

Dr. Michelle Mannes FEBRUARY 28, 2015

*“Michelle has the rare ability to move seamlessly between the worlds of research mathematics, education research, and K-12 classrooms.”*

Most of this citation, including that sentence, is quoted directly from students’ and colleagues’ testimonials.

Michelle Manes earned her Ph.D. in mathematics from Brown University in 2007. Prior to that, Michelle had earned an M.Ed. in Deaf Education from Boston University. Michelle’s very wide teaching experience, including time as a 3rd through 5th grade mathematics specialist at a school for deaf children teaching in American Sign Language, has helped her develop into a very effective university teacher. An active researcher in the intersection of dynamical systems and number theory, Michelle’s teaching style is informed by her grounding in mathematics education research and her conviction that all students are capable of learning mathematics. She summarizes her teaching philosophy this way:

*Finding the joy in mathematics, setting high but attainable expectations, communicating to students a belief in their abilities, and maintaining a reflective teaching practice.*



*“What made her stand out amongst the other professors were her passion and enthusiasm for what she taught and her relatability to her students. Dr. Manes made learning new complex material fun, interesting, and... something that I appreciated... straight forward. Her discussion and activity based classes were the highlights of my usually boring, lecture-filled week.”*

*“Another thing that stands out about her is that she was always so happy. Michelle Manes was always bouncing energetically around while she was teaching because she loves math. I never really enjoyed math because it was dull; however, that changed when I had a class with Professor Michelle Manes. She is a big reason why I am in the Elementary Education program and why I really enjoy teaching math today.”*

**Teaching should be such  
that what is offered is  
perceived as a valuable gift  
and not as a hard duty.**

**- Albert Einstein**

In the University of Hawaii at Manoa Mathematics Department, Michelle's most important contribution has been to the Math for Elementary Teachers two course sequence. Based on her extensive experience she worked closely with her colleagues in the College of Education to revise the course syllabi, redesigning the courses to better meet the needs of the students, and to develop new materials in the absence of a suitable textbook. These materials are also now the basis for new distance learning courses that will allow students from the other Hawaiian islands to complete their College of Education requirements online, as well as to train teachers on the other Pacific islands, including Guam and American Samoa. Michelle is also the founder and mathematical leader of the Math Teachers' Circle of Hawaii (MaTCH).

During MaTCH meetings that occur one Saturday each month, K-12 teachers from across Oahu meet for two hours of mathematics activities and an hour of pedagogical discussion. This might otherwise be considered an overwhelming experience for teachers who routinely identify themselves as *"not-a-math-person"*. Michelle is sensitive about this sentiment and has a natural aptitude for managing the group's anxieties. The teachers report that they feel encouraged by Michelle's instructional style and find delight in learning mathematics with her.

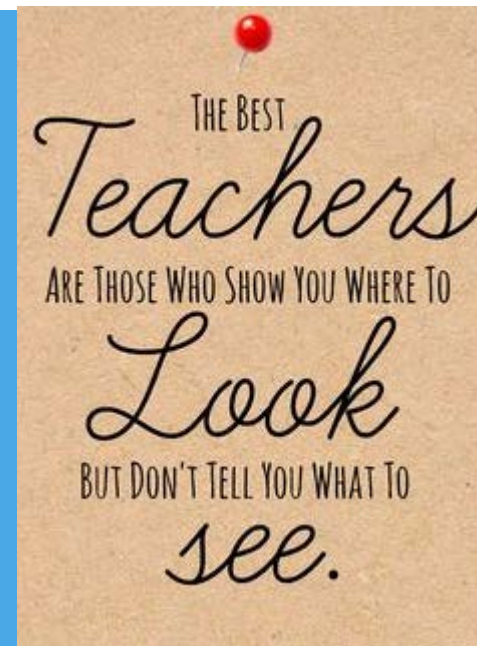


*"It was inspiring to see how a concept/skill that I know about can be seen from a totally different angle that I had not previously seen. And I have tried to instill that sense of wonder & explanation to my own students. . . I think this class renewed my awe of how deep math can be."*

*"MaTCH allows me to struggle with content in a good way "*

*"I have learned more math concepts, theory in MaTCH than I did in all of college."*

In addition, Michelle distinguishes herself with her numerous community outreach efforts. For example, she served as a consultant to the Honolulu Museum of Art for a special exhibit about mathematics and art called Finding  $x$ . Another exhibit is planned for 2015, and Michelle has already been contacted to be a consultant for the reprise.





Michelle has a special role as a mentor for both undergraduate and graduate women in mathematics in her department and beyond. Of her five current and past graduate students, four are women. Locally, Michelle is co-PI of an NSF-funded project that sends graduate students to work in local K-12 schools for two years as GK-12 Fellows. Nationally, she is active in the Association for Women in Mathematics, and is on the board of the Women in Numbers Network. In 2011 she organized a conference at Banff for women number theorists. This year she will attend the third Women in Numbers conference and co-lead a project with three young women researchers.

We are proud to present the 2015 GOLDEN SECTION Award  
**Distinguished College or University Teaching of  
Mathematics**  
to Michelle Manes,  
an extraordinarily effective and inspiring teacher.