

Title of Session: Math & Science Professional Development Online for Out-of-Area Teachers

Moderator: Michael Hosking

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JeffC: Welcome to Michael Hosking's presentation on Online Professional Development for Out-of-Area Math and Science.

MichaelHo: Welcome everybody...we'll start in just a couple minutes

JeffC: I'll be moderating this event, and ask if everyone could read the "10 Steps to having a successful chat at Tapped In" if you haven't already done so.

MichaelHo: Good Afternoon everyone...thanks for being here. I'm pleased to be able to talk with you today.....I'm just letting the last few people get in and get oriented.

JeffC: Michael Hosking, Ph.D. is the founder of Personal Professors.com

<http://personalprofessors.com> ...an online tutoring system which I believe you will see today.

MichaelHo: I hopefully can work under the assumption that we are all convinced of the need for high quality math and science instruction in the US

JeanieGst25: I'm with you, but this chat thing is very new to me!

MichaelHo: Yes..I know...it will be

MichaelHo: new to some others here as well..

MichaelHo: no worries...

LindaPC: high quality instruction is VERY important

MichaelHo: Yes....we can all agree on that I do believe....

MichaelHo: In today's session I'm going to explicitly compare a couple of modes on online delivery....

MichaelHo: and in fact, I will use this particular mode as the 'null' model...

MichaelHo: I want to explicitly demonstrate the differences in online delivery of instruction...

MichaelHo: We will get to that...:)

MichaelHo: How many of you are familiar with the Glenn Commission report...

MichaelHo: aye or nay?

GailH nods her head.

LindaPC: never heard of it

BlancaR: nay

KristaKR: yes

LeannW: nay

AmieF: nay

LeighAD: nay

MichaelHo: Others?

GeoffD: nay

MichaelHo:

StephaniR: nay

MichaelHo: No worries if you haven't!:)

WexGst20 . o O (don't recall it)

SyedaSherZ: no

SyedaSherZ: nay

MichaelHo: Ok...so only a few are familiar with it.....thanks for fixing that no Syeda!

MichaelHo: I'm holding it in my hands...at this very moment!

MichaelHo: Imagine that...

MichaelHo: It came out in the year 2000...its official title was "Before It's Too Late"

MichaelHo: "A report to the nation from the National Commission on Mathematics and Science Teaching for the 21st Century"

MichaelHo: Senator Glenn chaired the commission, and

JeanieGst25: I think I've heard of it, but don't have it memorized!

MichaelHo: around 30 educators and administrators worked on the various subcommittees...

MichaelHo: (me neither Jeanie!)

MichaelHo: They emphasized how important it was for our students to learn math and science...

MichaelHo: and

IhorC: including Elliot Solloway - Mr. Handheld at the U. of Mich.

MichaelHo: pointed out that in a recent international survey of math and science achievement of 12th graders in industrialized nations.....

MichaelHo: the US came in third from last of 41 nations surveyed.

JeffC: <http://www.ed.gov/inits/Math/glenn/toc.html>

JeanieGst25: Thanks Jeff, but I think I recall now!

MichaelHo: Now...I don't want to get into whether the tests were valid, or the surveys were well done....but...and this is where I started today...

MichaelHo: we can all agree that, especially now in the new century, it is in our individual and national interests to really make sure that students learn math and science well.

JeanieGst25: Amen!

MichaelHo: The Glenn Commission noted that....and this is amazing.....

MichaelHo: only around 30% of our high school math and science teachers actually studied math and science in college!

SusanaMe: It's amazing news!

KristaKR: Wow

WexGst20 is actually not surprised

SyedaSherZ: oh really

StephaniR: Really?

MichaelHo: And...as a scientist and former professor at a top-ten national liberal arts college...I can tell you that you need to have deep and wide knowledge in your math or science field to really be able to teach it well..

MichaelHo: I am convinced of that.....

LeighAD: Not to mention the amount of teachers who did study the discipline, but are not up to date on subject matter...

MichaelHo: A good point Leigh...one we can talk about...

JeffC thought that there were still four basic elements: earth, wind, fire, and air... but I could be wrong.

MichaelHo: Funny Jeff!!

MichaelHo: Thanks for the humour...sometimes hard to get some with chat only...I like it.

MichaelHo: So...my main thesis today is that in order to really get our kids learning math and science, we need to have teachers who really know it!!

GeoffD: Whoa. You need to understand Lobachevsky to teach factoring? I'm not sure I buy that.

MichaelHo: Radical, eh?

LindaPC: successful teachers have equal parts content knowledge and pedagogy

MichaelHo: I would agree 100% Linda....

KristaKR: I agree

LeighAD: very insightful

SyedaSherZ: I agree

LeannW: I think cross-content area helps too.

MichaelHo: In fact, I might go so far to say that successful teachers have special gifts....like a really great jazz musician.....real-time adaptive responses....

MichaelHo: Me too Leann...wide knowledge in addition to deep in their field.

GeoffD: I will gladly accept the premise to continue the discussion...

MichaelHo: Thank you Geoff.

GeoffD: I will gladly accept the premise to continue the discussion...

GeoffD: but aren't we accepting an assertion without proof here?

StephaniR: It's true that teachers need to have good background and appreciation for science in order to really teach the subject and show students connections.

MichaelHo: So....the trick, given that we have so many out of area teachers is that they are so busy that they can't get the instruction they need.....

MichaelHo: As much as I hate to do that Geoff...I think we are.

MichaelHo: That too, I think we can agree on..at least the teachers in the room today.

MichaelHo: Yay...nay?

BlancaR: yay

MichaelHo: (thanks Blanca!)

StephaniR: yay

KristaKR: yay

GeoffD: Yay. I'm not trying to be gadfly.

LeannW: I'm not a teacher yet but, yay

SyedaSherZ: yay

GeoffD: Maybe we can get back to the issue after the chat.

AmieF: yay

MichaelHo: (just trying to keep everybody awake..just kidding :))

MichaelHo: Sure Geoff...

LindaPC: agree that lack of time is a factor that inhibits prof dev

MichaelHo: so onward....

MichaelHo: Well..the Glenn Commission recommended a solution to the problem...

MichaelHo: and the solution to the problem is what I'm talking about today.

MichaelHo: These teachers could use some instruction that fits into their busy days/lives...and helps them with their subject area knowledge so that they are better

SyedaSherZ: O.k what is that

JeanieGst25: I think you're looking at it!

MichaelHo: able to communicate the complexities of their fields to their students.

MichaelHo: That solution is one part Tapped In...and one part PersonalProfessors.com.....or at least our delivery method.

MichaelHo: The G. Commission suggested an Internet Portal as they called it...

MichaelHo: remember when that was the 'in' buzz word for Internet stuff?

MichaelHo: Portal?

MichaelHo: Well...if you read the G Commission report, you will see that TI very closely approaches the ideal they suggested...

MichaelHo: except you can't 'teach' in TI very well....

GailH . o O (would have to think about that)

LindaPC: Blackboard works well...you can even write in longhand using the virtual pen

MichaelHo: and that's what I will demonstrate today. As regards the Glenn Commission report...we can put up a link to that in my office in TI when we are done today...and I will be happy to have discussions with any and all in the future...(I'm talking about you Geoff!! :))

MichaelHo: Sure..but then Blackboard doesn't have what TI has....

GeoffD smiles, nods

MichaelHo: but you'll see what I'm talking about today....

MichaelHo: So....now

JeanieGst25: I saw the whiteboard in the intro!

MichaelHo: Good Jeanie..that's what we'll be doing....:)

LeannW: It's impressive...

MichaelHo: Thanks...

MichaelHo: so...

MichaelHo: remember when I suggested that there are different modes that can be used to communicate ideas....

MichaelHo: perhaps even teaching...

MichaelHo: on the Web?

MichaelHo: Now....I will go to a different mode and...

MichaelHo: hopefully....

MichaelHo: show you how much better one can be for certain types of communication....

MichaelHo: I think one needs to adapt the technology to the needs of the student and the type of information...

MichaelHo: just an aside...

MichaelHo: So.....

MichaelHo: let's all now go to the link for the live demo in the links section of the Tree House...

MichaelHo: I'll wait here to see how you are all doing..

MichaelHo: if you enter the live demo...you might hear me typing and talking to myself!

MichaelHo: It helps me type better for some reason.....:-/

MichaelHo: Jeff..could you please keep an eye on things in here?

MichaelHo: Help people with links and such?

LindaPC: I clicked on the link but nothing happened
JeffC: . o O (no problem)
MichaelHo: Anybody else?
JeffC: Make sure you have your popup blocker turned off for this site.
MichaelHo: Good point Jeff...
JeffC: http://personalprofessors.com/ppelectures/tappedin_live.smi
MichaelHo: Thanks..that's nice.
JeffC: You can click on that.
MichaelHo: Who's in?
LindaPC: I'm good to go
MichaelHo: Should see a whiteboard..and perhaps hear me typing and mumbling.....:-)
MichaelHo: Ok...
MichaelHo: I'm going to start talking on the microphone....so be prepared to hear me pick it up..which will create some rustling..
MichaelHo: and I'll keep an eye on what's going on here as well.
JeffC: You need Real Player for this site to work.
GailH: I got the plug in today and the demo worked for me.
GailH: Please retype the link correctly again.
KristaKR: This is working now
JeffC: http://personalprofessors.com/ppelectures/tappedin_live.smi
LindaPC: mine is still loading
GailH: It works fine.
JeffC: Please type: "no" if you're not in the Real Player presentation yet
SyedaSherZ: mine is still loading
LeannW: no
SyedaSherZ: no
StephaniR: no
AmieF: no
GailH: My tech guy had to unistall Real player and reinstall it to get the plug in to work. It was more than I could figure out.
GailH: But it works now!
LeannW: success!
JeffC: ok... right now... he's handwriting on the screen.
AmieF: I opened a new window and it took me out of the room
JeffC: Assumption: M/S is critically important... and that there is a crisis that we're third from the last.
JeffC: He's talking... I'm typing as fast as I can!
LindaPC: Am I supposed to see something on the white board?
JeffC: It's an interactive whiteboard system... showing how to use it to teach math and science.
LeannW: I hear but don't see anything yet
JeffC: Yes Linda, he is writing on the Real Player Mimio whiteboard.
JeffC: Do you have Real Player up?
LindaPC: hmmm...I guess mine is not very interactive right now then...
LeannW: It's there...Thanks

LindaPC: yes real player is loading (eternally it seems)

GailH: Is it just blue dots (or are there words)?

JeffC: just blue dots! yes!

GailH: Oh, I see him draw!

JeffC: that's one of the problems with tech Linda... always glitches with new technology and delivery systems!

HelenK: note working for me - I tested the demo earlier

JeffC: http://personalprofessors.com/pplectures/tappedin_live.smi

GailH: Is this live, and he is talking, or is this a tape that he made earlier?

JeffC: Individual dots are connected... he's live talking.

JeffC: talking

GailH: Now he writes word!

JeffC: All of this is live, but I believe it is possible to tape and archive it... but you'll have to check with him when he gets back here.

JeffC: "The connections between the dots are what allow us to teach effectively"

JeffC: knowledge connections have the most efficient and effective real time method for adaptive assessment of student learning.

LindaPC: Sigh...

LindaPC: I still am out of the loop on this

JeffC: A number can't get in... so I'm typing as fast as I can, Captain!

JeffC: The web allows us to draw the connections for students, by connecting a knowledge expert with a learner.

JeffC: Then we can allow for real time assessment ...

JeffC: Students he has in mind for learning are out of area teachers

GailH: In green he has written Connections and real time adaptive assessing.

JeffC: Ooat need to make the connections... they don't have the advanced degrees... but they need to make the connections.

GailH: In red he has written out of area teaching.

GailH: He had something in blue but he erased before I could see it.

JeffC: Tapped In and Personal Professors.com can provide that mechanism for bringing teachers together... using "just in time" fashion.

HelenK: thanks Jeff - appreciate your efforts for those of us who cannot access the demo

JeffC: 20 minutes a week allow teachers to learn the concepts and hook up with knowledge experts

JeffC: he will discuss this shortly

GailH: Board says:

GailH: Teaching

GailH: small units

JeffC: The Glenn Report and how it relates.

GailH: just in time

GailH: archived

JeffC: Tapped In is a close approximate of what the Glenn Report calls for.

GailH: archived--learn at own pace

WexGst20 wonders if the Glenn report differs markedly from TIMMS

GailH: Blue box around those 4 things.

JeffC: What is needed for professional development is real teaching from the knowledge expert in small units, just in time, and archived.

GailH: He put the letters PP by that blue box.

JeffC: Archived so that teachers may review at their own pace.

JeffC: We also need according to Glenn... a community where teachers can share ideas.

JeffC: Personal Professors and TI community give features needed by the Glenn commission... opportunity to share database of ideas and research.

WexGst20: Impressive program of connecting teachers with college faculty as support during the school year and working with them to do REAL SCIENCE in the summer

JeffC: His red pen just messed up... and now he must right in green.

JeffC: Share ideas and research.

JeffC: Interactive online resource (such as Tapped In)

JeffC: Outlet to distance learning courses, which closes the loop with Personal Professors.

IhorC: I think The Glenn Report was mostly fact finding, while TIMSS was research based.

JeffC: In tandem, TI and PP can provide what the Glenn commission calls for.

JeffC: Review

JeffC: Math and Science teaching is important

JeffC: Learning it is important and you need highly qualified teachers.

IhorC thinks that TI and PP is not yet ready for prime time.

MichaelHo: So..thanks for translating Jeff...

MichaelHo: good typing...

MichaelHo: wow

JeffC: Connections need to be made and providing out of area teachers get access for self-paced learning

MichaelHo: I'm just finishing up now...

JeffC: I would've been better but my kids are bugging me to take them to the park.

WexGst20 applauds Jeff's efforts

IhorC: These out of area teachers better be very tech savvy!

SusanaER: take them to the park!

MichaelHo: Whew....

JeffC: lol... good points Ihor and Susana!

MichaelHo: so....

MichaelHo: I hope at least some of you were able to make it in there...

SusanaER: I made it

LindaPC: not successful : (

AmieF: I will check it out after the session. Sorry I couldn't see it here

JeffC: Well... tech savvy insofar as they need to get plugins, etc... the first lesson is always the hardest... because getting there is half the fun! ;-)

SyedaSherZ: not successful

StephaniR: Sadly, no

GailH: I could hear and see, but I was confused.

WexGst20 likes the topic of conversation

IhorC: no, I'm still staring at my blank real one player that never opened the download.

MichaelHo: How about the rest of you?

LeighAD: not successful either

SusanaER: what is going on?

BlancaR: Great way to use the whiteboard and Real player

SyedaSherZ: My real player is still in loading position

LeannW: Can students record lessons that you draw on the whiteboard? or take screen capture? or should they take notes on paper?

JeffC: couldn't see or hear a thing... just guessed at what you were talking about

KristaKR: I was able to see what was happening. It is a great way to use technology!

MichaelHo: Funny Jeff!!

MichaelHo: Leann..

WexGst20: Michael, I'm guessing that a variety of formats (Flash) could be used to present the information

MichaelHo: yes, they can screen capture, and print out...but they also take notes..

MichaelHo: Thanks Krista...

MichaelHo: Yes....that's right Wex...

WexGst20 nods

LeannW: I'm taking a screen capture now of your final board.

MichaelHo: with some caveats that I can share with you if you are interested...

LindaPC: wish I could see it

MichaelHo: Way to Go Leann!!

MichaelHo: You are on the ball...

MichaelHo: Now those of you who didn't get in...

MichaelHo: don't worry...

MichaelHo: you probably just had an old version of Real Player that didn't get the plugin for you...

MichaelHo: the newest...free....version does.

AmieF: I actually downloaded the newest version this afternoon before this session started

GailH: I downloaded the newest today and did the demo.

MichaelHo: And you couldn't get in Amie?

LeannW: As soon as you load the new RealPlayer it finds an update (the mimio)

AmieF: nope

IhorC: Not in my case. But then this new Mac OS operating system can be fussy.

MichaelHo: Oh..you probably didn't check the 'allow for updates or something"

MichaelHo: Did you say Mac?

MichaelHo: Uh oh.....

WexGst20 smiles broadly

AmieF: Sorry-I couldn't access it from TI

KristaKR: I had to download it again, after I watched the demo

GailH: I got in fine, but I found the talking and the scrolling of the chat window and the whiteboard to be too many places to follow.

MichaelHo: Yes...I agree Gail...

WexGst20 understands Gail's point

MichaelHo: that's why we do 15 minute lessons on PersonalProfessors...

MichaelHo: then

MichaelHo: we go to live questions and answers...

JeffC: The scrolling chat though was only really for people who couldn't get in there.

MichaelHo: nice compromise I think.

MichaelHo: Exactly Jeff...

GeoffD: Appreciated, Jeff.

MichaelHo: You all know the research about paying attention for 15 minutes...so that's why our lessons are only that long..

JeffC: I think the attention span has gone down to more like 15 seconds

MichaelHo: Right...normally we have everybody in the lesson, then we ALL go to the live questions and answers afterwards...

MichaelHo: works well that way...

MichaelHo: and then the lessons can be archived very nicely....so chaos and tech clutter...you know?

IhorC: It depends on what the students are watching

GailH: A question, please.

IhorC: good educational materials do better than 15 minutes

MichaelHo: Go ahead Gail..

MichaelHo: then I want to follow up with Ihor..

GailH: This is an article

<http://www.enc.org/features/focus/archive/mathvideo/> about math teachers doing video study groups. I can see more PD happening there. Can you explain what you think the other offers?

MichaelHo: Sure...

MichaelHo: video is good for some things....but not necessarily easy for someone to use in quick chunks in their office or at home..or anywhere else.

MichaelHo: Is this video as in video tapes or video online?

GailH: But teachers who watch a short video together and then do a discussion of the teaching they saw...

MichaelHo: Ahhhh...video tapes.....ok...

GailH: The tape in their hands, and then they talk F2F.

MichaelHo: Oh, but therein is the problem Gail...

MichaelHo: many teachers don't have access to these kinds of f2f groups..many are the only one in their school, or county...

MichaelHo: that's the beauty of the Web..it can bring folks together over distance...

LindaPC: what's F2F?

MichaelHo: face to face

WexGst20: I've seen some CD-based video that allows for annotations and review, places for teachers to comment on what they've seen

MichaelHo: And even teachers in the same city might have a very difficult time driving to the same place to watch a video...you know?

GailH: And they can watch videos and then communicate, like on Tapped In and discuss it.

LeighAD: I don't mean to rush, but I believe we are running out of time.

MichaelHo: The Web can really connect people in a way that fits into busy schedules....

GailH thanks Michael for showing this new technology.

GeoffD: Video vs. Virtual Classroom isn't an either or deal. Different modalities to suit different situations.

MichaelHo: Exactly Geoff..

MichaelHo: each has its benefits

GailH: Thanks again Michael.

GailH: And Jeff--you did a great job of trying to keep up.

StephaniR: Thanks for your presentation.

MichaelHo: You're welcome Stephani

WexGst20: Thank you, Michael - great topic

BlancaR: Thank you Michael and Jeff for this session

AmieF: Thanks Michael and Jeff

MichaelHo: You bet Blanca...my pleasure

KristaKR: Great job! How much do the lessons cost?

HelenK: thank you Michael and Jeff

SyedaSherZ: thanks Michael and Jeff

MichaelHo: We are monthly subscription model for our high school students...talking about this with TI still.