



## Issaquah School School District Math/CTE Connections Project

### What is it?

Help students be successful in Algebra 1, Geometry and beyond!

Math and CTE teachers team-teach an algebra enhanced woodworking course that aligns the learning of math concepts with practical, construction-oriented projects in order to improve math skill retention, help make math meaningful and relevant, and reinforce the importance of math for success after high school.

### How does it work?

- ◆ Team a math teacher and an industrial tech teacher.
- ◆ Target students who are predicted to struggle in Algebra 1.
- ◆ Students learn a math concept with the math teacher and then rotate to the CTE teacher to work on a practical construction-oriented project. This rotation is ongoing throughout the year.
- ◆ Students are concurrently enrolled in Algebra 1.
- ◆ After completing the year-long Enhanced Woodworking course, students earn a .5 math credit and a .5 occupational ed credit.

### Where do we go from here?

- ◆ Spend next year to work the kinks out of the rotation and develop and balance the level of cognitive demand and utilize high leverage practices.
- ◆ Develop a geometry enhanced CTE course to start in Fall 2010 – possibly in fabrication or pre-engineering. Students would be concurrently enrolled in geometry and earn the .5 math credit and a .5 occupational ed credit.
- ◆ It is our intent that students build a strong math foundation to be successful in Algebra 2 and progress to college level math.
- ◆ Participate in or support the development of an Applied Algebra 2 course as an alternative to Algebra 2.
- ◆ For students who earn the 1.0 occupational math credit and choose to opt out of Algebra 2 for a career pathway course, a math oriented CTE course can be scheduled (i.e. Construction Tech, Welding, Engineering, Drafting, Accounting.)

### How did we do it?

- ◆ Built a partnership with District Teaching & Learning, District CTE, High School principals, counselors and teachers.
- ◆ Participated in the PC3 Math/CTE workshop series and received a Transition Math Project grant to fund course development.
- ◆ Ran a pilot course at Liberty High School.

### What are the challenges?

- ◆ Adding the Enhanced Woods classes meant giving up sections of other CTE courses.
- ◆ Coordinating the math and the CTE projects takes ongoing effort and refinement.
- ◆ Developing and balancing the level of cognitive demands in math and CTE takes ongoing effort and refinement and requires professional development for the teachers.
- ◆ Need more experience to determine whether the course is producing the results we want to achieve.

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