



Issue 1

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Summer Conference 2009

The Aggie STEM annual summer conference was held at Emmet J. Conrad High School this year in Dallas. The two-day conference took place Monday, June 8 and Tuesday, June 9. This year's conference contained a strand for both beginning Project-Based Learning educators as well as advanced educators. New PBL learners attended a session led by Conrad's T-STEM administrator, Deborah Floyd and Texas A&M University's professor in mathematics education, Dr. Robert M. Capraro. Advanced PBL educators could choose between Conrad teacher, Jennifer Stitt's and TAMU engineering professor, Dr. Jim Morgan's "The

Making of a PBL" or TAMU mathematics education professor, Dr. Mary Margaret Capraro's and TAMU doctoral student, Kristin Huggins' session on Professional Learning Communities and Interdisciplinary PBL. Conrad teacher, Crystal Woods, led a great session on TI graphing calculators and the Navigator System. Another dynamic Conrad teacher, Heath Coles, trained teachers on the use of SMART Boards and CPS (Clickers). Special guest presenter from Texas A&M University, Dr. Fred Bonner highlighted the conference with his talk on "Generating STEM Success with African-American and Hispanic Students". Two I-Pod Touch were given away to participants, Laverne Sanders and Ruth



Cutwright. Aggie STEM Project Manager, Linda Stearns, and engineering professor, Dr. Jim Morgan, joined forces with the other 6 STEM centers in Texas and Texas High School Project for a week long conference at the La Mansion in San Antonio from July 20 through July 24. This conference, designed for STEM school leaders, provided educators with the necessary tools to write their own, present in their classrooms and teach others in their schools the proper methods of Project-Based Learning.

HOW TO HAVE AN EFFECTIVE PROFESSIONAL LEARNING COMMUNITY

By Dr. Scheurich

Unfortunately, most professional learning communities (PLCs), teacher teams, or common teacher planning times have little to no effect on improving student achievement, even though that is their purpose. Why is this true? The primary reason is that the teachers in most PLCs don't maintain a sharp,

persistent focus on issues of teaching and learning. Instead, the PLC time gets used to plan parties, complain about paperwork or administrators, gossip about students or other teachers, etc. If you want your PLC to be effective, you have to become very persistent about keeping the focus on issues of teaching and learning. To be effective,

keep the focus on collaborative lesson planning, building collaborative assessments, evaluating whether a lesson worked or not and for which students, diagnosing why students missed certain questions, and developing appropriate reteach efforts. If you keep your PLC focused on these latter activities and share your mutual strengths, you will have one of the exceptional PLCs that actually raises student achievement.

Teacher Profile: Crystal Woods



Crystal Woods is starting her ninth year of teaching at Conrad High School where she teaches algebra I, geometry and geometry Pre-AP. Crystal was selected as the Conrad High School 2008-2009 Teacher of the Year. She has created a PBL “Geometric City” that focuses on geometric vocabulary, geometric shapes, and composite figures. Crystal used this PBL last academic year in her class and will use it this year, too. She says the most interesting aspect of her PBL is “the freedom of creativity students have to use their imagina-

tion.” Some students went far beyond her expectations by adding people, cars, birds, trees, etc. to their geometric cities. Moreover, Crystal saw an increase in her TAKS scores in measurement and composite figures, and she thinks this project helped create that success. For the teachers that are going to use her PBL, Crystal says they should know that getting the students to create perpendicular and parallel lines using rulers as a coordinate grid is difficult. However, she also says this part is critical to the equations they cre-

ate from the project as well as their understanding of the objectives covered in the project. Additionally, Crystal encourages teachers who choose to use her PBL to create some formative assessments to serve as check-points, so students cannot throw a project together at the last minute and the teacher is aware of the students' progress. She plans on adding her own formative assessments this year when she does the project again.

“Who dares to teach must never cease to learn.” ~John Cotton Dana

Check out our renewed website
aggie-stem.tamu.edu

Look for the PBL on the aggie-STEM website

What is going on at STEM ?

New addition to the STEM team

My name is Rayya Younes. I am a doctoral student at the department of Teaching, Learning and Culture at TAMU and a Graduate Research Assistant at STEM. I have a bachelor and

masters degree in mathematics. Moreover, I have a Teaching Diploma for teaching math. I am originally from Lebanon where I taught math in middle and high school for 5 years. I was also a scouts leader for 10 years. I worked with different age groups and I got to try

many of the methods we use in the classrooms in the outdoor setting. I love sports especially volleyball but I haven't played yet since I got to Texas. What I have missed the most since coming here is the beach !



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Addresses and links to PBL's