

Can Teaching Math Be Fun? Beth MacDonald: Teacher of the Year | CEHS

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Dr. Beth MacDonald is giving an important gift to the world: exceptional math teachers. Our society needs mathematicians who are both creative and technical, and Dr. MacDonald trains educators to respond to diverse student learning needs. The pre-service teachers she trains are often surprised at how much fun math can be. When they go on to help their own students to enjoy learning math in the same way, it is a great reward for Dr. MacDonald to know that many students are being positively affected.

She encourages future teachers to integrate assessment into daily activities, so that they can be constantly updated and aware of the diverse ways their students are learning. The ability to communicate and listen effectively when engaging students in mathematical discourse is vital.

"I promote inquiry-oriented instruction so pre-service teachers can give students multiple entry and exit points when solving math problems," Dr. MacDonald said.

Teaching for 15 years in elementary classrooms prepared Dr. MacDonald to be an advocate for her pre-service teachers. "I understand the perspective of the math teachers," she said. "Teaching math in elementary school is different because you have to be an expert in many levels—living that identity has helped me connect better to my students."

Delving deeper with her doctoral students, Dr. MacDonald also prepares math education teachers and researchers for academia. They learn math educational theory, curricula issues, math teacher education pedagogy development, and how to develop a research agenda in

one of the fields about which they are most passionate. As an assistant professor of math education, Dr. MacDonald teaches undergraduate courses to elementary teaching majors and middle-level math teaching majors. Her doctoral courses are in math educational research, math education curriculum theory, math education learning theory, math education academic writing, and advanced research design in math education. She has published with her students in a variety of education and math education journals.

Dr. MacDonald and her husband of 22 years have two children and they love to hike and travel across Utah. Dr. MacDonald particularly enjoys being a student of new skills. She is currently learning to play the hand bells for the *Bells of Westminster* choir at her church.