Title of Session: Science Resources K-20 Moderator: Jeff Cooper Title of File: 20070501science Date: May 1, 2007

Room: Science Resources Group

DavidWe: Shall we begin with introductions, folks?

AshleyE: Sure. I'm Ashley. I just finished my student teaching in Sugar Land TX, and will be a special ed teacher in the fall

AshleyE: I will be teaching Autistic students

DavidWe: I'm David Weksler. I'm one of the HelpDesk volunteers and I lead a math education and technology discussion here. I'm in New Jersey, near New York City

MaureenB: Maureen 4th grade Putnam County, NY

SusanR: Sue from Canada. I lead the K to 3+ Great Resources sessions here

EmilyW: I am Emily and I am on Tapped In helpdesk, and I am in DC and I design websites

SusanR: I am tutoring grade 3 and 6 students in preparation for formal testing

SusanR: and subbing in kindergarten

DavidWe: So, Ashley...what interests you about this discussion topic?

MaureenB . o O (I was testing my 4th graders today too in science)

AshleyE: Well, in sp.ed. I like to do a lot of hands on activities

DavidWe: What do 4th graders need to know about science in Putnam County, NY, Maureen?

MaureenB: the hands on piece is measurement

MaureenB: electricity and magnets

DavidWe smiles

MaureenB: force and simple machines

AshleyE: The students don't really retain a lot of info so the little they do means a lot

AshleyE: Hands on is more fun anyways

SusanR . o O (love those topics)

MaureenB: yes the least stressful of the 4th grade tests

MaureenB: biggest problem is following directions

DavidWe smiles

AshleyE: With me? YES...I agree!

MaureenB . o O (biting my tongue all day)

AshleyE: I'm sure with everyone though

JeffC: so we have 5 Helpdesk members here and two teachers in need of help! (if his math is correct)

MaureenB . o O (here often enough to become a help desk person)

JeffC: So... Maureen and Ashley... would you like me to get you some sites, or something else?

AshleyE: sure sounds great

DavidWe: Do you know some online resources for science, Ashley?

DavidWe: I'm sure we all know some

AshleyE: well, I basically just do engine searches for lessons I need. Not anything in particular

DavidWe: Science museums have wonderful web sites

MaureenB: my favorite site http://www.bbc.co.uk/schools/scienceclips/index_flash.shtml

DavidWe: The Franklin Institute, The Lawrence Hall of Science (at UC Berkeley), The Exploratorium in San Francisco

MaureenB: covers almost every topic for all age groups

AshleyE: and all functioning levels too?

AshleyE: My students are pretty low. Maybe even lower than pre-k

MaureenB: it is very interactive

JeffC: Here's one for you Ashley: http://www.engagingscience.org/games/

MaureenB: and it reads for them

AshleyE: ok

JeffC: low level... kind of fun.

AshleyE: in some cases

AshleyE: with science projects, behavior has a lot to do with why we don't do some of that stuff

JeffC: Here are some low level offline science activities: <u>http://www.fi.edu/tfi/activity/act-summ.html</u>

AshleyE: sounds great thanks Jeff

DavidWe: Here's the Lawrence Hall of Science web site:

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

DavidWe . o O (and the Exploratorium - <u>http://www.exploratorium.edu/</u>)

AshleyE: Thanks David

DavidWe: They have wonderful things, Ashley

DavidWe: I'm sure there are other museums, but those are 3 of my favorites

DavidWe: Very well done, very good school-based lessons with supporting materials for teachers

JeffC: Here is a shortcut for David's site to kid related activities from the Lawrence Hall of Science:

JeffC: http://www.lawrencehallofscience.org/kids/

AshleyE: Well, I will have fun looking at ALL of the sites ya'll have suggested today.

SusanR : <u>http://epa.gov/climatechange/kids/index.html</u> ...global warming

MaureenB . o O (will take me a week to check them all out)

JeffC: If you want dozens (hundreds?) more on Math and Science, I have folders for both in my public bookmark site at <u>http://www.mybookmarks.com/public/coops</u> ...I haven't updated it recently though... I'm sure some of the links are inactive.

AshleyE: well thanks

MaureenB: thanks

EmilyW looks for her science websites

DavidWe: This is a network of science museums that was organized maybe 10 years ago - the Science Learning Network (SLN)

DavidWe: <u>http://www.sln.org/</u>

AshleyE: thanks

EmilyW: http://www.sciencenetlinks.com/

SusanR: just noticed Exploratorium has an association with SecondLife, David and Jeff

DavidWe: cool

JeffC hasn't really explored SecondLife.

DavidWe hasn't either

AshleyE: Well okie dokie

JeffC: cool Susan

JeffC: let me shift gears away from sites for just a bit.

MaureenB I have and was confused

MaureenB: by Second Life

JeffC: I know that your students may have limited tech skills... but last year with my daughter's 2nd grade class, we created powerpoints on the solar system.

JeffC: it is *not* beyond a student's capability to do that... with the right support.

AshleyE: true

JeffC: now... if you want... I can take you to that room and show you some of the things we did... and how you might adapt my techniques to your classes.

AshleyE: sounds great

JeffC: you up for that Maureen? (and wonders if Maureen wants to join this group as well).

MaureenB: I would love to see it. I do a lot of PP with my class

JeffC: ok... then when I leave, type: /join Jeff C

MaureenB . o O (sounds like a plan)

JeffC left the room.

SusanR: any questions about SecondLife?

AshleyE left the room.

MaureenB left the room.

Room: Matzke Grade2 Group (K-12)

AshleyE: my math teacher showed us last semester

AshleyE: that is really neat

JeffC: Powers of 10 is fun for the whole family! And of course... it integrates science and math.

JeffC: Now... what I've done with this room is post up a few (well... more than a few) sites for the kids to visit.

AshleyE: ok

JeffC: They all learned how to copy/paste into Powerpoint.

JeffC: My daughter's Powerpoint on Pluto is featured if you want to take a look at it.

AshleyE: where again

JeffC: Now... I'm not saying do a thing on the solar system... but this is one way to get the kids actively engaged. Her powerpoint is to the left of the pic... Pluto--Nora.ppt

AshleyE going to look

JeffC: Take them to some fun sites too... like <u>http://www.yucky.com</u>

JeffC: I *would* recommend if you have school access to create a K-12 classroom for them.

JeffC: This will give you a way to post up resources, etc. and a starting point for exploration on whatever topic(s) you choose.

AshleyE: Thanks

AshleyE: She did a great job

AshleyE: second grade you said?

JeffC: thanks... I'll tell her! yup... this was last year's class.

JeffC: this year I'm supporting her 3rd grade class and doing Rainforest Animals.

AshleyE: I did part of my student teaching in 3rd and some of them couldn't do that

JeffC: they can if you help them.

AshleyE: yes I know

JeffC: now... there are other things here as well... like their letters to Ms. Molnar's class... for those... the teacher had them write longhand... and she and I did the typing.

AshleyE: Understandable

JeffC: the big thing there is that a lot of students who would only write a sentence or two in writing assignments really took off and wrote entire pages (or more).

JeffC: the key there is relevance... so... now... how do you make science relevant to young kids?

JeffC: how do you make it interesting? Maureen... you said you needed to teach levers, etc., right?

MaureenB . o O (congrats to Nora great job)

JeffC: why would a kid care about that sort of thing?

MaureenB: we start the year with lots of hands on experiments

JeffC: cool... what about?

AshleyE: show them something real, tactile then show the correlation between that and something larger

MaureenB: first unit is how a scientist works

MaureenB: so we go through the steps of the scientific method

AshleyE: or something different

JeffC: ok... so why should they care about the scientific method or how a scientist works?

JeffC: or thinks?

MaureenB: I show how they can break down any problem

MaureenB: using data and educated guesses

MaureenB: and they can play with the tools of science

JeffC: ok... that's all good... and I think that *play* is *extremely* important.

AshleyE nods in agreement

JeffC: do you have access to a digital microscope?

MaureenB: food chains food webs is the second unit and we dissect owl pellets and take field trips to the local marsh

MaureenB: yes through the HS

AshleyE: sounds like a fun classroom

AshleyE: do you look at bones from the owl pellets...like from what they ate?

MaureenB: I just got a document camera so it is so easy to make things visual

MaureenB: yes and then reconstruct a full skeleton

JeffC: ok... and you can get digital microscopes fairly cheaply on ebay for instance: http://cgi.ebay.com/Intel-Play-QX3-Microscope-Digital-USB-200X-With-Slides_W0QQitemZ120115079948QQihZ002QQcategoryZ53155QQrdZ1QQcmdZView Item AshleyE: how neat is that?!

AshleyE: I wish my students could understand that type of stuff

MaureenB: if they don't have enough bones, they are invited to go to the "bone graveyard"

AshleyE: awesome

JeffC: I think finding ways for them to go "wow... that's really cool!" is really important... which is why I like yucky.com for example (except there they'll go: "wow... that's gross"!)

JeffC: kids like to be grossed out.

MaureenB: and for the allergic I have a virtual dissect site

AshleyE: well, if I ever do science in general ed, I will definitely do stuff like that

DavidWe . o O (some adults, too)

AshleyE agrees

JeffC: now... NCLB has really taken the fun out of a lot of things... science is no exception... funny that you should mention dissection Maureen... I just read today that they've eliminated it from curriculum in one state because it wasn't part of the high stakes mandated test.

MaureenB: yep we read the book All About Poop with it real gross out

JeffC: but I agree... that even going to a virtual frog dissection site will get kids intrigued (to say the least).

AshleyE: sure

MaureenB: you are right they are taking the fun out of things

JeffC: and science really *should* be one of their funner classes.

AshleyE: I agree!

JeffC: even doing something as mundane as a virtual weather project... getting kids to compare notes with other students around the world as to what the weather is like... can be fun.

JeffC: or get into some more project related activities... like pollution in your town...

AshleyE: I didn't have that much fun when I was in school, and now I want the students to have fun

AshleyE: get interested in different things

MaureenB: I was involved with a weather station that reported data to Ch 4 News but something happened to it

JeffC: here's one site that has quite a few PBL related to science: http://web.stclair.k12.il.us/splashd/Experimt.htm

JeffC: because we tend to teach inside the box... and science really screams to get the kids thinking outside of the classroom.

AshleyE nods in agreement

JeffC: even getting into cross-curricular activities... think about global warming... and politics...

DavidWe smiles

JeffC: learn about the Ross Ice Shelf and when it goes that the world oceans will rise 20 feet.

JeffC: I'm sure that will scare the heck out of them... I know it does me!

JeffC: and then get them thinking "well... what can *I* do about it?"

AshleyE: True

MaureenB: We do that with the owl pellets and reading the book "There's an Owl in my Shower" and have a debate about environmental issues

JeffC: personally... I think that if kids get involved on a local level... then they can attract some media attention... by getting involved... they can make the world a better place even if the impact is marginal. The point is that it's a *huge motivating factor* and really ups their self-esteem.

JeffC: that's great Maureen

DavidWe agrees with Jeff

DavidWe looks at the clock on the wall

JeffC: everyone can figure out ways to make this a better world... my own little personal crusade is getting local tv stations to take down scam infomercials.

DavidWe: Well, at least close to the end of the discussion

JeffC: yup... we're pretty much through for the day.

JeffC: I'll leave you with the instructions on how to create your own K-12 class.

JeffC: although Maureen already has one!

AshleyE: sounds good to me. Thanks.

MaureenB: thanks as always very informative

AshleyE: Thanks to everyone for today's help and sites.

K-12 Student Group Creation

1) Click the Tapped In tab in the top frame

2) Click the Groups subtab

3) Click the Create a new K-12 Student group link

4) Read all the terms... (recommend copy/pasting the agreement into Word for later use)... check the box saying you agree to the terms... click Continue

5a) Name your group: (ex. Mr. Cooper's AP English) 28 characters maximum.

5b) Nickname: Give it a nickname (ex. cooper_ap) 10 characters maximum and *no spaces* This will be the name of your group room. Empower your students by asking what they want the nickname to be (panthers, peacenicks, etc.)

5c) Purpose: The purpose can be what you want... teach online with your class, collaborate with other classes, etc. This shows up on your group profile page (and may be edited later).

5d) Topics: Select up to three topics that relate to the group (ex. ESL, Language Arts, Technology Education) for your group's profile.

5e) URL: You may type in your school's homepage or any appropriate link. Be aware that this will also show up in the group's profile. If you are looking to collaborate with other K-12 educators, consider giving the teacher's homepage with information that you are looking to collaborate with other teachers and students.

5f) Duration of Group: Defaults to 3 months, can be up to 12 months. The group may be renewed later by the Owner or Moderator.

5g) Grade Level: Elementary, Middle, or High School

5h) Number of Accounts: Select the number of students in your class and add 5 (just in case). If you have more than 50 students select 50 (more may be added manually later). Also consider creating more than one K-12 group.

5i) Prefix: Prefix may be no longer than 6 characters. Prefix will generate default student names (student names can be edited later) If you don't plan on changing their user names, these names will be used by the students with numbers attached. (ex. choose "coops" to autogenerate coops01St coops02St etc.). All students automatically have the St suffix added to their user names.

5j) Click Next

6a) Specify a password: Type it twice, at least 5 characters. All students will login initally with this password. Once logged in, they should immediately change it so that other students cannot use each other's accounts. (more on this in the Quicknote K-12 Group Management). Owners and Moderators may change individual passwords at any time.

6b) Join K-12 Students Box: Check the box to join the K-12 Students group. This is a support group for educators with K-12 students. In addition to posting questions regarding help for your group, you may also post requests for collaboration, lessons, etc. This group has over 400 members at Tapped In.

6c) Click: Create Group: This will create your group. If you are unsatisfied or need to make any changes, simply click the Back button instead.

7) You may now click the link at the bottom of the page to enter your K-12 Class!

MaureenB: yes but haven't used it but will once the state testing is through

JeffC: those will be in your transcript...

AshleyE: Thanks

JeffC: I spend my Saturday morning advanced tour getting people up to speed with K-12 classes here.

JeffC: and one final little thing...

JeffC: whenever I'm here... I like to perform a magic trick.

AshleyE: ok

MaureenB: should come for a refresher

JeffC: click the Welcome link on the left of the top frame.

JeffC: that will refresh it.

JeffC: and presto changeo... you now see a different picture and different links...

AshleyE: okie dokie

JeffC: very easy to do... and basically... allows you as the teacher to give a different classroom look depending on what you're teaching your students when you bring them here.

AshleyE: ok

JeffC: all I did was un-feature the Space Image Note and Space Portal Sites and featured what you see now.

JeffC: so... thanks very much for coming...

AshleyE: Thanks to everyone for today's help and sites.

MaureenB: thanks again thanks

JeffC: my son has been bugging me to use the computer... so... I'm going to let him on.

DavidWe: Thanks, Jeff

DavidWe waves and heads to Reception

DavidWe: Good luck, Ashley

JeffC: thank *you* David... and you too Bj.

DavidWe smiles

DavidWe left the room.

JeffC: later all... I'll be lurking in my office.

AshleyE: Have a great evening

JeffC: btw... you may add this room as a favorite if you want.

JeffC: as you can see... I've left it open for visitors.

AshleyE: already did

JeffC waves bye for now!

JeffC: great Ashley!