**Title of Session:** 7-12 Science Forum

Moderator: Jeff Cooper Title of File: 20031202712sci Date: December 2, 2003

Room: After School Online

**JeffC**: Glad to have you here Annie... how did you find out about Tapped In?

**AnnieR**: My computer class at school.

**JeffC**: great

**JeffC**: So many times we do things because we are "required" to do so... to me... this is antithetical to learning.

**Jeff**C: If you come back... and you're not required to be here... then we have something going... more motivated learning for starters.

AshleyGst6: Sometimes you don't discover things until you are required to do them!

AnnieR: I know

**ShannonMB**: Yes, that is certainly true for me...

**JeffC**: So that's one reason I'm glad that Annie, and others here, are logged in. Good point Ashley... but... there are different ways to reach those requirements.

AshleyGst6: How?

**JeffC**: Personally... I think that if you tell 35 students to learn one thing, there will always be a percentage who will drop out mentally.

**JeffC**: By giving them choices.

**ShannonMB**: Honestly for me I know I can benefit by these science and Math web-sites because those are my two weakest areas as a middle grades (ss/lart) mjr. Now teaching all subjects at the elm. level....

**JeffC**: Letting them take part of the process. For example... have any of you ever let students take a look at lesson plan sites and choose a lesson to learn?

**AshleyGst6**: no, does it work

**JeffC**: Well... one never knows till one tries.

**JeffC**: Check out this site: <a href="http://www.nytimes.com/learning/">http://www.nytimes.com/learning/</a> **JeffC**: And while there.... look at the lesson plan archives: <a href="http://www.nytimes.com/learning/teachers/lessons/archive.html">http://www.nytimes.com/learning/teachers/lessons/archive.html</a>

**ShannonMB**: Jeff, let me ask...I know this is for middle grades, but what are some core topics that you believe should be covered in ELM school for science?

**AnnieR**: I like to give my students choices. The day goes much better when I am not fighting with them to do something.

**JeffC**: Consider this... have students go and explore and report back what they would find interesting... let them teach and learn cooperatively...

**JeffC**: Annie... I don't personally believe in any "must" know... I believe in "must want to learn"

LauraAW: that's hard with standardized testing

**JeffC**: But... if you want programs that deal with that... I'd recommend Schoolkit, because it places student-centered interactive and constructivist lessons in conjunction with MS Office, so students learn both.

LauraAW: is there a website for that

**JeffC**: I'm against standardized testing. My own son is facing it for TAG, and hates it. He is graded down because the "standards" don't cover division... so... when he was tested on it... he didn't do as well... and frankly... I find the situation surreal. http://www.schoolkit.com ...check out "Enactz"

**JeffC**: Standards are low for math here in Oregon (and elsewhere)... I was multiplying and dividing two and three digit numbers by third grade... they don't even teach division until late fourth now... and we're talking basic division here. So... what good are these standards?

**AshleyGst6**: But standardized testing is not going away...how do you balance student choice with required state standards?

**AnnieR**: I think most teachers are against standardized testing

**Jeff**C: Because an actively engaged student will do well regardless of how you get them there... but teaching to tests deteriorates the will to learn.

**ShannonMB**: Yikes...we begin mult in 2nd grade and division (heavily) in third...in GA **JeffC**: Right... but if most teachers are against it, and don't do anything about it... how are we going to change the system?

**ShannonMB**: What do you suggest we do and still perform our "jobs" as required by admin.

**JeffC**: Yeah... so... you can see why I'm a bit flummoxed as a parent Shannon!

ShannonMB: yes

**AnnieR**: The politicians need to feel like we are earning our "big" money

**JeffC**: I think that if you can find ways to really motivate students to learn the curricula through inspirational means... you won't have problems with students, parents, or even admins.

AshleyGst6: good point Annie

**JeffC** snickers at Annie (lol)

**JeffC**: The politicians feel that they (and everybody else) should have the right to dictate how our students are taught. That's why you have words like dictate, mandate, standards... all have negative connotations in my mind... try words like: motivate, facilitate, validate, collaborate... and then you have my attention.

**JeffC**: And I think the attention of many others... unfortunately... voices like mine are being muted by the current status quo... which moves ever vigilantly in the wrong direction

**AshleyGst6**: I agree but my job is on the line if my students do not pass these tests **ShannonMB**: You're right...we do tend to start furrowing our brow at the mention of those words...it is often difficult to keep that positive perspective in mind...

LauraAW: I almost feel like I have to "teach the test"

**Jeff**C: I think that teaching to these tests brings the students down... it's only a matter of time till it all crashes... if you have students who are completely test oriented... not involved with their education except for grades and tests.

**AnnieR**: They need to be looking at how well a child will do in the long run and not on the next test.

**LauraAW**: true...the child is also judged based on this test

**JeffC**: And... you can still get them to do well on tests by taking a different approach to the curriculum. Have them get involved with the Jason Project <a href="http://www.jason.org">http://www.jason.org</a> ...

or find interesting lessons online... or go to takingitglobal.org and get involved in a clean water project... the possibilities are there.

**ShannonMB**: yes, a great deal of my generation is a result of those practices

BJ . o O (Global Project Based Lessons is scheduled for Thursday of this week)

**AnnieR**: It is hard to get around some administrators...they think you must teach from the test only...

**JeffC**: Thanks bj>

AshleyGst6: very true Annie

LauraAW: does the Jason-thing cost?

**JeffC**: They're wrong Annie

**JeffC**: I think there is a minimal cost for Jason.

AnnieR: I know that and you know that but...

**JeffC**: And if teachers don't ever challenge or work with the administration to change it... we will never truly be educators.'

AnnieR: true

**JeffC**: We will continue to be part of the process that really does little to improve the student...

**ShannonMB**: Back to science....what are some other of your fav's

**JeffC**: Have you looked at my science folder at

http://www.mybookmarks.com/public/mathscience ?

**JeffC**: Because.... I want you to add yours as well... <a href="http://www.yucky.com">http://www.yucky.com</a> is always a favorite with kids.

**ShannonMB**: yes, but haven't had enough time to fully explore them...will do at a later time

**ShannonMB**: thanks

**JeffC**: <a href="http://www.enc.org">http://www.enc.org</a> is a must... you need to go there and register... subscribe to a listsery or two.

**JeffC**: There are a myriad of projects that you can join as well... Global SchoolHouse ... <a href="http://www.globalschoolhouse.org">http://www.globalschoolhouse.org</a> (I think that's it)... that's where I got started with project based learning...

**JeffC**: The important thing is that you can deal with standards, and still be interesting. **ShannonMB**: Thanks...these are exactly what I'm looking for...the yuck one looks neat **JeffC**: Go to the New York Times Learning Network... assign students to find a lesson they are interested in... then teach it as a group.

**AshlevGst6**: good ideas...thanks for the websites

**JeffC**: For those who came late... if you go to <a href="http://www.mybookmarks.com">http://www.mybookmarks.com</a> and login: mathscience password: tappedin ...you will reach my sites for Math and Science... and... you can add your own.

**AnnieR**: I'll have to try some of these with my students

**AnnieR**: thanks

**JeffC**: What I'm trying to engender here is a collaborative amongst science and math teachers... you can help each other... work with each other... do projects with each other...

JeffC: Build your own cohort.

**JeffC**: How many of you are working collaboratively with other educators in your classes?

**ShannonMB**: We work with our grade level, but unfortunately go boringly with the curriculum....we need to spice things up a bit...

**LauraAW**: I would like to do more collaborative work

**LauraAW**: Shannon..that's kinda the way it is at my school

**AnnieR**: It seems like it would be more fun for both the students and myself **ShannonMB**: I guess we have to be the innovators for the "spice", Laura

LauraAW: lol

**JeffC**: I'd recommend hooking up with one of the projects already going and established.

LauraAW: the globalhouse website is cool....

**JeffC**: Jason, Mayaquest, there are others... work with others to find the good ones. Most science teachers start with a weather project and leave it at that. I'd recommend going to some place like Global Schoolhouse, or <a href="http://www.takingitglobal.org">http://www.takingitglobal.org</a> and looking at some of the things they are doing.

**JeffC**: For example, billions of people do not have clean water... discuss.

**JeffC**: What's going on in the world that relates to science, and to our students' lives that aren't addressed in state standards... like... clean water... although I'm sure you could squeeze it in somewhere if you wanted.

**ShannonMB**: I agree those are much more serious topics that we could relate to if we were seeing what's in our and other's water...

AnnieR: I saw a really neat webquest about that a few weeks ago

**JeffC**: Tell us about it Annie... and thanks for reminding me... I'll put up a few good Science Webquests links.

**AshleyGst6**: that would be great Jeff

**AnnieR**: It was geared toward special ed. students and I wish I could remember where it was

**AnnieR**: I think it might have been on the webquest site

**CliffT**: the water topic is one of the most important issues of the decade and this century.

**CliffT**: I think this topic alone has a great deal of potential to be integrated with other subjects

CliffT: here are others AshleyGst6: very true CliffT: global warming CliffT: overpopulation' AnnieR: world hunger CliffT: over consumption

CliffT: all these issues provide highly integrated topics for study based upon the latest

scientific research

**JeffC**: I put together a number of Science Webquests at:

http://www.oten.info/resources/webguests.html

SusanR: Obesity???

AnnieR: yes we seem to have that problem more than anyone else

CliffT: falls within over consumption and American culture

**SusanR**: seems to be in the news...food science

**CliffT**: anyone ever heard of affluenza

SusanR agrees with Cliff

**Jeff**C: I think we need to think more about teaching across the curriculum... I think that the current NCLB insanity (pardon my politics) has taken us away from that... although I'm sure that somewhere it can be weaved together. Science and Social Science go hand in hand... but when was the last time someone at your school worked in a collaborative team on one of the subjects (or webquests) mentioned above?

**CliffT**: affluenza was coined by a sociologist, it is affluence + influenza

**CliffT**: this is either a great lead in or conclusion to studies about water, global warm, over pop

**Jeff**C: <a href="http://www.webquest.org/">http://www.webquest.org/</a> is of course another good starting point for webquests... you can also do a google search for "best science webquest" or check out Filamentality... **ShannonMB**: I don't believe anyone from my school has done that...

**AnnieR**: Most of the teachers at my school think the only way to teach is alone and their way

**JeffC**: None of the above Cliff... we're talking about strategies in general for dealing with Science Standards while simultaneously working on ways to inspire students to want to learn, rather than feeling mandated to teach to tests... it's all pretty tricky.

ShannonMB: Well, thanks Jeff for your sites...I've got to run...thanks again...bye

**JeffC**: Well Annie... there are teachers here that you might want to work with then... that is the way many teachers are in general.

**JeffC**: Which is really too bad.

AnnieR: yes it is because think of what they could do together

**AshleyGst6**: Thanks for the sites...and the insight into what learning should be..gotta go..bye

**CliffT**: scilinks is good site too

**AnnieR**: The students might not be so bored if they tried working together once in a while

**LauraAW**: do you see our education system going to a more collaborative method of teaching??

**JeffC**: Cliff... is it http://www.scilinks.com?

CliffT: yes

**AnnieR**: I think once our generation of teachers become the "old" teachers then maybe... **JeffC**: Thanks... I'll add it to my bookmarks... and again, I'd love to have people here add their own bookmarks to the Math and Science site...

LauraAW: I wish it would....it would make teaching a little more fun too!

**AnnieR**: no kidding

**JeffC**: I have my own little rubric about whether I would recommend something to use in a class: 1) Does it have an educational value? 2) Is it easy for teachers to use? 3) Is it enjoyable for students? 4) Is it cheap or free?

**LauraAW**: Jeff...thanks for all these sites...we are fixing to start a unit on astronomy...

**JeffC**: Notice that I didn't use the "S" word anywhere in that rubric!

LauraAW: there is some good stuff on here

**Jeff**C: Cool Laura... if you have any money at all... I'd recommend "Starry Night Pro" or Starry Night Backyard... you can see the universe...

**CliffT**: where can I find a list of these sites

**AnnieR**: thanks for every thing guys...gotta go...bye

LauraAW: neat...thanks

**JeffC**: <a href="http://www.mybookmarks.com/public/coops">http://www.mybookmarks.com/public/coops</a> (are all my K-20+ links... over 1600 of them).

**EricK**: Though I did not respond and make comments I did read them. Thanks, I appreciate the site links and info.

CliffT: ok got it thank you

**JeffC**: <a href="http://www.mybookmarks.com/public/mathscience">http://www.mybookmarks.com/public/mathscience</a> (is where the Math and Science only are)... and you can login: mathscience ...password: tappedin (to edit them) if you go to <a href="https://www.mybookmarks.com">www.mybookmarks.com</a>

**JeffC**: Any other questions, comments, suggestions?

**CliffT**: I strongly suggest major teaching in environmental issues

JeffC: Coool Cliff... I agree...

LauraAW: any suggestions for teaching ecology..food chain, etc

JeffC: One sec

CliffT: ecological issues will really take a front seat for this generation forward due to

some pretty big pending problems

**JeffC**: Laura... what grade?

LauraAW: 4th-8th

JeffC: Check out the NY Times

LauraAW: ok..thx
JeffC: Also check out:

**JeffC**: http://www.eduweb.com/ecotourism/eco1.html

**CliffT**: how about teaching them that meat doesn't come from the grocer

**Jeff**C: I enjoyed it... and I'd like everyone to consider working with each other in the future.

LauraAW: thanks for the enlightenment Jeff

JeffC: Well... hope it helped... and I'm around here (not tonight thought) ... if people

would like to chat about things another time

**JeffC**: We'll have these Science and Math forums monthly now.

SusanR: Welcome back, Laura. Would this site be useful for Grade 4

http://ecokids.earthday.ca/pub/splash.cfm...ecokids online

**SusanR**: or is it too juvenile, Laura **LauraAW**: I can't seem to pull that up

SusanR: I will try it again <a href="http://ecokids.earthday.ca/pub/splash.cfm">http://ecokids.earthday.ca/pub/splash.cfm</a>

LauraAW: s-that's great...

LauraAW: thanks

**SusanR**: Did it come up, Laura. I will add it to Jeff's Bookmarks

LauraAW: yep

SusanR: A neat ecofact of the day pops up!