

1014-D1-1703 **Steven R Benson*** (sbenson@edc.org), Education Development Center, 55 Chapel St, Newton, MA 02458. *Putting the Focus on Mathematics: Content-based Professional Development for Grade 5-12 Teachers*. Preliminary report.

K-12 curricula, along with local, state, and national standards and frameworks, increasingly emphasize student investigations. The pedagogical judgments required to successfully facilitate such investigations depend heavily on a specialized kinds of mathematical knowledge. While it is widely acknowledged that professional development programs must assist teachers in strengthening their “mathematical knowledge for teaching,” there is less consensus on what specific content is appropriate.

We will share our experience with content immersion programs developed for middle and high school teachers that foster “mathematics for teaching” by encouraging mathematical exploration in content areas that go beyond - and connect to — the mathematics they teach. We will share materials that have been used successfully in a number of workshops and professional development programs, including two NSF MSPs, a well-established graduate program in mathematics for teachers, local school- and district-based continuing professional development, and workshops around the country. We will conclude with a discussion of lessons learned in the various applications of content immersion in these disparate venues. (Received September 28, 2005)