Title of Session: MSP - Extending an Inquiry Approach to Science and Math Moderator: Kimberly Lightle Title of File: 20090413msp Date: April 13, 2009

Room: Middle School Portal Group

KimberlySL: Hi everyone!

JohnE: hi

MelissaCl: Hi

KimberlySL: Let's introduce ourselves

BjB: and a reminder that if you're new to Tapped In go to the Actions menu in the top right of the chat and select DETACH

KimberlySL: I'm at Ohio State - I teach preservice teachers, science educator, and I have a couple of National Science Foundation funded projects - Middle School Portal and Beyond Penguins and Polar Bears

JohnE: I am a physics teacher in San Diego. I have just recently been introduced to Tapped In. I thought that this looked like an interesting class.

RichardW: Rancho Bernardo High School in Poway teaching first and second year Algebra. This is my first sampling of Tapped In also. Hi, John.

JohnE: Hi Richard

RichardW: Sorry, that's Poway California

KimberlySL: Wonderful - thanks for participating

MelissaCl: I am in my first year of teaching and I teach in the Chicago suburbs. I currently teach third grade general education, but am interested in learning in how to use these strategies in my classroom.

KimberlySL: That's great - we've covered lots of topics in the past but tonight I thought we'd learn more about the National Science Digital Library (NSDL) and all the resources they have to offer

KimberlySL: Are any of you familiar with NSDL?

JohnE: not me

MelissaCl: I am not

RichardW: NOPE

KimberlySL: BTW - NSDL is not just science - the S really means STEM

KimberlySL: OK - Let's jump in - please go to <u>http://nsdl.org</u> and give the page a once over - anything jump out at you

JohnE: Is that Science Technology Education?

MelissaCl: I find it interesting that NSDL is on iTunes U

KimberlySL: STEM is science, technology, engineering, and mathematics

JohnE: ok...thanks

KimberlySL: NSDL has collected about 2 million STEM resources and then built tools and services to support users finding and using those resources

KimberlySL: everything from search to Pathways to the Strand Map Service which is based on the Project 2061 resources

KimberlySL: I'll share some specific resources that would support each of you - physics, algebra, and elementary but let's go to the Pathways projects first

KimberlySL: go to http://nsdl.org/about/?pager=pathways and scroll down a bit -

KimberlySL: John - click on Compadre

JohnE: Are we looking for the MSP2 Portal?

KimberlySL: Melissa - go to Teachers Domain

JohnE: oh..

MelissaCl: I'm there

KimberlySL: John - MSP2 is one of the pathways project but you might be more interested in Compadre - MSP2 is grade based, Compadre is discipline based

JohnE: me too

JohnE: ok thanks

KimberlySL: Richard - see what you see in CSERD - lots of applets

RichardW: Thanks

SusanR joined the room.

BjB: welcome, Susan

SusanR : Hi

SusanR: sorry for the late arrival

SusanR: I will just audit

KimberlySL: Melissa - I forgot that Teachers Domain (TD) requires registration. They take PBS video, chunk it into 2-3 minute sections and then wrap activities and background information around the content

KimberlySL: Hi Susan - Glad you would join us. What is your background?

MelissaCl: Wow, that sounds interesting

SusanR: Substitute teacher from Canada

KimberlySL: TD is all about multimedia. The different Pathways projects all pick a specific media, or grade level, or discipline and then highlight/contextualize resources for that audience.

KimberlySL: Susan - we're looking at the NSDL Pathways projects - go to <u>http://nsdl.org/about/?pager=pathways</u> and see if any are of interest to you

KimberlySL: The MSP2 project is for middle school math and science teachers but has lots of content that high school teachers use.

KimberlySL: Melissa - I do have another project you might be interested in - Beyond Penguins - <u>http://beyondpenguins.nsdl.org</u> - it's specifically for elementary teachers - it's not a Pathways project but it is part of the NSDL

MelissaCl: Great! I'll take a look at that!

JohnE: I can tell that this will cut down my search time. I recognize some of the sources for physics applets I've already discovered, but there are a lot more...and they are all in one place. This will help.

JeffC: There's also a "Beyond Penguins" group here at Tapped In.

KimberlySL: Oh good - let's look at another service of NSDL - Expert Voices blogs - go to the NSDL homepage - <u>http://nsdl.org</u> and on the left side click on Expert Voices blog

JohnE: ok

KimberlySL: scroll down to the section that says - Who Says -

KimberlySL: look under K-12 - sciencegeekgirl is a physics teacher

MelissaCl: ok

JohnE: They finally put a CT scanner to good use! :-)

KimberlySL: Exemplary Resources for Middle School Math and Science is a blog I write - click on that one -

KimberlySL: Richard - here are some really good resources for algebra http://expertvoices.nsdl.org/middle-school-math-science/category/algebra/

RichardW: Thanks

KimberlySL: NSDL also has a set of wiki pages - here is the link to the Middle School Portal wiki pages - <u>http://wiki.nsdl.org/index.php/MiddleSchoolPortal</u>

KimberlySL: math is first - science second - don't click on the images - just the links under the image

JohnE: Quite a variety of topics!

KimberlySL:

http://wiki.nsdl.org/index.php/MiddleSchoolPortal/Light%2C_Optics%2C_and_Lenses - this one is on physics

KimberlySL: Within each page we highlight resources from the NSDL collection

KimberlySL: Do any of you edit any wiki pages?

JohnE: No

MelissaCl: I have not, but I am aware of how they work

KimberlySL: All of these pages are editable - I would love it if somebody wanted to "own" one of these pages and continue to update it

KimberlySL: OK - we've looked at Pathways, ExpertVoices blog, and wiki - next is Science Literacy Maps

MelissaCl: great

KimberlySL: go back to <u>http://nsdl.org/</u> - on the left side click on Science Literacy Maps

JohnE: By edit...you mean update entries from searches we have done? Adding things that apply to that page's topic? Not necessarily adding content?

KimberlySL: John - That is what I mean - all of it!

JohnE: ok...I'm getting the idea now. Thanks

KimberlySL: So Science Literacy Maps - is anybody familiar with Project 2061 and the Atlases of Science Literacy?

MelissaCl: I am not

KimberlySL: Project 2061 laid out the content that an American Citizen should know to be scientifically literate

SusanR listens

JohnE: Yes, but after our state introduced its own state science standards I have (unfortunately) spent most of my attention there.

KimberlySL: then they took that knowledge and built maps that show how the learning should progress

KimberlySL: NSDL took those maps and then laid the maps on top of the NSDL collection

KimberlySL: you can search the NSDL collection using the maps

KimberlySL: I'm here - <u>http://strandmaps.nsdl.org/</u> - click on one of the maps - use the hand in the bottom right corner to move the viewer around

KimberlySL: BTW - these maps go from K-12 and there is a map for the nature of mathematics

MelissaCl: ok

JohnE: Is there supposed to be a "center" to these maps?

MelissaCl: it looks like it moves by grade

MelissaCl: the bottom is the lower grade and top are the higher grades

KimberlySL: yes - each map progresses from K (bottom) to 12 (top)

MelissaCl: is there a way to see this all on one page or print it out?

JohnE: ok

MelissaCl: never mind. I see the print view on the top

KimberlySL: There is a print view (but very small) - these maps are in two really big books

JohnE: very nice...I like it

MelissaCl: if you click on PDF, it converts it to a PDF and you can zoom in

MelissaCl: that makes it a little easier to read

KimberlySL: if you click on one of the learning goals (gray boxes) you can see resources that are related to that goal

JohnE: Are all of these resources online? or are there also print resources?

KimberlySL: look up near the top blue bar - it says View Student Misconceptions

KimberlySL: John - all digital

JohnE: thanks

KimberlySL: All the resources are in the NSDL digital library

KimberlySL: OK - Next item - let's go back the NSDL homepage - <u>http://nsdl.org</u> and go down the left side until you see professional development

KimberlySL: click on NSTA web seminars

KimberlySL: NSDL co-produces free webinars with NSTA (National science teachers association) - all of them have been archived and they are really good

MelissaCl: thank you

KimberlySL: <u>http://learningcenter.nsta.org/products/webseminars.aspx?lid=tnavhp</u> - here is a link to all the NSTA webinars

KimberlySL: Melissa - on April 21 there is one on birds from Beyond Penguins and Polar Bears

KimberlySL:

http://learningcenter.nsta.org/products/symposia_seminars/NSDL3/Webseminar7.aspx

KimberlySL: NSDL also has podcasts - you can see that link on the left of the home page

MelissaCl: thank you, I'll have to check that out

JohnE: Are Webinars more of a one-way delivery? or do participants do a lot of questioning etc?

KimberlySL: Participants are polled and can put in their 2 cents but it is more one way

KimberlySL: I also wanted you to do a few searches in the K-12 search at NSDL just in case you had some questions - the Pathways project have done a really nice job of corraling content but sometimes you still want to search

BjB: Penguins and Polar Bears will be having Tapped In discussions in the next few months, I hope!

JohnE: ok...that's fine. At this point I would be more inclined to look-in rather than think I have to offer something more meaningful to everyone in the webinar

KimberlySL: these NSTA webinars really do provide good information

KimberlySL: <u>http://nsdl.org/search/?verb=Search&s=0&n=10&audience=2</u> - here is the link to the K-12 advanced search

KimberlySL: do a couple of searches and see what you think

MelissaCl: It looks like there is a huge amount of information on here!

KimberlySL: the results lists are long but continue to refine your search and see what happens

MelissaCl: I like how you can search by specific media

JohnE: It seems most are not free...at least the physics articles. Is this generally the case?

JohnE: ok...now I'm finding free items.

MelissaCl: I have not had a problem finding any that are free

KimberlySL: interesting - John - I would really just go to Compadre first and then go to NSDL if you couldn't find what you wanted

JohnE: it's the American Assoc. of Physics Teachers articles that require log-in credentials. Now I'm finding other items that are free.

BjB looks at the clock on the wall.

KimberlySL: I just did a search on Richter Scale - Richter Scale Day is April 26 - clicked on grades 6-8 and video and got 6 results

KimberlySL: Good grief - look at the time!

KimberlySL: NSDL has wonderful resources and tools and services - this was a quick and dirty overview of lots of them

MelissaCl: That really did go by quickly! Thank you so much for helping me discover many great resources!

JohnE: Thanks for this. It was helpful. I would not know of this otherwise.

SusanR: I got some nice results for weather projects and the standards and benchmarks can apply to Ontario

KimberlySL: So glad to hear it!

BjB: watch your TI calendar for the next MPS discussion...and Polar Bears discussion

JohnE: ok

RichardW: Thanks, bye.

KimberlySL: Any ideas for future discussions would be greatly appreciated

JohnE: I'll talk to my fellow teachers and let them know about this. I'll see what they say.

BjB: join this group and you can post your suggestions to the discussion board

KimberlySL: BTW - I have a social network for middle school teachers at <u>http://msteacher2.org</u> - we're just getting started - I would sure like feedback on that also

KimberlySL: Well - looks like its time to get some supper! Thanks so much for coming.

MelissaCl: Sure thing

MelissaCl: Thank you again!

JohnE: I will check it out. I don't teach middle school, but I'm sure that I can learn

something from the social network site

KimberlySL: That would be great

JohnE: Thanks again

BjB: Thanks, Kim. I'll be in touch

JohnE: oh-reservoir