ADMISSION REQUIREMENTS

STUDENTS MUST HAVE THE FOLLOWING...

- BA or BS degree in Mathematics Education.
  (or equivalent credentials as approved by the department)
- Recognized state teacher certification.
- GRE General Test score.
- TOEFL score. (for international applicants without English as a first language)

Application deadline March 1

ANNUAL STIPEND OF UP TO:

$20,000
This program has given me an expanded understanding of what it means to teach mathematics well; I will be a better teacher after graduating. I may also go on to a PhD program in mathematics education.

— Betsy Zwahlen

Name: Betsy Zwahlen
Home town: Layton, Utah
BS degree: Mathematics education, BYU-Idaho ’05
Research area: Designing mathematical tasks
Learning new things, reading, exercise classes

What are you researching?
I am researching how preservice secondary mathematics teachers design mathematical tasks. I am looking at what considerations the preservice teachers attend to as they design tasks and the factors that influence those considerations.

What do you hope your research will accomplish? Designing good mathematical tasks for instruction is a vital skill for mathematics teachers. A better understanding of how preservice teachers design mathematical tasks could lead to an improvement in how preservice teachers design tasks. I am looking at what considerations the mathematics teachers design mathematical tasks. I am researching how preservice secondary mathematics teachers design tasks.

How do you like Provo?
I like how the faculty at BYU expect a lot from their graduate students so that we gain a good understanding of the field, but they also make resources available to us to help us live up to those expectations. BYU is a good place to do graduate studies in mathematics because the faculty members are invested in helping their graduate students excel in their coursework and in their research. They have enriched my understanding of teaching and learning.

What kind of equipment does the Mathematics Education Department offer? The Department of Mathematics Education at BYU is a separate entity with professors and classes focused specifically on the study of mathematics education.

What is your favorite class you have taken at BYU?
I am sure this is not secret, but I loved my class Field Experience. It was so helpful and beautiful. I was able to make a difference in students’ lives.

The program benefits from an outstanding 1:2 full-time student/faculty ratio. Students are given exceptional opportunities for meaningful learning experiences. We aim to immerse our graduate students in mathematical exploration, inquiry, analysis and exposition. Such an environment encourages students to explore new mathematical understanding in both personal and social contexts. Graduate students work closely with faculty in personal areas of interest, conducting research studies, writing reports for publication and developing innovative approaches to teaching and learning.

THE PROGRAM
Students in the BYU MA of Mathematics Education program will benefit from a truly unique experience. Our department values close, detailed mentoring of each graduate student as an active member of our scholarly community, which is devoted to the exploration of and inquiry into the learning and teaching of mathematics.

QuICK FACTS

APPLICATION DEADLINE FOR FALL/SUMMER

March 1

Most full-time graduate students receive teaching assistantships, which include a stipend and a tuition scholarship for program courses.

MATH ED..........MA

Rather than operating under a general mathematics department, the Department of Mathematics Education at BYU is a separate entity with professors and classes focused specifically on the study of mathematics.

FACULTY TO STUDENT RATIO

1:2

For more info go to mathed.byu.edu

FACULTY RESEARCH AREAS:

Douglas L. Corey, PhD
University of Michigan, 2007
Corey’s interests include understanding the characteristics of high-quality mathematics instruction and what mathematics knowledge teachers need to help students develop mathematical understanding. Current projects include studying the conceptions of high-quality instruction of expert teachers and international comparisons of instructional quality.

Keith R. Leatham, PhD
University of Georgia, 2002
Leatham focuses on understanding the complexities of teaching and learning to teach mathematics. Current research includes ways to restructure the student teaching experience to focus on students’ mathematical thinking and exploring how classroom mathematics discourse can meaningfully build on that thinking.

Blake E. Peterson, PhD
Washington State University, 1993
Interests in the Japanese professional development of lesson study. Peterson researches the process of learning to teach mathematics in the United States and in Japan. A key element in learning to teach is learning to use and build on student mathematical thinking, which requires anticipating student thinking—a fundamental part of the lesson study process.

Daniëls K. Siebert, PhD
UC—San Diego, 2000
Research interests include discourse and conversation in mathematics classrooms. Current research projects focus on how students learn mathematical discourse and how a literacy perspective can be used to support mathematics teaching and learning.

Dawn Teuscher, PhD
University of Missouri, 2008
Teuscher studies how national policy and mathematics curriculum influences teachers and students. Research projects include analyzing how secondary mathematics teachers shift their teaching to focus on student thinking and how that shift helps students, and analyzing pre-service teachers’ understanding of rate of change and functions as they enter calculus.

Steven R. Williams, PhD
University of Wisconsin-Madison, 1989
Advanced mathematical thinking (including calculus concepts, advanced algebra and proof), and sociocultural approaches to knowledge and classroom discourse are some of Williams’ research interests. Past research projects include studies in abstract and linear algebra, proof, link between concepts, classroom discourse, and knowledge construction through discourse.