

**Title of Session:** Problem Based Curriculum

**Moderator:** Chris Aguirre

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Room: Project Based Curriculum Group

**BJB2:** we usually start all Tapped In discussions with introductions

**ChrisA:** Are you here for the problem based curriculum meeting

**PamGC:** Ok I'm Pam and I am a student teacher supervisor for Azusa Pacific University.

**BJB2:** I'm a teacher in Pennsylvania

**PamGC:** Greeting!

**PamGC:** APU is in CA

**ChrisA:** I am the Director of Career and Technical education for the Kodiak School district

**PamGC:** Yes, I am here for the problems based curriculum meeting.

**DavidWe:** I'm David Weksler, Jeff's east coast representative (in New Jersey). I'm one of the Help Desk volunteers

**ChrisA:** Ok let's get started has everyone introduced themselves?

**PamGC:** Yes

**ChrisA:** Ok then I thought maybe we could talk about what makes a good problem?

**ChrisA:** does anyone currently do any kind of curriculum work that involves projects/

**ChrisA:** that would be a ?

**ChrisA:** what often happens in Career and Technical Education is teaching of the desired skill

**ChrisA:** The skill gains purpose when you can use it to solve a problem

**ChrisA:** so when we look to develop a course one of the first things we do is look for a problem to base it on

**ChrisA:** for example we currently are revising our curriculum for our construction program and one of the questions we asked ourselves was

**DavidWe** nods

**DavidWe** waves to Susan

**ChrisA:** how do we build ecologically minded affordable structures

**ChrisA:** embedded in that question is our tie to other disciplines

**ChrisA:** now not only do we want to apply the skills we have been practicing but we want to put the knowledge we have been acquiring in other areas use in this case we were hoping to make a connection with earth science,

**PamGC:** Chris, what disciplines would be included in the subject your suggested?

**ChrisA:** we think we can mix in conservation by choosing to build with rafstra or hay bails

**DavidWe** knows a bit about hay bails

**ChrisA:** although hay bails are pretty expensive to ship they still make great insulation and when constructed properly makes a great dwelling

**PamGC:** How large a dwelling could you make with hay bails?

**JeffC:** I saw a straw house episode once on "This Old House"... pretty interesting stuff.

**ChrisA:** the Rafstra literally meets local wind codes for building and has a great track record for keeping out mold which is a local problem

**PamGC:** I saw the "This Old House" program, too. It was very interesting!

**ChrisA:** actually I have seen two story homes done with hay bales and I helped with a two story barn before I left Upstate NY

**PamGC:** What is rafstra?

**ChrisA:** from our stand point asking the question how do we build a more energy efficient home that keeps mold out (local problem) and meets local building codes lead us to thinking about using rafstra

**DavidWe** . o O ( raffa? )

**ChrisA:** if you are unsure of what rastra is this should help  
[http://rastra.net/rastracom/web-site/wi\\_ra.htm](http://rastra.net/rastracom/web-site/wi_ra.htm)

**DavidWe** nods

**DavidWe:** Thanks

**ChrisA:** anyway taking that approach not only allowed us to cover the needed curriculum for the course but it also opened the door for cross curriculum tie-ins

**PamGC:** Thanks, Chris, That was helpful

**ChrisA:** I think that any problem that want to use at the core of course either as a capstone project or a course goal to solve needs to do

**ChrisA:** both the given skill objective (math science, ELA or in my case construction)

**ChrisA:** and needs to have a tie to other curriculum that allows a student to transfer their knowledge from other subjects and experiences in trying to solve the problem

**PamGC:** So, the problem needs to be very broad in scope

**DavidWe:** Not necessarily

**DavidWe:** Just need to think about how to elaborate the problem into various subject areas, Pam

**ChrisA:** In our case we called the course construction II but we based the course on solving this problem: how do we build a more energy efficient house that keeps mold out and is still affordable

**ChrisA:** Ya I agree David

**DavidWe** nods

**ChrisA:** is anybody in a course or has taken a course that they have been handed a problem in the beginning and asked to solve it?

**PamGC:** No

**DavidWe** . o O ( not typically )

**ChrisA:** because I am truly a geek and have way to much time on my hands I have given this approach a lot of thought

**PamGC:** My area of interest here is in the K-6 classroom. Is this method applicable to this level?

**ChrisA:** if you were able to formulate a problem or a series of problems on the scope of any curriculum wouldn't the problem itself give the curriculum purpose and meaning

**ChrisA:** I think it happens naturally at that level Pam

**PamGC:** What do you mean by "naturally"?

**ChrisA:** I mean that they encounter problems on daily bases and they feel the knowledge your giving them is meant to solve it

**ChrisA:** not quite what a kid in High school does

**DavidWe** doesn't think younger kids see problems divided up into subject areas as high school students might

**PamGC:** Do you really think so? or are they just doing what is asked to please the teacher

**ChrisA:** that kids might look at the knowledge being presented to them the means to an end

**ChrisA:** I agree with David on that

**ChrisA:** great question

**PamGC:** That's true. The day in elementary school covers a lot of subjects that can be related by a skillful teacher

**ChrisA:** doesn't the answer to that question boil down to whether the student sees a purpose in the action

**PamGC:** probably!

**ChrisA:** I think at that point of transfer you are solving a problem

**ChrisA:** quietly and with out much recognition you are solving a problem

**PamGC:** OK I hadn't thought of it that way. I thought it was supposed to be a lot more formal

**ChrisA:** what do you think?

**ChrisA:** ask yourself this

**ChrisA:** what does it take for you personally to solve a problem

**ChrisA:** by that I mean what do you do [to] get over a hurdle you might be facing

**ChrisA:** I know I ask a lot of questions

**PamGC:** Understand what is being asked, look at my options and what needs to get done, decide

**ChrisA:** and I always look for situations that are similar

**PamGC:** Yes

**ChrisA:** with those two steps done I take what I have come up with and apply it to the problem I am facing

**ChrisA:** I would say that is transfer

**PamGC:** That's true. So it's more recognizing what I am doing anyway

**ChrisA:** What ever problem you would like to use in the course of your curriculum would most likely involve the use of a similar method to solve? (I am just thinking out loud here)

**PamGC:** So every problem would have a similar way to solve it?

**ChrisA:** I would think so, I just asked you the question to call attention to the fact that if you formulate problems that are two narrow most likely they will serve as a better assessment of fact or piece of information

**PamGC:** So it is better to ask a less specific problem to have more interaction across the curriculum

**ChrisA:** if you formulate a problem that is broader in nature it will most likely require transfer of other knowledge to solve. I am thinking that is a definition of "purpose"

**ChrisA:** would anyone like to answer Pam's question before I take a swing at it?

**ChrisA:** Ok ya I think a problem that wraps what you're teaching into a bigger question that places what you're teaching in larger context will allow students [to] see meaning in the content your presenting

**DavidWe:** Yes!

**DavidWe:** My answer

**DavidWe** smiles

**ChrisA** smile

**ChrisA:** anyway it's a point of view I wanted to get out on the table

**ChrisA:** I think about this a lot because from my chair I am often asked what our purpose is

**PamGC:** Good food for thought

**ChrisA:** this has been fun thanks for coming everyone

**ChrisA:** see you next month if you're online

**PamGC:** You are welcome. See you all later

**DavidWe:** Thanks for a great discussion, Chris

**ChrisA:** by Pam

**DavidWe** waves bye to Pam

**ChrisA:** no Prob thanks for coming David

**JeffC:** thanks Chris

**JeffC:** how do we deal with the problem of getting more people to attend?

**DavidWe:** Indeed

**DavidWe:** Thanks again, Chris.

**BJB2** . o O ( next PBC is June 19 )

**ChrisA:** later

**DavidWe:** Ciao, folks

**BJB2:** thanks, Chris

**ChrisA:** ya sounds great BJ

**ChrisA:** see you then

**BJB2** waves goodnight