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Math program gets global

New method re-examines problems

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It's a grade school kid's dream: math without memorizing multiplication tables.

Northern Kentucky University will host a public discussion 3:30 to 8 p.m. Wednesday on creative mathematics that promises just that. The program, "Extending the Mathematical Challenge: A Look at Teaching Mathematics from Around the Globe," will feature professors from Connecticut, Malaysia, South Korea, Japan and Germany.

Creative mathematics is being studied in classrooms in Northern Kentucky. Teachers at Lincoln Elementary in Dayton and Glenn O. Swing Elementary in Covington already are using the method.

Linda Sheffield, a professor at NKU, is a co-director for the program called Mentoring Mathematical Minds.

She describes it as helping kids think more like mathematicians by developing their own methods for problem solving.

The goal is to move away from traditional computation and more toward understanding concepts.

Traditional methods emphasize students being told how to solve a particular type of problem, and then practicing it repeatedly. The new concept focuses on the process to solving the problem.

Those dreaded multiplication tables? In traditional settings, to learn the tables up to the 10s, students must drill 100 different facts: $1 \times 1 = 1$, $1 \times 2 = 2$, etc. "But if the child learns the patterns of the multiplication table, they will have an understanding on how to reach the answer," Sheffield said.

Participating teachers spent two weeks learning how to teach the program. This is followed with several days of supplemental training throughout the year.

Cami Young, who has taught math at Lincoln Elementary for eight years, thinks the program shows promise.

"It involves more higher-level thinking. A lot of the material involves content that I remember in middle school and high school. Then again, students are expected to know and do a lot more now."

Students enjoy the program's method of working in groups and sharing answers, but grumble about the increased use of word problems and written responses. "Some moan when we have to complete the writing component. Writing is no always a favorite," Young said.

Sheffield has presented what she's learned to various audiences, including one in China where that country's leaders are hoping more creative students will lead to more creative scientists in the future.

The seminar will be held in the business/education/psychology building, second-floor lobby.



ZOOM The Enquirer/Patrick Redd
Cami Young, a fourth-grade teacher at Lincoln Elementary School in Dayton, works with students using a math game that teaches about factors and multiples.

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