Kentucky Primary Mathematics Intervention Initiative Sees Major Gains in First Year

HIGHLAND HEIGHTS, Ky. – The Kentucky Center for Mathematics (KCM) released today surprising statistics from the first year of its Primary Mathematics Intervention Initiative that show the program is working better than anyone could have expected.

Last year, more than 1,000 kindergarten and first-grade mathematics students at 45 schools throughout the Commonwealth received specialized instruction from full-time time primary Mathematics Intervention teachers. Students who received the specialized instruction significantly outperformed their peers. Kindergarteners finished the year scoring higher than 64 percent of all students nationally, whereas their peers who did not receive the specialized instruction scored higher than only 36 percent of all students. Equally impressive, first-graders who were part of the program scored higher than 49 percent of all students. Considering that these students started the year scoring higher than only 7-8 percent of all students, the gains are dramatic.

"We couldn't be more pleased with these results," said Alice Gabbard, KCM director of diagnostic intervention. "To see that the Mathematics Intervention Initiative is having such a strong and immediate impact is extremely encouraging. We hope for continued support to sustain this program because it is desperately needed for building a foundation in numeracy that will allow all Kentucky students to excel."

Just as early literacy intervention has received much focused effort in recent years, early numeracy intervention is beginning to get equal attention. Early numeracy benefits children by establishing foundational concepts and skills and also provides them with greater confidence in their abilities to think and to explain their thinking. Cheri Griffin, a Mathematics Intervention teacher from Northern Elementary in Pendleton County, says that she was excited to see student progress in 30 hours of instruction that was "unreal." Griffin emphasized the importance of early intervention to avoid greater gaps in the future.

Staff members at the KCM, which is housed at Northern Kentucky University, coordinate the training for the Mathematics Intervention teachers. Jonathan Thomas, assistant director of diagnostic intervention at the KCM and doctoral student at the University of Cincinnati, said there is a great need for time and attention to be dedicated to young students, because there is a wide-spread misconception that first-grade math is easy.

"The KCM provides training and support to allow teachers to learn and engage in ongoing discussions about the complexities of teaching primary mathematics," Thomas said. "One of the goals of teacher training is awareness of specifically what a child understands. For example, when a child looks at the numeral 12 and says 'twelve,' does the child just see a squiggle that matches the word? Does he understand that 12 is ten and two or think that it is a one and a two? Is the child able to think about the parts within the 12, such as seven and five? Understanding exactly how children think allows teachers to provide the most effective instruction." The 45 Mathematics Intervention teachers were each funded for two years by the Kentucky Department of Education. Another 41 teachers received two years of funding beginning in the 2007-08 school year and an additional 40 schools are slated to receive two-year grants beginning in the 2008-09 school year. From now until December 17, 2007 schools may submit primary intervention grant applications to the Kentucky Department of Education for the 2008-09 school year. For details, visit <u>http://kymath.org</u> and select "Intervention." Continuation of funding beyond year two is uncertain, but Mathematics Intervention teachers are hoping to be able to continue their work that is making a big difference for their students.



Kindergarten and first-grade math scores increased dramatically for those students who received specialized instruction by full-time primary Mathematics Intervention teachers. Participating kindergartens scored higher than 64 percent of their national peers compared to non-participants, who scored higher than 36 percent of their national peers. First-graders who received specialized instruction outscored just eight percent of their national peers in the fall but outscored 49 percent of their national peers in the spring.

NKU

PHOTOS AVAILABLE UPON REQUEST: Photos of Cheri Griffin and Jonathan Thomas working with students are available upon request.

For more information, contact Mathematics Intervention Teacher Cheri Griffin at <u>cheri.griffin@pendleton.kyschools.us</u> or Kentucky Center for Mathematics Assistant Director of Intervention Jonathan Thomas at <u>thomasj13@nku.edu</u>.