Expanding the Circle of Successful Mathematics Intervention

The KCM (Kentucky Center for Mathematics) is supporting schools across Kentucky in enacting effective RTI (response-to-intervention) in mathematics. RTI is a multi-level prevention system used to maximize student achievement though an integration of assessment and targeted, evidence-based intervention. House Bill 69 (2012), requiring implementation of district-wide mathematics primary grades RTI systems by 2014, has resulted in the proposed administrative regulation 704 KAR 3:095, to be reviewed during a public hearing April 24, 2013 (see http://education.ky.gov/districts/legal/Pages/KDE-Public-Hearing-Information.aspx).

The Mathematics Achievement Fund, an investment from the Kentucky General Assembly since 2006, supports the intention of House Bill 69 (2012) with funding to grow teachers’ expertise in diagnosing progress and difficulties and advancing students’ early mathematics development. Now those expert teachers are spreading the wealth through 25 EERTI (Enacting Effective Response to Intervention) Math Circles—enthusiastic professional learning communities led by experienced and highly trained, passionate MITs (Mathematics Intervention Teachers) and supported by the KCM. The Math Circles are growing K-3 teachers’ understanding of early numeracy development and providing strategies and techniques to improve schools’ math RTI systems.

There are currently 25 EERTI Math Circles with more than 200 mathematics education participants!

The MITs, as members of the KCM’s long-standing PMIP (Primary Mathematics Intervention Program), have an astonishing record of accomplishment for facilitating growth in intervention students’ mathematics achievement.

For example, during 2011/2012 primary grade students in the PMIP made impressive growth from fall to spring on the mathematics portion of the MAP (Measures of Academic Progress) test, a national assessment that aligns with state proficiency levels. The average growth was greater than the expected growth, based on national norms (see graph at right).

80% of all kindergarten, first, second, and third grade students in intervention exceeded the expected gains based on MAP norms from fall and spring. The growth of the 803 primary grades intervention students (with pre and post MAP scores) of 18.83 percent on average was nearly double the gains of their non-intervention peers who increased 9.56 percent.