Title of Session: Un-muddling the middle grades: Math and Science resources from ENC **Moderator:** Gail Hoskins

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Room: Comfy Conference Room

DianneA: Hi, welcome to our session on Math & Science Resources from ENC, our leader today is Gail Hoskins from ENC. As we expect a big group, you might like to detach your chat window. At the end of the session I will be giving you information for the certificate process.

DianneA: Hi, welcome to our session on Math & Science Resources from ENC, our leader today is Gail Hoskins from ENC. As we expect a big group, you might like to detach your chat window.

GailH: Thanks Dianne.

GailH: I am Gail Hoskins. I am Senior Outreach Coordinator at Eisenhower National Clearinghouse (ENC). I am responsible for the conference presence (presentations and exhibits) and for training.

GailH: Can we very (very) briefly introduce ourselves? Name, location, grade/discipline.

DianneA: Dianne Allen, Kiama, Australia, pre-service teacher training for primary educators

GailH waits to learn about the participants.

LindaPC: I work with middle school curriculum in my district in Fairfax County, Virginia

JessieGst30: Jessie Fowls, Portland, Oregon, student teacher secondary mathematics StephaniR: Middle school science teacher in Fairfax County

KristaKR: Krista Rothell, Georgia, 9th Grade/Pre-Algebra, Algebra I **GailH**: Thanks, everyone.

SyedaSherZ: From Pakistan, now here in Virginia in George mason in ms program **SusanaMe**: I work with bilingual students grades 9 - 12.

IhorC: Ihor Charischak, right now trying not to dribble my soup on the keyboard

GailH: We will be practicing using the 10 steps to a successful chat today.

GailH: I welcome you.

GailH: I am going to talk for just a bit, and then I will ask you to participate.

IhorC: Let me try that again. Hi Gail! Math technology educator at Stevens Tech in Hoboken, NJ

GailH smiles to Ihor whom she remembers well!

GailH: I have been with ENC since it began in 1992. Before then I was a high school math teacher and a K-12 math coordinator. I welcome email at <u>mailto:ghoskins@enc.org</u> **GailH**: The Eisenhower National Clearinghouse (ENC) is U.S. Department of Education funded. We are a K-12 math and science teacher center. All ENC resources and services are free. Print products can only be mailed within the U.S. Since ENC begin, almost twelve years ago, we have distributed almost 8.5 million print and cd-rom products. Our homepage is <u>http://www.enc.org</u> and we get over two million page views per month. **GailH**: This session is going to be MIDDLE grade specific, but ENC is K-12 math and science.

GailH: I am going to focus on two main parts of our site.

GailH: One is ENC Focus and the ...

GailH: other is our Classroom Calendar part of the site.

GailH: On both the ENC home page and on the Focus page you'll see THIS week's issue of ENC Focus very prominently displayed. That is the Graphic Organizers for Science. Each Thursday we feature a new focus (and all of them are always available in the archive of past issues - which you can see in the left navigation bar under ENC Focus. So tomorrow (a Thursday), there will be a different Focus featured when you return to ENC Online.

GailH: Each ENC Focus issue tackles a new topic for math and science teachers. You can read teacher-written articles, and see what experts in the field are saying, and find professional development and classroom resources. A real strength of this is how you can find a topic that really matches YOU (and don't have to settle for a one-size-fits-all approach)

GailH: In a moment, once I have given instructions, you will have this blue url http://www.enc.org/features/focus/archive/midgeometry/

GailH: which I'll ask you to click on, and then I want to say some things.

GailH: Please click on it but return and read this chat window more.

RosalynT: Gail isn't it so hard to find resources like the one that you provided us

with...thanks I agree with you about not settling for one size fits all solutions

DianneA: I am having difficulties with the web page Gail

StephaniR: So Am I.

KristaKR: I am also

GailH: So am I. Let's try another.

RosalynT: I'm ready for the next one...

SyedaSherZ: me too

SusanaMe: That is an excellent approach to provide the necessary tools and assistance to all students at all levels.

GailH: Try this <u>http://www.enc.org/features/focus/archive/ideasmsmath/</u>

JeffC: Maybe ENC is getting DNSed?

GailH: OK, the beauty of having technical help is that they are working on it.

RosalynT: ha ha

GailH: I will go to plan B and show this:

JeffC checks if the hamsters running the server have been fed.

StephaniR: You always need plan B as an educator.

DianneA: At this stage I would be spaced out!

WexGst20. o O (especially with technology...)

WexGst20 grins

SusanaMe: I agree with you Stephanie. Always have an alternative for any inconvenience.

DianneA: now it looks like it is responding

GailH: OK, I have had miracles happening here. We will begin again.

JeffC: <u>http://www.enc.org/features/focus/archive/midgeometry/</u> works now (hamsters fed)

DianneA: this is what we don't need for new members

DianneA: but sometimes it is beyond our control

SyedaSherZ: this works now

LindaPC: great

GailH: OK, can we all try clicking on that LAST url that JeffC said-- that ends with midgeometry.

JeffC: <u>http://www.enc.org/features/focus/archive/midgeometry/</u>

SusanaMe: Not if you prepare yourself ahead of time.

GailH: Has technology ever thrown your plans for a loop?

IhorC: never!

WexGst20 has faith in ENC

DianneA: almost always ...

JeffC . o O (ENC RULES!)

GailH: From that page Middle School Geometry from Different Angles, there are 4 parts (not counting the intro.)

GailH: I am asking if you would pick just one and explore it for about 3 minutes and then return here. I am setting my timer.

GailH: So some of you are going to geometry from a hands-on angle.... and others to other parts.

RosalynT: I really liked the links for elementary school teachers especially because you can print out GRACIAS

GailH: We are finishing up looking at one of those parts of the mid school geometry from different angles part.

GailH: If you have had a chance and are back with me, please say that you're back. **SusanaMe**: Those printable resources are excellent for teachers because they are very handy.

StephaniR: I am back

LindaPC: me too

GailH waits and counts folks.

LindaPC: had to check out the science graphic organizers too while I was there **SvedaSherZ**: I'm back

DianneA nods

GeoffD: here

RosalynT: Linda me too...since I teach bilingual students I really need those visuals **IhorC**: Using the detached window was helpful... I never had to leave.

GailH: Every week ENC creates a new issue of Focus like this. Would someone like to share what they found and liked or would try. Pls. tell what section it is in.

SusanaMe: I checked the Cynthia's Lanius' Fractals. It is an excellent resource for bilingual educators.

LindaPC: the connection between math and architecture appealed to me...always the practical one...

SusanaMe: I highly recommend visual organizers because they help students understand the mathematical concepts easily even when they don't know the language.

StephaniR: The interactive math lessons are interesting- trying to make a polygon. **GailH**: I used to be the most "wowed" by the interactive part - but over time I have come to see that it really helps to have ALL the parts. GailH: Sort of like the four legs on a table.

StephaniR: I agree.

SyedaSherZ: I tried hands on Angle

JessieGst30: I'm a very connection-based person so the link to architecture in the applied section could be very useful

IhorC: In the interactive section, Polygon Creator invites you to do some Logo exploration with applets.

SyedaSherZ: very interesting and very creative from educational points of view **GailH**: Let's (even more quickly) look at one more. Try

<u>http://www.enc.org/features/focus/archive/ideasmsmath/</u> and go to one of the links from there. (I am referring to those links in the RIGHT navigation bar.

RosalynT: I looked at the Professional Development Section since I am trying to write a Technology Plan for my classroom

GailH . o O (hopes you notice that the Classroom Ideas for Middle School math pretty picture has links to the elementary and the high school version if you need to check those out later.)

GailH: Is anyone looking at Petals?

StephaniR: Yes-I am

JessieGst30: I am

KristaKR: I am

RosalynT: no Gail but How do I get there

GailH: Have you seen that before.

GailH: If you go to that last url in blue above, it is over on the right.

SyedaSherZ: yes I am

GailH: I will say its url here too.

GailH:

http://www.enc.org/features/focus/archive/ideasmsmath/document.shtm?input=FOC-000711-index

GeoffD: Modular arithmetic. Nice.

RosalynT: thanks

GailH: The answer, for those of you who may be trying to figure it out, is in the article--

GailH: just not so prominently displayed as to spoil the fun.

GailH: ENC provides links and ideas like this in our Focus section.

GailH: We also have a Classroom Calendar section.

BjB loves the calendar

GailH: I'd like to show one of my favorites from there.

RosalynT: Gail quick question...where are you writing us from?

GailH: I am in Columbus OH.

GailH: http://www.enc.org/features/calendar/unit/0,1819,248,00.shtm

LindaPC: the petals activity looks fun

RosalynT: WOW this is exciting to me because I am in CA

GailH: One of the links on that calendar page (the url is just above in blue) goes off to

the Statue of Liberty's nose page.

GailH: That is a Figure this resource.

GailH: Are you familiar with that larger site?

KristaKR: The petals activity is interesting

JessieGst30: I am not familiar with the figure this site but I'll have many bookmarks to make after this session

GailH: Do we need to talk about the petals around the rose activity? About how to use it and an extension? Or would you like to go on.

StephaniR: The petals around the rose is great problem solving- you have to plunge in.

GailH waits for the consensus of the group.

JessieGst30: I'm ready to go on when you are

SyedaSherZ: I like that puzzle

SyedaSherZ: it is fun and interesting

GailH: OK, let's look at another calendar entry...

GailH: please click on this blue link:

http://www.enc.org/features/calendar/unit/0,1819,258,00.shtm

LindaPC: I am ready to discuss the calendar

GeoffD: Apropos

LindaPC: I get something about taxes...

GailH: On the calendar we briefly about proportion, and the one about taxes.

DianneA: Susana, try closing the ENC window, and clicking on the link again

RosalynT: so am I (taxes)

SyedaSherZ: are you talking about net income

SusanaMe: Thank you.

GailH: Yes, Syeda.

SyedaSherZ: o.k

GailH: Each of those entries has big ideas and ready-to-use activities to go with them.

GailH: If you look at this <u>http://www.enc.org/features/calendar/category/</u> you will see an organized list of all the options.

DianneA: I am going to have to come back when I have time, and I am going to have to share this with my pre-service teachers!

RosalynT: thanks Gail I'm following along right behind you

SusanaMe: These are great ideas for students to become aware of economics.

GailH: What distinguishes ENC from many other sites is the high standard that we hold sites to.

SyedaSherZ: oh I got it

GailH: ENC is also the (US Dept. of Ed's) national repository for K-12 math and science real things.

GailH: While they aren't usually free, it is a great source of finding out about things...

KristaKR: These are great "real world" activities

GailH: and our record tells the url and 800 and email of the provider.

RosalynT: did everyone check out the list of links that provide ready to go resources **LindaPC**: please explain

SusanaMe: I agree with you Krista

GailH: I am going to take a big risk and try one really nasty url that I prepared before this.

RosalynT: Krista "real world" activities is what our kids need!

GailH: It will be a list of some middle grade specific things (not just web sites)... **KristaKR**: I agree

GailH: If you are patient, I believe the url will work. Here it is.

RosalynT smiles **GailH**:

http://www.enc.org/resources/search/advanced/1,1233,search,00.shtm?page=1&pageLen gth=10&searchMode=search&searchType=advanced&encNum=&search_filter=advance d&search_location=advanced&L1=any&T1=&F1=subject&L2=any&T2=&F2=abstract &L3=any&T3=middle&F3=title&GMODE=all&LG=06&HG=08&cost=-

1&sort=date&Submit=Submit%2Bsearch

RosalynT: WOW

GailH . o O (pretty it is not.)

SusanaMe: Sure, that's what children need to become aware of their future and responsibilities.

BjB waits to see if everyone gets that url

SusanaMe: Was that a single link?

GailH: Did that come in (it is ONE link)

GeoffD: Holy character string Batman!

BjB: I got it, Gail

GailH: If you click on it one time, I believe you will get it.

LindaPC: yes. it works fine

KristaKR: It works

GailH: It lists over 300 very specific middle grade things.

SyedaSherZ: Is that one the search result

IhorC: It works in Netscape.

StephaniR: I found it

RosalynT: it works perfectly

GailH: In the transcript, it will be there just like it is now.

WexGst20 . o O (Might win the longest URL award)

StephaniR: Great resources!

RosalynT: I know Gail Congrats

GailH: We have lots of search interfaces - but that is an ultimate search.

SusanaMe: Okay, so we can keep it for our records.

SyedaSherZ: oh great

GailH: If you look over sort of on the right on that page, you'll see they are from grades 6-8.

GailH: And they have middle in the title.

KristaKR: I know this session is for middle school, but is there a search for high school activities as well?

GailH: Definitely.

SyedaSherZ: yes if any

RosalynT: how about for elementary

GailH: I did a browse kind of search for graphing things for middle grades. Here it is **GailH**: <u>http://www.enc.org/resources/browse/0,,0-100-1-887_1_3-0-0,00.shtm</u>

GailH: Do you see the pull-downs in the top center?

SusanaMe: Sure, this session is not only for that particular group of learners but to the entire population in general.

GailH: Can you change them to be the grade level YOU care about.

LindaPC: good I found something we can check out for our curriculum project

SusanaMe: How about for English Learners? Any suggestions?

GailH: And here is an issue of Focus for High School math

http://www.enc.org/features/focus/archive/ideashsmath/ we call that our chicken page!!

GailH: And here is the elementary version

http://www.enc.org/features/focus/archive/ideaselmath/ our blue ball page!

KristaKR: This is great

SyedaSherZ: great work.

SyedaSherZ: I'm speechless

GailH: On a somewhat wider grade range, here is a Focus on Science misconceptions. GailH: <u>http://www.enc.org/features/focus/archive/misconceptions/</u>

SyedaSherZ: wonderful

GailH: I'd now like to ask two questions of you kind participants. First, ...

GailH: out of the things that we have seen, which only touch the surface of what is available at ENC, what thing (or kind of thing) do you find most helpful?

LindaPC: an excellent topic but I was looking for much more info on what the misconceptions are...maybe a comprehensive list

LindaPC: Annenberg does a lot with this topic too

GailH: This is not a comprehensive list, but here is an interesting activity I have used often:

http://www.enc.org/print/features/focus/archive/content/document.shtm?input=FOC-002876-index no answer

DianneA: firstly, knowing that it is there, and some of its scope

LindaPC: I find lesson activities most helpful.

GeoffD: The pre-screening for quality is a big help...

LindaPC: yes I agree...knowing that you have already screened them is perfect

JessieGst30: I thought the application to everyday things is helpful

KristaKR: I liked the activities

GeoffD: The pre-screening for quality is a big help...

GeoffD: there are always plenty of sites...

SusanaMe: I guess I can now continue with the discussion.

SyedaSherZ: Hands on experiments I like most

StephaniR: I also like this section on Science misconceptions- it helps me to know what some students are thinking- erroneously.

GeoffD: The pre-screening for quality is a big help...

GeoffD: there are always plenty of sites...

GeoffD: but screening for good ones can be frustrating.

KristaKR: I agree

StephaniR: I like reading through lessons and finding parts of some that may give me an idea to try out.

GailH: For those of you saying lessons, here is one page

http://www.enc.org/features/lessonplans/science/

GeoffD: The pre-screening for quality is a big help...

GeoffD: there are always plenty of sites...

GeoffD: but screening for good ones can be frustrating.

GeoffD: I like the chicken too.

LindaPC: yes, I have used it often

GailH: and there is a similar science one -- do you see on the top left of that page the part of the ENC site that this is in.

GailH: http://www.enc.org/features/lessonplans/science/

GailH: There are many other parts of ENC Online. Once you get the transcript to this session you may want to look at a sample ENC Update

<u>http://www.enc.org/features/focus/updates/</u> and see our daily Education Headlines <u>http://www.enc.org/educationheadlines/</u>. Those are both electronic services you may choose to select if you register at <u>http://www.enc.org/register/</u> with ENC.

GailH: Thanks to all of you for attending this session.

DianneA: Thanks for a great session Gail

DianneA: Thanks for great participation from our visitors and members, too

DianneA: And please consider coming to Tapped In's regular sessions during the month, check the calendar for time and topic

GeoffD: Thank you :smiles and waves goodbye

GailH: You can check back another time at <u>http://www.enc.org</u> too.

KristaKR: This has been very helpful, thank you Gail

GailH: And feel free to email me at <u>ghoskins@enc.org</u>

WexGst20. o O (Gail can literally supply you with boxes of material)

LindaPC: this was a good session. although I have used ENC I learned about some new features. thanks.

GailH: ENC is a tremendously big site and has lots of interesting little parts to explore. Please visit again.

SyedaSherZ: Lots of important and interesting information thank you so much

GailH: Major parts of our site include our Digital Dozen (12 great sites identified per month) <u>http://www.enc.org/features/dd/</u> - something we have been doing for nine years **GailH**: So we have 12 months a year...

GailH: and 12 sites a month...

IhorC: My only "problem" with your site is that I get delightfully distracted by something neat that I find.

GailH: for 9 years...

IhorC: Today it was Rose petal.

GailH: which makes a lot of award-winning web sites that we have discovered.

GailH: They are all still listed http://www.enc.org/features/dd/archive/

GailH: but it is much easier to search (see in the top left of the page)

StephaniR: Thanks for your session. I need to explore now

GailH: <u>http://www.enc.org/features/dd/search/</u> finds just our cream of the crop web sites.

IhorC: Note about Petals around the Rose - I couldn't get the java applet started in Netscape, but had no problem in Explorer.

GailH: Ihor - I have found that a number of resources seem to only work in IE anymore.