Title of Session: Social Studies Forum - GIS in the Classroom
Moderator: Michael Hutchison
Guest Speaker: Herschel Sarnoff
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Room: After School Online Room

SarahMW: What is GIS?

HerschelS: GIS is geographic information systems

SarahMW: How does it work?

HerschelS: take a look at this site it will give you an idea of what gis can do
http://www.tcla.gseis.ucla.edu/rights/features/3/gis.html

MichaelH: BJ, shall we start, or do you want to wait a few more minutes?

BJB2: go ahead and start, Michael.

MichaelH: Herschel, I'll go ahead and start, and then we can go into the topic in more detail...

BJB2 . o O (it will take a few moments to explain about detach and do intros)

MichaelH: Hello, everyone, welcome to tonight's Social Studies forum

MichaelH: tonight we have a great topic, and a special guest to tell us about it

MichaelH: ok, we'll let Herschel do his thing in a second, but... let's start with introductions for tonight, ok?

MichaelH: would everyone like to say who they are, and where they are located geographically?

BernieD joined the room.

BJB2 waves hi to everyone. I'm an art teacher in Pennsylvania and a SSF groupie

MichaelH waves to Bernie

BJB2 waves hi to Bernie!

SarahMW: My name is Sarah and I am in Texas

BernieD waves shyly

DavidWe: I'm David Weksler. I'm in snowy New Jersey (really, it's snowing) and I help teachers learn more about math and science and technology. I guess I'm a Social Studies Forum groupie, too

HerschelS: southern California

DavidWe points at Bernie and waves

DianaAL: Diana... Middle School Social Studies Flagstaff AZ... almost 8 years under my belt... it's snowing here as well...

BernieD: I'm a professor of ed tech in San Diego

BernieD: Where it's not snowing.

MichaelH is a social studies teacher and independent curriculum consultant in Indiana

DavidWe grins

RobertG: I am a technology trainer for 9 school districts in Northern Utah.

RobertG: Bernie, we have met.

RobertG: Last year at the UCET conference.

BernieD fondly remembers UCET

DianaAL: I think I'll be in San Diego this summer for the ESRI education conference... hopefully the weather will still be good...

BJB2 thinks we should get started with the discussion so we don't run out of time

HerschelS: its always great for the conference

MichaelH: Listens to Ma BJ

MichaelH: anyway, Herschel is here tonight to discuss a very interesting topic, especially to teachers who would like to integrate geography in their curriculum

MichaelH: so, I'll let Herschel tell you all what GIS is all about...

HerschelS: First there is a free GIS program that can be downloaded for free at http://www.esri.com/software/arcexplorer/download4.html

DavidWe: Windows?

HerschelS: GIS is essentially a mapping program, where you take data, like an excel table, link it with a location and you can display the info graphically

BernieD: "Macintosh download not available"

HerschelS: take a look at this GIS map my students did from a ULCA website
http://www.tcla.gseis.ucla.edu/rights/features/3/gis.html

DavidWe frowns

MichaelH: BUT.... don't go away too far, because Herschel will have a lot of other stuff to tell you

HerschelS: it is for the mac perhaps something is wrong

DavidWe nods

DianaAL: There is a Mac version available... you just have to request a CD from ESRI...

RobertG: What does arc Explore do compared to Arcview?

HerschelS: GIS is an incredibly powerful software that I have been using and teaching since 1998, the program if from a company called ESRI

MichaelH: hmmm... just clicked on Herschel's link, ad my popup blocker put me in the outer limits

HerschelS: arc explorer is a light weight version, you can see and load maps but cannot create new ones

SarahMW: Herschel, What subject do you teach?

HerschelS: I teach us history and a GIS class where I teach how to use the program, there are many thousands of jobs out there for GIS trained people

SarahMW: I am a pre-service Math teacher, so I was just wondering if it could be integrated into Math

DavidWe thinks so, for sure

DianaAL: There are math lessons in ArcLessons at the ESRI website...

DavidWe hopes Sarah knows about the Math Forum - www.mathforum.org - too

HerschelS: it's used in many disciplines, I'm going to give you a website that will have info on that http://rockyweb.cr.usgs.gov/public/outreach/giseduc.html

SarahMW: Thank you

DianaAL: here is the link to the ArcLessons... http://gis.esri.com/industries/education/arclessons/arclessons.cfm

MichaelH: Herschel, do students take your GIS class as an elective, or do you integrate GIS in a traditional US History class?

HerschelS: Gis is having an impact on k12 education, ESRI sells a whole bundle to schools for $500 which would cost many 1000's of otherwise

RobertG: What about Mac users, is there much available for the Apple side of things?

HerschelS: Both, we've gotten GIS into the LAUSD curriculum and I have incorporated it into my us history classes. It's really great to be able to create almost any map at will when lecturing etc

MichaelH: What sort of system requirements are there to run the software, Herschel?

DavidWe believes that there is Mac GIS software, but isn't sure

MichaelH: oh, yeah, I'd love the ability to crank out maps as needed....

HerschelS: Macs, ESRI abandoned the mac some years back but the free program does work on the mac

BernieD: There's also GRASS but it's very hairy.

MichaelH: Thinking how much Apple promoted the Mac as a "graphics machine"... I bet there's software out there for GIS...

HerschelS: here is the link to the ESRI educational site http://www.esri.com/industries/k-12/index.html

DavidWe: Here's a web site for Macs and GIS: http://gislounge.com/ll/macintosh.shtml

HerschelS: there may be other gis software for the mac but I don't know

RobertG: What is GRASS

SarahMW: It is that stuff that grows in your front yard!

DavidWe grins

SarahMW smiles

HerschelS: it is a free gis program, I've looked at it briefly, not the smoking kind either

BernieD: http://grass.baylor.edu//

RobertG: thanks for the link, I will pursue on my own time.

DianaAL: My friend Aaron Doering at the U of Mn works with Macs a lot and did his PhD. Dissertation on GIS in education... I'll IM him quick and see if he knows of any Mac stuff...

RobertG: Back to GIS in the Classroom

HerschelS: http://www.hmsgis.multimedialearning.org/gis/s_work/1860_student.htm this site has some of the civil war maps my students made up using 1860 census data, they had to answer the question "could the south have won the war based on resources etc without foreign intervention?"

RobertG: We are using Arcview 3.3 in several if my school districts, but only just getting started.

HerschelS: if I can help you in anyway please contact me

HerschelS: Robert what are they doing with it now

RobertG: Mostly using MrSid images of their town.

RobertG: Aerial and Satellite Photos

HerschelS: have they looked into using census data?

RobertG: No,

RobertG: We have county data available from the state.

RobertG: DWR provides wildlife data.

RobertG: Never thought of Census.

HerschelS: I usually start my students off with a project called my neighborhood where they construct a GIS map on demographics of where they live, the census tract

DianaAL: I just got done with a Lewis and Clark lesson... and the middle schoolers could hang with it...

DavidWe: The Census has GREAT STUFF!

RobertG: Your Civil War site is a gem.

HerschelS: thanks

DianaAL: USGS and your county are also good sources to investigate...for data

MichaelH: Herschel, would GIS be appropriate for elementary grades?

HerschelS: here is a link to a few more maps my students made http://www.tcla.gseis.ucla.edu/rights/features/3/gis.html,

HerschelS: we investigated different aspects of inequality using data and displaying it graphically

HerschelS: here is a site that will show you what is available from the fed shttp://www.geodata.gov/gos

SarahMW: Do you have computers in your classroom?

SarahMW: Or do you have to go to the computer lab?

DianaAL: Michael...I think that 5th and 6th graders could navigate and younger grade teachers could use it for demonstrations in a teacher led situation....from my perspective...

HerschelS: well, yes, but you can use it as a teaching tool as well. I'm fortunate that I have my own super well equipped computer lab

RobertG: Sorry to be able to only stay a short time. I have to run. thanks for the valuable information and websites.

SarahMW: Bye!

RobertG: I have to add, I have a colleague that uses GIS with 1st graders.

RobertG: they do a safe walking route from home to school.

HerschelS: that's a great idea!!

SarahMW: That is a neat idea

RobertG: She also uses GPS with them and integrates that into Arcview.

DianaAL: very cool...

HerschelS: http://fisher.lib.virginia.edu/libsites/salem/   here is a gis site analyzing the Salem witch trials

RobertG: The Esri lessons are a wonderful place to start with teachers.

RobertG: Sorry, got to go now.

HerschelS: You might want to check out their book "mapping our world" its loaded with lessons, and a year of the arcview 3.3 for free

RobertG left the room (signed off).

HerschelS: they also have several books on community mapping with lessons and ideas

DianaAL: There is a really snazzy Lewis and Clark lesson... but my computers at school won't really load it that well... but still visually interesting... and educational http://www.davidrumsey.com/GIS/index.htm

HerschelS: Diana you mentioned you use Arcview, could you share some of the way you use it

SarahMW: What is Arcview?

DianaAL: I use many of the ArcLessons as well as have my students participate in the Community Atlas project through ESRI

HerschelS: it's the gis program, there is ArcView, ArcHGis and other companies have their own gis programs as well

DianaAL: also, there is a fantastic adventure learning project that incorporates GIS lessons into their curriculum... www.polarhusky.com

HerschelS: I've never done the community atlas, what are the outcomes?

DianaAL: I struggle with it because of the lack of functional technology, but I trudge on nonetheless...

DianaAL: I've never published... but the students do amazing work... we live in a county with 5 Indian reservations, the Grand Canyon and the highest peaks in AZ... there's plenty to talk about...

HerschelS: Did you learn the program on your own?

DianaAL: pretty much

HerschelS: How would you describe the learning curve for the average teacher

DianaAL: My sister has her degree in Geography and worked with GIS at her job, but by the time I was trying to figure it out she was in WI and I was in AZ... she helped over the phone a bit, but it was trial and error central the first two years...

HerschelS: here is an interesting historical GIS site
http://www.mtholyoke.edu/courses/rschwart/ind_rev/

DianaAL: The greatest thing I tell the kids is that I don't know everything and that I need their help to understand the program... that motivates the heck out of them and by the end of each class we had all learned something new...

SarahMW: Using maps is a great way to make the curriculum relevant to students!

HerschelS: The students have saved me a couple of times, some of them figure out things on their own and teach me

SarahMW: Especially the map from their house to the school.

DianaAL: I started by using some really strong lessons from ArcLessons... they are written very well...

HerschelS: And when they make their own maps they learn the much quicker and retain it as well

SarahMW: This is good stuff!

DianaAL: The visual representation of the data is so powerful... I had a student that didn't finish one assignment all year and they were the first one done with the GIS lessons... it was amazing

HerschelS: ESRI will be giving away free U.S> history lessons to be used either with the free program or ArcView. The free program would be great as an instructional tool as well

SarahMW: Diana... that is interesting!

DianaAL: Herschel have you looked at kangis.org...

DianaAL: Student Data Mapper...

HerschelS: It's a lot more then making maps, you can do lots of higher level analysis and comprehension lessons that involve the students. You can do things in your class that haven't been done anywhere else.

HerschelS: Yes, Diana its neat

DianaAL: http://www.kangis.org/mapping/sdm/

SarahMW: Is it mainly for Social Studies curriculum?

DianaAL: and Science...

HerschelS: absolutely not, it's mostly used in science and other areas

SarahMW: Neat!

HerschelS: http://rockyweb.cr.usgs.gov/public/outreach/giseduc.html   this site lists subject areas it's used in

SarahMW: Thanks.

SarahMW: All of these websites will be helpful!

HerschelS: On my website I have bookmarks to many more gis sites

HerschelS: http://www.hmsgis.multimedialearning.org/

DianaAL: This is a dissertation that defends the use of GIS in the classroom...it's from the perspective of bringing GIS into pre-service teacher preparation... http://gis.esri.com/library/userconf/educ02/pap5039/p5039.htm

SarahMW: Great, thank you.

HerschelS: You can also make and print out blank maps and map quizzes, I do that all the time

DavidWe: That sounds great, Diana

SarahMW: So the students draw the line of navigation?

HerschelS: http://www.citejournal.org/vol1/iss4/currentissues/socialstudies/article1.htm and this site is by a college education professor who is in the forefront of GIS for teachers, Marsha Alibrandi

SarahMW: I could use a map to teach scale factor.

DianaAL: I just got a hold of my friend the Mac/GIS user and he said they quit writing for the Mac after version 3, so the 3.3 would still work on the mac...

HerschelS: Not sure 3.3 will work on Macs, I believe 3.0 was the last that had a mac version BUT the free program works on macs!

HerschelS: There are tons of data resources out there, the Feds have made a big push to get GIS into schools

DianaAL: Are you talking about the Arc Explorer Java Edition for Education

HerschelS: yes, have you seen it?

DianaAL: yes

HerschelS: it will read all shapes made up in arcview you just can't make them up inside the program, but its free

DianaAL: it doesn't want to download with my windows 98 very well... but Aaron swears it's the latest and greatest...

HerschelS: Aaron has used it?

DavidWe: Ooh, Windows 98, a veteran

DianaAL: ohey... I'm in AZ... we're 50th in funding and proud of it...

HerschelS: I started using gis with Win 98

HerschelS: we're catching up with you in Calif

DianaAL: The free program... the old free program actually works really well with windows 98

HerschelS: Conan wants to terminate public education spending

MichaelH checks the clock... about 8 minutes left...

HerschelS: something to do with java?

DavidWe always thinks Mississippi is 50th in funding

DianaAL: we passed them this year

HerschelS: http://www.epa.gov/enviro/html/em/   if you are into environmental issues there is lots and lots of GIS data

DavidWe cheers for AZ

MichaelH: Herschel, Diana... just a few more minutes left... would either of you like to give the group contact information if they'd like to get with you regarding GIS? Maybe something e-mail?

DianaAL: dlaufenb@apscc.org ...

HerschelS: hsarnoff@gmail.com   hsarnoff@lausd.k12.ca.us

DavidWe: Where in Arizona are you, Diana?

MichaelH: Does anyone have any final questions or points they'd like to add to tonight's discussion?

HerschelS looks around nervously

DianaAL: Flagstaff

SarahMW: No, thank all of you for your help in helping me better understand GIS

HerschelS: let us know if we can help you

MichaelH: It certainly has been an interesting and enlightening session!

DavidWe: Are you connected with NAU at all, Diana?

DavidWe: Thanks, by the way, Herschel

HerschelS: welcome!!!

DianaAL: I have a master's from there... and am still taking classes...

DavidWe: It's a great topic. I like maps

DavidWe nods

DavidWe: Do you all know about maps.google.com

DavidWe: I really like it

HerschelS: I'll check it out

DavidWe smiles

DavidWe: IT does directions, etc.

HerschelS: I think that is a gis application?

DavidWe: It's scrollable - you can "slide" the map to move from one area to another - the refresh is impressively fast

HerschelS: cool site, thanks

DavidWe smiles

DavidWe: Sure thing

SarahMW: Thank all of you again, Bye!

HerschelS: bye bye

DianaAL: Til next time...

MichaelH waves goodnight, too