

Title of Session: Problem Based Curriculum

Moderator: Chris Aguirre

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Room: PBC Group

ChrisA: Jennifer I know David and BJ but have we met before

LindaU joined the room.

DavidW . o O (we might all do intros, in any event)

JenniferLD: No, this is my first time in one of these. I am fulfilling a requirement for my masters

BjB: let's start with intros, please, and a reminder that if you're new to Tapped In go to the Actions menu in the top right of the chat and detach

ChrisA: Oh that is great what program are you in if I can ask

DavidW: Welcome to the Tapped In community, Jennifer

JenniferLD: Thanks

ChrisA: Definitely welcome

ChrisA: Hi Linda

JenniferLD: I am getting my masters in education tech

LindaU: Hi everyone. I'm Linda Ullah. I live in North Carolina, but work for the New Technology Foundation in Napa Ca. I work with New Tech High Schools in NC who are implemented a project-based learning curriculum in their classrooms.

DavidW: I'm David Weksler. I'm one of the HelpDesk volunteers and I lead a math education and technology discussion in Tapped In. I'm in New Jersey, near New York City

ChrisA: My name is Chris Aguirre and I am the Principal of M117 in East Harlem but way more importantly I get to come here once a month and talk to all of you about something I am really passionate about: problem based curriculum

JenniferLD: I am from Louisiana. I teach high school--financial math and algebra 1.

ChrisA: Hey Jennifer who are doing your Masters with?

JenniferLD: Which College?

ChrisA: wow have you always used that model Linda?

ChrisA: Ya what college

JenniferLD: McNeese State University in Lake Charles

ChrisA: cool

ChrisA: Linda what kind of projects have you been involved with?

LindaU: Oh boy.. many--where do I begin?

DavidW smiles

BjB . o O (Linda leads the Global Project Based Learning discussions in Tapped In)

LindaU: PBL as you know has is an acronym for project-based as well as problem based learning.

LindaU: They are quite similar actually.

LindaU: I've been teaching teachers to use PBL for many years now, having been a PBL teacher prior to starting to work with teachers.

ChrisA: Ya I would agree that is why I am really psyched to hear about some of the stuff you have going on

LindaU: Right now we have 33 high schools around the US who use project-based curriculum in their classrooms... The teachers develop the projects based on the Buck Institute PBL model.

ChrisA: from my stand point every good project based curriculum has excellent question embed in the project

BjB: Chris, in your spare time you might look at the three years of archives for GPBL at www.tappedin.org/transcripts

LindaU: We are on the same page... Good essential questions are key to good project!

ChrisA: How are the projects chosen if I can ask?

LindaU: The teachers create the projects. We guide them through the process of determining 21st Century Skills, state standards, writing good measurable objectives, determining acceptable evidence of learning, crafting good essential or driving questions, and, etc...

ChrisA: I would agree we have a lot in common

JenniferLD: I like this idea for Financial Math but do you have any examples of previous projects I could look at to really understand what this is all about?

LindaU: Prior to this job I developed and taught a PBL institute for teachers in the San Francisco Bay Area: <http://www.krauseinnovationcenter.org/ewyl/>

JenniferLD: Thank you

LindaU: Enough about what I do, I'm here to learn from you.

ChrisA: Well Let's talk about what makes a good problem and what to do with a good problem once you found one

LindaU: oh.. we have a New Tech project library in our learning system tools, and I kept a project library for the institute I used to teach.

JenniferLD: what kind of problems are you referring to? I guess I'm in the wrong class but I really don't know a lot about what you are talking about. Sorry

ChrisA: I would say relevance, that ability to apply prior knowledge and the ability to see an outcome are essential elements to identify a problem that could be used to get core ideas and skills across

ChrisA: Let's look at Social Studies as an example

ChrisA: If we know the goal is to understand why people settle where they do we could ask the question "What are the demographic patterns in a given neighborhood?"

ChrisA: Answers are found through data

ChrisA: but what comes past that point

ChrisA: I would say what would come past that point is an examination of what we think we know about the neighborhood overlaid on top of the data trend we just looked at

BjB: an example, please, Chris?

DavidW: o O ("what we think we know"?)

ChrisA: So in my case why are the blocks between Lexington Avenue and 2nd street doing poorly while two blocks over in the other direction there is building and development going on

ChrisA: I find that we ask why for many of the things we see without really knowing we are asking why

ChrisA: I might look to frame a problem out of that kind of observation

DavidW . o O (make a hypothesis and then test it?)

ChrisA: So In this case I might look to state the problem as "What would it take to develop the blocks between 2nd avenue and Lexington? and ask why are the blocks between Lexington and 1st doing well but going the other way they are not

ChrisA: and lead into the question "What makes us think that these blocks are doing well and these blocks aren't?"

BjB : interesting!

ChrisA: In this case these questions set the table for my problem How do we develop the two blocks that are not doing well

ChrisA: I should have all of the elements I stated above let's go through them to see if I do

LindaU: It's sort of like the pre-school [child] who asks "why," and each time you try to answer this question he/she replies "why" again and again.

ChrisA: First Relevance: I have that by grounding my problem in a geographic area that my students live in. This is their neighborhood and they know it way better than I do and they are invested in it

ChrisA: ya the five why rule definitely applies

ChrisA: I contend inside of those whys lives an excellent problem that should have these elements

BjB . o O (related to the creativity that is also extinguished in pre-schoolers)

ChrisA: Next because the problem requires us to construct something by being framed as a "how" question" it requires us to access prior knowledge

ChrisA: not just Social Studies knowledge but all of our knowledge

ChrisA: which in a very real sense is Social Studies knowledge

ChrisA: because in this case what we are really talking about is geography and land use and geography by its very definition is the study of all things

ChrisA: Finally let's look at a possible solution to the problem that was posed: How do we develop the two blocks that are not doing well?

BjB: how do we know they are not doing well?

ChrisA: in this example the school I work is in one of these blocks so I have many visual cues they are not doing well

DavidW . o O (count things - broken windows, abandoned houses...)

ChrisA: such as abandoned buildings between 2nd and Lex. No business on either side of the school

BjB: who owns the properties?

LindaU: ...collect data..

ChrisA: A visible neglect of the neighborhood in the form of excessive garbage on both blocks

ChrisA: Yes I would say all of those things start to come into play and be elements to a solution

ChrisA: What is interesting to me about this type of approach is that there is nothing stopping a teacher as to how far they want to push the project.

ChrisA: in my case potential solutions can be forwarded to the city councils, editorials can be written for our small community paper. Clean up can be organized as community service

LindaU: Including having the students develop plans for improving conditions and perhaps presenting those plans to the City Council or Planning Commission, etc.

ChrisA: I look at it from this point of view if my students do nothing else they become aware of how they can impact their greater surroundings that is at the very least

ChrisA: at the very most they could set in motion a lasting change in our school neighborhood

DavidW . o O (connect with other student-led projects in other cities?)

ChrisA: either way in this example they are asked to formulate a real solution to a real problem using the base knowledge, vocabulary and skills we teach in the core curriculum

ChrisA: That is a great Idea David

DavidW: Linda's department, Chris

DavidW guesses that Chris knows about the Harlem Children's Zone

LindaU: Great idea David.--makes learning more relevant when students actually do something productive with what they learn.

ChrisA: Not yet I really haven't gotten off my block since arriving in East Harlem

LindaU: e.g. doing real research for a real audience that can make a real difference.

ChrisA: which goes to my point of relevance: who among us does not internalize information better when we see the point to what we are learning

JeffC: put up the url David.

ChrisA: well in this example our problem was formed in that way

JeffC: It's not just seeing the point, it's *wanting* to see the point.

ChrisA: to me that is the big attraction to using this approach with other approaches

LindaU: Students don't have to wait until they are adults to make a positive difference in the world!

ChrisA: it allows you to scale up or down

DavidW: <http://www.hcz.org/>

ChrisA: I would say what we just talked about was on a big scale

LindaU: Learning becomes real!

ChrisA: yes I would agree in this case we could use that as an underlying learning point

JeffC: I've got something started here as well... which I plan on incorporating global project based learning with online debate. I've created a K-12 International Debate Club here.

JeffC: to accentuate and support the debate club my son is starting in his middle school here.

ChrisA: which is why I said earlier Relevance is essential to a good problem

ChrisA: Hey that is really cool Jeff

JeffC nods... I'll invite anyone here who wants to join that class.

JeffC . o O (i.e. K-12 student group)

JeffC hopes Jennifer will join this PBC group as well... I'll keep people posted about it... sorry for typing so much, Chris.

ChrisA: not a problem

JeffC will share one site and then shut up: <http://www.idebate.org/>

JeffC: register (free)... *tons* of resources, debates, etc.

ChrisA: I think it is pretty cool and I trying to make a point in my life to get out the hole I am currently in to see other groups and I think visiting Jennifer would be a great start

ChrisA: The last element I brought up this evening is something I would like to end with

JenniferLD: I will try. Can't go to another class tonight. Have 2 kids trying to get to bed. I will check out these sites you all have listed for me.

ChrisA: With any problem there needs to be a point were you need to be able to see your result and if need be adjust

ChrisA: this to me is like the most important part because this is were we make visible our personal views on success and failure and this is were we define problem solving for our students

ChrisA: I am not a big believer in using this kind of approach in a summative assessment situation but I have seen it done before

LindaU: Formative Assessment???

ChrisA: ya I have used that way successfully and I think it naturally lends itself to a formative assessment

ChrisA: because it allows an infinite number of ways to apply the knowledge and skills you have previously taught

DavidW: students can create content around areas of interest

ChrisA: I agree students can create content around areas of interest but just as important students can be challenged to do something that may seem out of their grasp

ChrisA: it's like throwing somebody the rubrics cube and telling them to solve it

ChrisA: many of us would try until we were frustrated and then put it down

ChrisA: but ask yourself what would it take at that point to get us to pick it back up again

ChrisA: I would say relevance

ChrisA: somehow we need to make that a relevant problem to solve

DavidW agrees

ChrisA: anyway I have taken up an hour of your time tonight

LindaU: ah.. a "need to know"

ChrisA: Thanks everyone for

DavidW . o O (and encouragement)

ChrisA: I would agree there are some of us that a need to know would keep us going

BjB: The next PBC discussion is scheduled for October 15. That work for you, Chris?

ChrisA: and if we are talking about children that have that kind of curiosity we are a lucky bunch of educators

ChrisA: but what if we are talking about the lowest performing third

ChrisA: those kids that can't face a challenge

LindaU: all the more reason for relevance.

ChrisA: then look at the problem I asked again

DavidW . o O (and encouragement)

ChrisA: definitely encouragement

ChrisA: Ya BJ I am looking forward to

ChrisA: Thanks

DavidW: Thanks, Chris. Good discussion

ChrisA: Thanks David

ChrisA: Talk to everyone later have a good night

JenniferLD: Thanks, I know I did not contribute anything but I learned a lot through you all

DavidW waves

BjB waves goodnight. Thanks, Chris

DavidW: Good luck, Jennifer