

Title of Session: Science Resources K-20+ - FermiLab

Moderator: Jeff Cooper

Guest Speaker: Susan Dahl

Title of File: 20070807sciencefermilab

Date: August 7, 2007

Room: Science Resources Group

JeffC: OK everybody, welcome to Science Resources. My name is Jeff Cooper and I facilitate this group, though I'm not a science teacher. I'm always looking for guest speakers, presenters, etc. for this group. I'm on Helpdesk here at Tapped In, and try and make this group as collaborative as possible.

LizaR: I'm from TX, still a student, looking for extra credit (lol) and ways to entertain my 2 kids. They are 5 and 6 and into everything. Exploring outside and making gadgets from anything around the house.

DavidW recognizes some of the usual suspects from the last discussion

JoseRH: Hello my name is Jose. I am a full time student

LourdesR: I am graduating in about a week or so and look forward to teaching ELA in the middle school level. I am excited but at the same time a little bit nervous. Nonetheless, ready!!

JoseRH: I would like to have some more knowledge on everything that I will be teaching

SusanDa: Hello. My name is Susan Dahl. I in Batavia IL. This is my first chat with Tapped In although I participate in our own online programs at Fermilab's Education Office and am a facilitator

DavidW: I'm David Weksler. I'm one of the HelpDesk volunteers and I am in New Jersey, near New York City

DianaG: hi, I'm a full time student and plan to teach elementary pretty soon

DavidW: Hi, Susan. Glad that you could join us

JeffC: To that end, there are a number of links, discussions, etc. in the top frame that you're welcome to peruse. I encourage educators to join this group (scroll to the bottom of the "Welcome to Science Resources K-20+" box and click the little "i" in the green circle next to the link for this group, then click the link to "join this group>")

LourdesR: I am here for extra credit but look forward to learning something new as I have with the other discussions

JovanaG: Student in south Texas, just looking...also this will be used as extra credit for my course

DavidW: Jeff, Susan and I chatted a bit the other day about whether she might be willing to lead a discussion on some of the work she does with Fermilab

JeffC: That would be great David.

JoseRH: cool

DavidW nods at Susan

SusanDa: I'm happy to do that once I get the feel of who's here

DavidW smiles

EmilyW: I am Emily, helpdesk volunteer at Tapped In, and I live in DC.

SusanDa: in the mean time, I'd encourage people to check us out at: <http://ed.fnal.gov> - in case you don't know we're a high energy physics lab (U.S. Dept. of Energy) lab

LourdesR: I think a lot of us just came from the previous discussion which is pretty cool

DianaG: yup

JovanaG: thanks

JoseRH: cool

SusanDa: I am in charge of our Teacher Resource Center which is a preview center of instructional materials for PreK-12 + for math, science and technology

JoseRH: where

JeffC attended a Fermilab program back in 2000... I still have the webpage lying around somewhere for the work I did that summer.

SusanDa: so, lots of students checking in?

SusanDa: are you undergraduate education students?

JovanaG: yes

DianaG: yes

JoseRH: yes

LizaR: y

JoseRH: I finish this year thank God

LizaR: me 2

SusanDa: lined up with new teaching positions?

JoseRH: yes

LizaR: no, I'm not sure I have the patience just yet

LourdesR: I graduate on the 18 of August thank goodness

DavidW counts at least 6 folks from U Texas, Pan American in south Texas

JoseRH: that's great

LourdesR: looking at teaching ELA in the middle school

JoseRH: what is ELA

SusanDa: can I ask you students - does your coursework address the process of examining and selection science core curriculum programs?

LizaR: idk. but probably not if I'm not familiar

DavidW: Susan, I think the person responsible for most of the students from UTPA being here is actually an English Professor, Danika Brown

SusanDa: what do you come to this Resource room hoping to find?

LourdesR: You are so right David

DavidW: She has been really pushing the students to interact in Tapped In quite a bit

SusanDa: does she?

DavidW: Some of their classes meet in Tapped In, as well

LourdesR: helpful and interesting websites to learn from

SusanDa: I see

BJB2: Danika had a profile in a recent Tapped In newsletter

JoseRH: more information to better prepare me for when I start to work as a elementary teacher

JoseRH: I am so late with this response

DianaG: lol

JeffC: Well... personally I think that regardless of subject area, that teaching across curricula could (i.e. *should*) be a major process in achieving 21st Century teaching/learning goals. So, even if the people here are mostly English teachers, I think they can benefit greatly by becoming part of this group, and following Susan's lead.

JovanaG: yeah I had her about two years ago and that is when she first introduced me to tapped in

BJB2: <http://tappedin.org/tappedin/web/perspectives/2007/db.jsp>

JoseRH: this is my first year

JeffC: btw... if you're not looking at the resources in the top frame< I'd recommend clicking the Actions menu and Detach your chat (if you haven't done so already).

JoseRH: and I am happy to be here

DianaG: me too

DavidW: Our (Bj, Jeff, me) experience is that it is infrequent that pre-service teachers are introduced to Tapped In

LourdesR: this is my 1st time and I am really enjoying it as well as learning lots of helpful resources

SusanR: btw I am Sue Roseman, I moderate the K to 3+ Great Resources discussions. We meet the 2nd and 4th Tuesday of each month. I am in Ottawa, Ontario. I teach K to 8 on an occasional basis. I am here to brush up on my TI skills for the exciting upcoming school year.

DavidW: If some of you don't know, Fermilab is a MAJOR site for physics research and they have done a great deal of K-12 math and science outreach over the past decade plus

LourdesR: I did not know

JeffC hands the floor over to Susan.

SusanDa: So, the majority of you are finishing up your classes before next semester (?)

JoseRH: yes

SusanR: Thank you Jeff

SusanR: I will quickly put in a plug for my Back to School discussion, David and Jeff and then keep quiet

DavidW smiles

SusanDa: Yeah, Fermilab has not only a world renowned research program in subatomic particles but, Dr. Leon Lederman is a huge supporter of science educators!

SusanDa: So, over some 20+ years we established so many things for teachers

SusanDa: we have fieldtrips when elementary teachers take our workshops but you can see some samplers of them and even get the full teachers guide.

SusanR: The theme is back to school jitters, excitement and challenges. and some GREAT resources to kick off your school year and get you energized!!

SusanDa: One program is Beauty & Charm -

SusanDa: no, it is not learning etiquette skills.

DavidW . o O (quarks?)

SusanDa: have any of you ever heard of a particle called beauty?

SusanR thinks

SusanDa: also know as bottom, vs. up quark

SusanR: quirks and quarks

LourdesR: not really

LizaR: no

BJB2 confesses ignorance

JovanaG: no

DianaG: not sure

SusanDa: all of these names make up parts of the physics "Standard Model"

HilarioP: no

SusanDa: who's heard of something called the Periodical Table of the Elements?

EmilyW: me

LizaR: I have

HilarioP: me

DianaG: me

JovanaG: yup

SusanR: yup

DavidW was a chemistry major

BJB2 sighs happily...but last time I knew about it, it only had 50 elements ;-)

SusanDa: super! now we're getting closer.

SusanDa: so, the Standard Model is similar in physics to the Period. Table in chemistry

DianaG: ic

SusanDa: it's a model/table that shows how all of the subatomic particles fit together - quarks, leptons and gluons

HilarioP: got it

SusanDa: basically we study stuff you can't see by using the equation $E=mc^2$

DianaG: ok

JovanaG: oh

JoseRH: cool

SusanDa: we start with mass and accelerate it to the highest energy levels and see what's inside once the beams of particles collide

SusanDa: we use detectors to sort out the information and store it for analysis

DianaG: cool

SusanDa: our lab is on 6800 acres

HilarioP: wow

LizaR: impressive

SusanDa: in the western suburbs of Chicago if you can believe that

JoseRH: that is huge

DavidW believes it is underground

SusanDa: our largest accelerator is 4 miles in circumference (sp?)

JoseRH: even better

SusanDa: well, TX started to try to have something similar - any of you hear of the Superconducting Super Collider?

DianaG: nope

LourdesR: no

JovanaG: nope

HilarioP: no

LizaR: can't say I have

SusanDa: so, our large site also has a reconstructed prairie

DianaG: exactly where?

SusanDa: this really makes it all cool because we've got the physics research, the life sciences connection, technology since the WWW came from the physics community (our sister lab in Cern Switzerland)

SusanDa: those areas allow us to have education resources and programs on all content areas of math, science and technology

SusanDa: My job besides being in charge of the TRC is to be the liaison with the scientists and the education community, also our informal science ed classes for kids.

SusanDa: any of you get up here?

LourdesR: this is all new to me

DianaG: no

JoseRH: no

DavidW wonders if he drove near Fermilab going to Dekalb from Chicago

SusanDa: probably did

HilarioP: never been there

HilarioP: to cold for me

JoseRH: maybe

SusanDa: where is your college?

JoseRH: Edinburgh Texas

SusanDa: One of my friend physicists - cute and spunky Olga Lobban teaches at a university in San Antonio

SusanDa: really!

DavidW . o O (cute AND spunky?)

SusanDa: yeah, I guess we'd be too cold.

SusanDa: Olga has such a funny name you'd never know from that how neat she is

DavidW: Susan, is there a set of resources you have specifically for elementary teachers?

SusanDa: just as an example, David, we have all of the core curriculum materials in math and science K-12!

DavidW nods

DavidW: Sounds great

JoseRH: cool

SusanDa: we also have a pretty huge collection of supplementary curriculum like GEMS AIMS, etc. and tradebooks and technology, not to mention 260 journals and newsletters

DianaG: nice

JoseRH: nice

JovanaG: cool

SusanR: Is there a fee to join

SusanDa: teachers are always amazed! some say it's just like being in a teacher candy store

DavidW: Do you guys know the acronyms GEMS or AIMS?

SusanDa: no, no, no fee. we're federally funded.

JoseRH: no

BJB2 thinks that is enough resources to lead a monthly Tapped In discussion for a couple of years ;-)

SusanDa: Great Explorations in Math and Science from Lawrence hall of Science

LizaR: more choices

SusanR: Will you be offering monthly sessions here, Susan...or bimonthly

SusanDa: are you all involved in your state association of science teachers?

DavidW: Here is a web page for GEMS:

DavidW: <http://www.lawrencehallofscience.org/gems/gems.html>

LizaR: I think my kids will like the ladybug activity

SusanDa: I do a lot of pd for teachers and inservice educators

JoseRH: me too

JoseRH: cool

LizaR laughs

LizaR: is enjoying the activity herself

SusanDa: on inquiry, curriculum analysis, technology integration and I'm preparing a new one I am calling TRI-it in Science (pls don't steal my name)

LourdesR: I also noticed we can find stuff for Spanish speakers that is cool too

JoseRH: yep that is so cool

SusanDa: TRI will stand for Tradebooks, Reading and Inquiry in Science

HilarioP: it's in Spanish to?

JoseRH: yes'

MaureenB: my favorite interactive site

http://www.bbc.co.uk/schools/scienceclips/index_flash.shtml

DavidW: What's the focus of TRI-it, Susan?

LizaR: this one breaks it down for age groups

SusanDa: Jeff, do the sties mentioned in the chats get posted on the resource list in the upper box?

DavidW: They can be posted, Susan

DavidW: All the Tapped In members here will have the URLs in the transcript of the discussion they will receive by email

LizaR: maybe I shall chg my interests to science...

SusanDa: the other hands on curriculum I mentioned is AIMS: <http://www.aimsedu.org/>

SusanR TRI-it has sparked my interest

SusanDa: their site even correlates to different state standards

LourdesR: that is good to know as well since we are required to follow state standards

DianaG: yup

DavidW: Do you workshops take place only at Fermilab, Susan, or do you travel around the US?

SusanR: and to Canada as well

SusanDa: interesting? since my position is covered as part of the lab, I am available to anyone anywhere in the U.S. free of charge.

SusanDa: but, we ask that my travel expenses be reimbursed

DavidW nods

DavidW: When was the last time you traveled outside of Illinois to do prof. development?

SusanDa: I go to midwestern states a fair amount. but, I've also been to SD, NY, NM once.

DavidW smiles

DianaG: wow nice

DavidW: Although I think most people enjoy face-to-face workshops, Tapped In was developed to try to allow people around the world to interact with lower travel expenses

SusanDa: it is very interesting to see the differences in atmosphere and expectation, you know

DianaG: true

DavidW smiles

LourdesR: I am so glad Dr. Brown exposed me to tapped in because I have learned a lot

DavidW: Well, I'm not sure we meant to drop this discussion in your lap, Susan, but thanks very much for giving people an introduction to some of Fermilab's resources

HilarioP: same here,

DianaG: I know I learned a lot

SusanDa: my MS is in instructional design and instructional technology, so, I really like both venues - it is the sharing of information and discussion that I find exciting

DavidW: Although this group is primarily pre-service teachers, we often have classroom teachers attending Tapped in discussions

DavidW: Again, I think it would be great and a real addition to our TI calendar if you were able to do other discussions, especially during the school year

JovanaG: thanks for all the info guys I enjoyed this discussion

SusanDa: are most sessions 1hr? I've done chats of 2

DavidW: It's usually at the discretion of the discussion leader

DavidW: Many of the TI events are 1 hour long, however some are longer

LourdesR: I too enjoyed this chat but I must leave now b/c I need to go back to school homework

DianaG: I also enjoy this discussion it was really informative and interesting

DavidW: We have just not had too many other science discussions lately and I think it is important that we try to find some new folks who may be interested in leading them

BJB2 . o O (scientific premise: The mind can absorb what the seat can endure (ma=se))

DavidW laughs

DavidW: It's testable!

DianaG: I learned something new

SusanDa: right

LourdesR: something is better than nothing at all!! Thanks and good evening to all

DavidW waves

JeffC: If anyone wishes to lead a discussion in the future, please contact me.

BJB2: thanks for being a speaker at this month's Science discussion, Susan!

JeffC thanks Susan as well.

SusanDa: good night. good to meet you all.

DavidW: Susan, do you find that hands-on science is getting cut back in schools? Are schools using simulations to look at scientific principles?

SusanDa: wow David. Can we continue that great topic another evening?

DavidW smiles

DavidW: certainly

SusanDa: we could schedule it as a discussion of course.

DavidW: Probably hard to give it a yes/no answer

SusanDa: as I seem to recall (?) you are the 21st century guy?

DavidW: Again, thank you for logging in and being willing to talk about Fermilab resources

DavidW: me?

DianaG: good bye to everyone, have a good day!

DavidW waves to Diana

SusanDa: Do you know our Educational Software Preview Guide?

SusanDa: <http://espg.info>

DavidW: Not sure I've seen that

BJB2: Susan, email me at bjb@tappedin.org if you want to schedule a discussion on the calendar...topic of your choice ;-)

SusanDa: thanks for the opportunity this evening. Will I automatically get a transcript so I have your emails?

SusanR: and if you are in

JeffC: -yes

DavidW: It shows up about 10 minutes after you logout

DavidW . o O (wex@pobox.com - David Weksler)

SusanR: interested I would love to have you as a guest for the K to 3+ discussions

SusanDa: great. gn

SusanR: WOW

DavidW smiles

DavidW: well, that worked out pretty well

SusanR: She makes me want to dig out those science journals