

Beyond the Podium

May 20, 2016

Divergent Thinking

Discussion Leader: Elif Ackali

Students Teaching Students (Learning Assistants – LAs)

Creative Campus grant

- Creative Scholar in Residence
- Visited the School of Theatre and Dance—specializing in Dance
 - Dance research is fundamentally different than the way research is done in Engineering
 - Advances in Engineering could have an impact in the Arts and vice versa
- Weekly 3 hour meetings at the college level
 - Play and explore
 - There is no “one correct” answer
- She is taking dance classes, art classes, cartooning
 - Elif’s struggles in those classes help her to see how students might struggle

Sketch activity

- Fast Drawing
 - Unusual images
- What is happening?
 - Need to choose an element to capture
- Identify a pattern to look at and not get distracted
 - Pick one thing that you can play with
- What are you doing?
- How do you feel?
 - Engineering students get competitive and their
 - Students think it is fun at the end
 - Sometimes students ask why they do this
 - If they do not ask, Elif doesn’t necessarily tell them
 - Helps them to step outside of their normal way of thinking

Divergent Thinking Class

Class meets once a week for 3 hours

- Invite and encourage them to do an activity that they have never done before
 - Contributing to “social capital”
 - Can help to find meaning
- Do you see how this plays out as Engineering students go through their program?
 - She is seeing this during the semester—students can identify more uses for objects
 - Students document the different ways they are thinking about problems
 - Teaching as part of Innovation Institute
- People who succeed in academia are not necessarily those who are open to different experiences
- How do you critique work?
 - Grading is a challenge
 - What is important is full student participation in the work
 - How committed are they?

- For every activity the same four questions that encourage reflection
- Course is more like a studio class
- Consider separating “assessment” from “grading”
 - Students help to define the project criteria
 - Challenges with students thinking that the default grade is an “A” and that they “lose” points
 - Students have a hard time differentiating between “effort” and “results”
- You don’t have to be an excellent sketcher to sketch something
- Today’s students tend not to use their sense of touch
 - The pen/paper experience can be freeing for students
 - Elif dedicates two weeks to “sensing”
- Most Engineering students are strong mathematically
 - We may ignore other ways of viewing the world
 - Giving students physical objects to support an activity where they list different ways to use the object tends to result in more uses
- In medical science, stepping back and looking for the patterns within the big picture can be helpful
- Elif now has 32 students in the course—with dance in the course, it can’t go above 40 students
 - Looking for ways to scale up
- Elif has a repository of exercises that folks can use in their courses to encourage outside-of-the-box thinking
- Engineers need more empathy skills
 - She’ll have students tape their hands to emulate arthritis

Other Activities

- 100 questions:
 - give them a word and ask them to respond
 - Pick the 10 of the most important ones
 - Is it an open question or closed question?
- Colored hats:
 - Black hat is emotion/cautionary
 - Blue is process oriented
 - White is data
 - The way I form a question invites different types of ideas
- Divide Class into four sections
 - Observing:
 - Watch people in a coffee shop
 - Use all senses
 - Learning:
 - Learn from yourself
 - 100 questions → learn from others
 - Questioning:
 - Ourselves
 - Other people
 - Experimenting
 - Dance exercises
 - Drawing exercising
 - End of course: use animal systems to design
- There can be Engineering solutions to social issues

- Within levels of bureaucracy it can be challenging to get people to understand things beyond the routine tasks