@internode.on.net

LizT: do you mean a TI office?

DrChristo: Yes.

LizT: do I leave a message there?

DrChristo: I don't think you can. Let's email and set up a time to meet there.

LizT: sounds good

DrChristo: Okay. I'll talk to you soon, then. I think this will be a good project!

LizT: I'm on school holidays for this and next week so have time to get my head around some of the issues

DrChristo: Enjoy your holidays!

LizT: thanks BJB and the rest of you for letting us hog the discussion I hope that when this comes off that you will all get some new info

BJB2: thank you for the great discussion!

SusanR: please report back your findings

BJB2: yes, we'll all be waiting to hear what transpires

LizT: is this the way that these normally run or have Dr Christo and self just hijacked the forum?

BJB2: Liz, most discussions tailor the discussions to meet the needs of the participants

BJB2: and since Jeff had to leave, you two did exactly that...and we all benefited

LizT: great

BJB2 waves goodnight.

DrChristo: Goodnight. Liz - I'll be in touch.

LizT waves