

Improvement of Mathematics Teaching in the North Country

The overall goal and purpose of this project is to meet the various professional development needs of North Country teachers so that they may more effectively teach (assisting in improving student achievement) mathematical concepts and skills identified in the NH Mathematics Frameworks. The NCES (North Country Education Services) Professional Development Center recognizes that teachers have varying needs for professional development and are thus proposing multiple components. Teachers may participate in all components or select one or as many components as they wish. Overlap in participation is expected.

The program components will be open to teachers of grades kindergarten through grade twelve. Priority for participation will be given to teachers of the partnering districts for no or minimal cost (optional graduate credit will cost \$125/credit). Remaining spaces will be made available to teachers in the surrounding areas. The content of the components is primarily geared to elementary, middle and high school grades. Participation from a mix of teachers, from those weak in mathematics to those with strong mathematics backgrounds will be encouraged. Past experience has shown that varying levels of expertise provides for a dynamic group of learners.

A factor that strengthens professional development in this mostly rural area of the state is in the informal network of teachers with mathematical interests that this regional approach fosters. Throughout the past years of math related professional development, teachers have come together from nearly every North Country school. They are able to share and brainstorm through challenges and provide support for one another. For many, without their connection to other mathematics teachers through the NCES PD Center, their opportunities for collegiality would be limited.

Goals and Objectives:

Component #1: Creation of a common set of end of class competencies / standards for Algebra 1, Algebra 2, and Geometry led by Plymouth State University NH IMPACT Center Mathematician

Component #2: Distinguished Math Educators Series composed of five 1.5 day math professional development activities in content specific areas for elementary and middle school teachers.

Component #3: Essential Mathematics for the Elementary and Middle School Teacher