

Title of Session: Problem Based Curriculum

Moderator: BJ Berquist

Title of File: 20060320pbc

Date: March 20, 2006

Room: After School Online

BJB2: is everyone familiar with what PBC is?

ErikaR: no

JacquelinC: no

BJB2: go to the Tapped In tab and then the subtab calendar at the top of your screen

JenniM: no

JulianneP: yes did a short project on it in school, but always looking for some more info

BJB2: scroll down to today's date and click on the PBC topic

BJB2: Chris has a pretty good definition on the calendar description

JacquelinC: thanks

BJB2: we're waiting for Chris [Aguirre] to log in

BJB2: while we wait, let's start with introductions, please

BJB2: tell everyone where you are located, what you teach, and what interests you about PBC

JulianneP: My name is Julianne Perretta from Baltimore, MD. I work at the Johns Hopkins Hospital--I am a Respiratory Therapist by trade, working on my Masters Degree in Education. I am currently a continuing ed. (professional development) instructor. My field (medicine) is all about problem-based education. We learn in order to prevent problems (or fix "problems" in patient's health). I hope to get some insightful ways to create PBL activities for my staff members.

BJB2: I'm an art teacher in Pennsylvania and am moderating this discussion.

BJB2: thanks, Julianne!

MaryannaA: I am a technology consultant from southwest Iowa we have grant to use podcasts with problem solving

ErikaR: I'm a student teacher just interested in learning more

JenniM: I'm in Houston, TX currently student teaching in 3rd grade. Will be interested in teaching Pre-K or K next school year.

JacquelinC: Hi, my name is Jacqueline Cao from Houston, TX. I am currently student teaching in the Klein district. I would like to know how I might implement PBC in the elementary classroom.

BJB2: MaryAnn, what grade levels?

MaryannA: The grant is for 2-12

BJB2: thanks, everyone, for such interesting introductions

EmilieCh: Hi everyone, I'm also a grad student at Johns Hopkins University pursuing my Masters degree in Educational Technology.

BJB2: thanks, Emilie

BJB2: looks like we're going to have to wing it for a little bit....so I hope you all will help me out....

BJB2: for those of you familiar with PBC, can you share a definition of what you feel it is?

MaryannA: sure

JulianneP: one of my professors in another class described it like this:

JulianneP: if you want the students interested in a topic, start them off with a problem--one they can't answer yet.

JulianneP: then, give them the tools necessary (e.g.-subject you cover that day) to help come up with solutions to the problem.

JacquelinC: sounds interesting, and it keeps kids involved

JenniM: neat

JulianneP: they actively look for the content and skills necessary to answer the problem. it works best when it's a problem they relate to

BJB2 . o O (authentic problem solving)

JacquelinC: which grade level do you think it's appropriate for?

JulianneP: in my field, it's awesome, because you can use an ill-defined problem that staff could have come across before, and were unsure of how to respond

MaryannA: a book i am reading states that it is the most important innovation in education in the last 2 decades

JulianneP: I think you have to direct the students more the younger they are, but even toddlers are actively seeking solutions to problems they come across every day--I think

ErikaR: true

JacquelinC: cool

BJB2: I'm curious as to how you're going to use Podcasts, MaryAnn

MaryannA: We have been using problem solving as the focus of prof dev for the last 3 years. the students have been using poly

MaryannA: poly's four steps to ps and they have been prob solv in all curricular areas. the podcasts are going to be students teaching other students problem solving

JulianneP: Maryann, cool idea. it's funny how we forget the resources other students can sometimes be for one another.

BJB2: . o O (like the resources we can be for each other, Julianne?)

MaryannA: watch for us on itunes, we should be podcasting up a storm next year

JulianneP: exactly! speaking of--if I go back and find some articles from other classes I've used on PBC, can I post them somewhere for others to access?

BJB2: the most effective way to learn something is to teach it to someone else.

EmilieCh: Has anyone used the NTeQ model to implement PBL into their curriculum? I just recently learned of this model and I was wondering how effective is it.

ErikaR: no

MaryannA: what is it

JacquelinC: no

JenniM: no I haven't heard of it

BJB2: Julianne, why don't you email the articles to Chris and he can post them in his office

JulianneP: I've heard, but refresh my (forgetful) memory

BJB2 gets Chris' email address

JulianneP: thanks, BJ

EmilieCh: it's a pretty complicated model w/ 10 very detailed steps. <http://nteq.com/>

JenniM: thanks for the link

ErikaR: wow

JenniM: I'll look at it later

BJB2: Chris Aguirre <aguirre_chris@hotmail.com>

EmilieCh: it shows how to implement technology into PBL lessons

MaryannA: thanks for the resource

BJB2: thanks, Emilie. I wasn't familiar with NTeQ either

BJB2: is this in any way related to Big6?

JenniM: what's big6?

JulianneP: ditto

ErikaR: yeah

EmilieCh: Here's a great PPT file on NTeQ -->

<http://nteq.com/PresentFiles/NTeQ%202000g.ppt>

BJB2: <http://www.big6.com/>

JacquelinC: thanks, BJ

MaryannA: The big 6 are problem solving steps you take while researching. They are put out by the ALA I think

JenniM: looks interesting so far -- will have to check this one out later as well

ErikaR: okay

BJB2: there was a monthly discussion in Tapped in about Big6, but the presenter is no longer available. There are archived transcripts at www.tappedin.org/transcripts

SusanR joined the room.

BJB2: big6 can be used for any problem solving

BJB2 waves hi to Sue

JenniM: oh

JulianneP: looks like its something we may do w/out knowing it when we solve problems everyday

JulianneP: or at least what we should do as critical thinkers

BJB2 nods to Julianne.

JulianneP: kind of reminds me of teaching people responsible web searching

MaryannA: The big 6 fits in with WebQuests

SusanR agrees with Bj and Julianne

BJB2: Sue, are you familiar with any other problem solving ideas?

SusanR . o O (thinks)

BJB2: how do you assess a curriculum based on problem solving?

MaryannA: We use a rubric

ErikaR: oh good idea

BJB2 . o O (and how does it fit into the NCLB criteria?)

BJB2 . o O (move to Canada with Sue?)

MaryannA: There is research that indicates that students who use pbl do well on standardized tests

SusanR: have you heard of brain sketching

ErikaR: no

BJB2: MaryAnn, can you give us an idea of what is on the rubric? Sue, MaryAnn is planning on doing podcasting using PBC

MaryannA: no

JulianneP: the difference between teaching students the answers to a problem and teaching them how to FIND the answers themselves

BJB2 is not familiar with brain sketching

EmilieCh: BJB, I'm not familiar w/ Big6, but w/ NTeQ ..the main thing about this model is that the objectives of the lesson must match the computer functions.

SusanR: It's a very old technique ... 1988 ... a good way too have students think in unique ways

JenniM: I'm not familiar with brain sketching

JacquelinC: ditto

BJB2 nods to Julianne...but how do you assess that process?

SusanR: can I give you the link

MaryannA: We use Polya's 4 steps to ps which are similar to the big 6, the rubric is based on the steps

JulianneP: I had a book in one of my classes that talked about using rubrics to assess problem solving. Jonassen, D. H. (2004). Learning to Solve Problems (Instructional Technology &

JulianneP: Training Series): An Instructional Design Guide. John Wiley & Sons, Inc. San Francisco: CA

MaryannA: a good resource for rubrics can be found in the back on the book "Learning to Solve problems with Technology" by Jonassen

JulianneP: an entire chapter devoted to designing rubrics and test questions to assess students' problem-solving abilities.

JulianneP: I have notes on it that I can post as BJ suggested earlier

ErikaR: really

JulianneP: of course, my copy is at work (and i'm not right now)

BJB2 . o O (Polya's strategy is from 1945?)

SusanR: just for the fun of it try this brain writing technique
<http://pblchecklist.4teachers.org/>

SusanR: wrong link

SusanR: <http://www.mycoted.com/creativity/techniques/brainsketch.php>

SusanR: that's it

BJB2: here's a scholastic list of the Polya 4 steps
<http://teacher.scholastic.com/lessonrepro/lessonplans/steppro.htm>

BJB2: thanks, Sue

JenniM: thanks

ErikaR: great resources

MaryannA: yes from his book is how to solve it

JacquelinC: thanks Sue

BJB2: so, if this stuff has been around for that long...how many of you were born in 1945? how come it's just being recognized?

MaryannA: Polya is known as the "father of Problem solving"

MaryannA: some colleges have contests based on Polya

JulianneP: I think people have been doing it for a long time--educators just never looked at it as a valid way to design curriculum.

EmilieCh: Julianne, did you take Collaborative and Project-Based Learning from the ed tech program? I'm just wondering if you also receive PBL materials from your adult learning courses as well.

JulianneP: in the real world, we do this all the time--but not in formal education settings

EmilieCh: agreed

JulianneP: what if you don't know how to use your oven...or why your child doesn't feel well? what do you do?

MaryannA: I am working on another project concerning problem solving and how it relates to the 21st century skills. How to use technology to solve problems?

JulianneP: Emilie--my PBL stuff came from several of my adult learning classes. adult/college education seems to be focusing more and more on this technique

ErikaR: really?

JacquelinC: good point Julianne

EmilieCh: cool!! yeah, I love this PBL stuff. It really does get learners motivated!!

JulianneP: especially in fields that need to learn how to troubleshoot, fix things, etc--
HARD SKILLS

JenniM: cool

JulianneP: using technology to solve problems is the perfect way to look at tech integration, I think

ErikaR: it makes sense

JulianneP: esp to sell these tools to teachers who don't want to use them

BJB2: are you referring to things like webquests as tech tools?

MaryannA: yes that would be one

JulianneP: you can use PD time w/ teachers to "show" how technology can solve problems in their classrooms, too

JulianneP: PBC for professional development

MaryannA: for instance?

JulianneP: pose a common dilemma that all teachers in your school come across, that can be answered by using a tool they don't use yet

JulianneP: e.g. - How can you improve communication with parents who never seem to be available, or who you can't really tell are involved in their child's education? (answer: web page, email, etc)

MaryannA: thanks good idea

ErikaR: good idea

JenniM: ok

JulianneP: I know you guys probably have a ton! I don't work in school, I have to deal with adult learners who are usually fairly undermotivated

JulianneP: and i spend lots of energy trying to get them to buy in on their learning experiences

EmilieCh: for those who are curious about the NTeQ model, here's a good NTeQ Sample Lesson Plan (i just found it) --> <http://www.ucs.mun.ca/~z06gkd/NTeQproj.html>

SusanR: Can I interject... if you are interested in Problem Solving Techniques you may want to refer to this list....techniques often used in industry..some of these are old techniques: but still relevant..would be interested in adapting them for tech integration

SusanR: <http://www.mycoted.com/creativity/techniques/index.php>

EmilieCh: the steps will show you how it's implemented by focusing on the 10 steps questions

JulianneP: BJ, will this topic be reassigned to another date b/c Chris couldn't log in?

BJB2: Chris leads this discussion once a month

JulianneP: ok

BJB2: that is why I suspect he had tech problems

BJB2: . o O (he usually is good about letting me know if he has to cancel or reschedule)

BJB2: his next discussion is April 17

JulianneP: thanks

BJB2: I think you all should give yourselves a round of applause!

BJB2: I learned a LOT from what you've all shared!

MaryannA: Thanks for all of your input.

SusanR: are any of you Dr. de Bono fans?

JenniM: thanks

JulianneP: thanks BJ!

JenniM: nope

ErikaR: thanks

JulianneP: who is Dr. de Bono?

SusanR: I am showing my age

BJB2 waves hi to Dave. We'll be starting in about 10 minutes

SusanR: He invented the 6 hats thinking method

SusanR: maybe it evolved into the BIG 6

SusanR: <http://www.mycoted.com/creativity/techniques/sixhats.php>

SusanR: This will give some background. I used the techniques with my grade 2 class some time ago