

Ludlow High School Embraces Algebra I Lesson Study PLE

The KCM (Kentucky Center for Mathematics) is excited to announce a recent, groundbreaking PLE (professional learning experience) targeting the ninth grade Algebra I classroom!

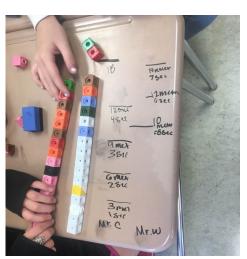
The KCM, with support from the Kentucky Department of Education, Northern Kentucky University, and the Kentucky Council on Postsecondary Education is offering a free, four-day professional learning experience for teachers of Algebra I, the "Algebra I Lesson Study."

One cohort of middle and high school in-service and pre-service teachers met for two days in the fall, and will meet for two days in the winter. Participants engage in lesson studies by jointly drawing up detailed plans for Algebra I lessons. Master Teacher, Anne Burgunder, then teaches the Algebra I lessons in a real classroom as other group members observe. Afterward, the group comes together to discuss their observations of the lessons and ideas for improvement.

KCM Executive Director, Daniel McGee, shared, "Bringing pre-service teachers and in-service teachers together at these PLEs allows inservice teachers to examine their practices through fresh eyes while providing valuable mentoring to future teachers. Additionally, this provides opportunities for schools to develop long term relationships that may help both recruitment and retention."

The first two days of the four day experience took place on September 8 & 9, 2016 at Ludlow High School in Kenton County.

Travis Caudill, Principal at Ludlow High School, said he felt inspired to encourage his teachers to participate in this professional learning experience: "We are driven to continually improve the math education our students receive





and consequently the products of their labor and their achievement results. We have a terrific mathematics staff—a humble group of people who outwardly model lifelong learning for their students. It was not difficult to persuade them to participate."

Ben Wolfe, a 2nd-year teacher at Ludlow High School, allowed Anne Burgunder to teach Algebra I lessons in his classroom as professional learning experience participants observed. Afterward, the participants came together to discuss their observations of the lessons, and the response was unanimously positive and full of excitement.

Wolfe said, "My biggest take away was [changing] the 'normal' structure of a class and playing with it a little bit. Inserting different routines...[lets] student thinking expand, and then allows me to steer [the class] in the direction we want to go for the day."

Another Ludlow High School teacher, Melissa Keller, has been teaching 13 years. Keller said, that after the PLE, "We all took a close look at how we structure our classrooms. There are always practices that can be improved on. The Lesson Study gave us time to reflect on what we do in our classrooms, and the resources to try new ideas."

Though the Algebra I Lesson Study is only half-way complete (the final two days will take place in January), the Ludlow High School

teachers have already noticed a positive impact this experience has had throughout their school.

Wolfe said, "I have implemented the 'What Do You Notice?' routine and the 'Next 5, Previous 5' routine. I also try to walk around with either a notebook or some post-it notes so that I can write down what I'm seeing while students are working...It really does help when reviewing/ reflecting on a lesson."

In addition, Keller said, "Our teachers have taken a closer look at how we engage our students from the beginning of a lesson... I have changed the way that I group students. In the past, I have always used groups of four for daily activities. After [participating in the Algebra I Lesson Study], I have switched to groups of two for all group work. I have noticed that my students are more accountable for their work and the conversations that they are having."

Principal Caudill echoed these same sentiments about the experience: "The ways that students learn are changing, so we have to be willing to change our instructional practices to be commensurate with their learning styles. Networking with teachers from other schools and with university professors allows our teachers to gain more insight into how students can successfully move from basic numeracy to college/career readiness and ultimately to productivity in the work force."

When asked how the educators at Ludlow High School felt this professional learning experience will help students, Wolfe said, "I think it will increase student understanding of mathematics because it allowed them to access problems on their own level."

Keller said, "Any time that teachers learn new strategies and evaluate their practices, students will benefit. Giving teachers the time to plan lessons with experts in the field can only help us sharpen our skills and increase student learning."

Principal Caudill agrees and notes that teachers' participation sets an outstanding example for students to follow suit: "It is good for our students to see their teachers show a willingness to try new, innovative and creative strategies in their classrooms. When students see their teachers 'put themselves out there' in this way, they find confidence in themselves to do the same."

KCM provides PLEs across the state of Kentucky to empower mathematics teaching and learning. Please visit www.kymath.org for more information.

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