

Talking points for Teachers, Administrators and Advisors

Reasons to use PBL:

1. Common Core Practice Standards
2. 21st Century Learning Outcomes
3. Image I gave out in workshop (comparing PBL and Traditional Methods Meta-Analysis)
 - a. Better Long Term Knowledge Retention
 - b. Higher Levels of Satisfaction in Learning
 - c. Higher Levels of ratings in observation in Clinical trials
 - d. Higher Performance on Simulations
 - e. Better Ability Shown on Evaluations requiring elaboration
4. PBL is a curriculum that is geared towards a “Growth Mindset” – Fosters risk-taking, creativity, learning from mistakes, the possibility of multiple answers and perspectives, critiquing peers’ work, use resources
5. PBL attributes fulfill or encourage research-based girls’ learning needs of empowerment, learning for understanding, ownership, connectedness and sharing (and most likely other underrepresented groups like socio-economic status, race and ethnicity as well)
6. Focus on self-regulated learning helps teach problem solving skills that transfer to most other courses, disciplines and SAT questions (not to mention real life!)
7. Allows for different types of learners to show their strengths (e.g. writing, computer skills, risk-taking skills, discussion strengths, presentation skills)
8. Purpose of mathematics education (implication: knowledge base, use in college and career) is changing – ingenuity, thinking of new ideas and how to use prior knowledge is key. Everyone will be able to find knowledge (i.e. resources like Internet are omnipresent).

“My child doesn’t learn this way”

- The exposure to new expectations is often a challenge at first
- Generally a three month transition period to clearly understand homework expectations, broad goals, new forms of assessment and classroom culture
- Recipient learners are forced out of their comfort zone in time
- Modeling by other students and the teacher begins to become habits in the classroom
- Numerous resources for help on concepts (generally not really the actual struggle)
- Communication of needs to teacher is very important
- Someone’s else’s child does
- Discussion of how to “take notes” on student presentation must be taught or discussed in class

“The teacher isn’t teaching” or “This is too demanding for the students” or “My child is spending hours on her homework”

- Instruction comes in many forms self-regulated, peer-to-peer, direct, and eliciting by the teacher (and in many of these types of classrooms, there may even be some types of direct instruction at times too).
- Trying to lay the groundwork for student’s own responsibility in learning

- Ownership and authorship help girls feel connected to material that might otherwise be foreign and unimportant
- Investment in the learning process implies retention of the material and the broad skills
- Every student should have at least one math class that pushes them “outside their comfort zone” to practice creativity, risk-taking and curiosity as well as mathematical thinking skills and a problem solving process.
- Talk to your child’s teacher and see what the time limit is on nightly homework and her/his definition and homework expectations. Make sure this is congruent with your child’s definition and expectations