Drury High School
North Adams
8-12
2014 to 2015 First Year for Real World Math

- Two ½ year semester courses
- 3 sections each semester
- Instituted as a Tier 2 intervention
- Some resources provided by Map. Mathshell.org
- Aligned with the math common core curriculum
Goal of intervention

- By using Real World problems, students will see the connection between math modeling and their lives.
- Students were identified based upon grades and MCAS scores.
- Course is project based to capture student interest.
How We Will Determine the Needs

• Pre and post tests will be given to students
• Students will self evaluate
• Order and pacing of real world math is determined by the respective curriculum maps
Students will have an active role in their own learning

- Financial literacy will be included
- E clickers will be utilized
- Career education will be included so students can see the need for math and their future
  - Guest speakers
  - Internships
  - Job shadowing
  - Surveys
  - Career investigation through Naviance Software
Students will present their career study through a Service Learning project showing how math is involved in their potential career choice.
Physics – Projectile Motion

- Physics is the basic science that all other sciences depend upon.
- Defines the nature of things such as motion, forces, energy, matter, heat, sound and light.
- Physics is the application of math skills in the real world.
- Students have a great deal of difficulty understanding Projectile Motion
Different types of projectile motion

Types of Projectiles

[Image of different types of projectile motion]
Currently this unit is taught in a theoretical manner only

Since it involves two vectors one linear and the other exponential, students get confused

The unit will be redesigned to include an experimental component

Resulting in better compliance with the NGSS
Students practice creativity and innovation

- As a hands on lab experience students will take risks and demonstrate persistence through trial and error experimentation as they devise multiple solutions to the problem.
- This will lead to greater understanding.
- Students will then defend their results to their classmates, MCLA and Williams physics professors.
Career connections

- Students will work with the Naviance software to see the connections to various careers and physics, scientific inquiry, and kinematics.
- Students will meet with the professors from Willliams and MCLA and further discuss careers requiring the knowledge of physics, motion and projectiles.
Thank You