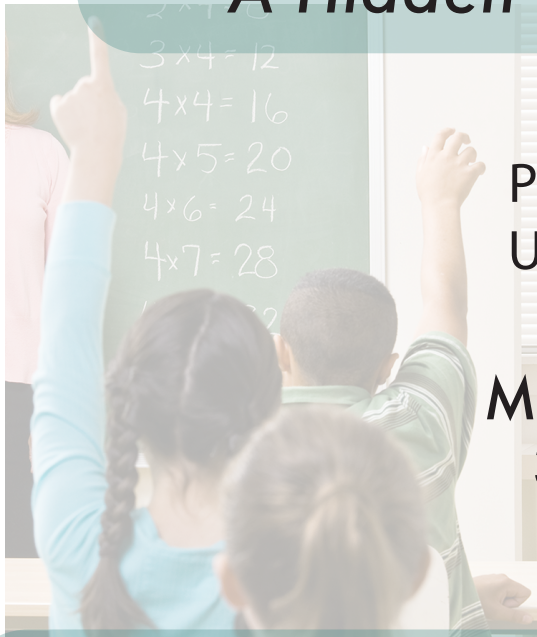


## Department of Mathematics Colloquium

### *Professional Noticing of Children's Mathematical Thinking: A Hidden Skill of Teaching*



Prof. Vicki Jacobs  
UNC Greensboro

March 24, 2017  
3:30 - 4:30pm  
DERR 329



Imagine observing or participating in a classroom lesson. What do you notice? What do others notice? What type of noticing has a positive influence on children's learning? Classrooms are complex environments in which teachers cannot be aware of or respond to everything that is occurring, but current recommendations have provided some guidance by highlighting the importance of teachers' eliciting and responding to children's ideas in the midst of instruction. However, this expertise has proven challenging to develop.

My colleagues and I have focused on trying to understand a piece of this expertise, what we call "professional noticing of children's mathematical thinking." Specifically, we are interested in teachers' abilities to detect children's ideas that are embedded in comments, questions, notations, and actions as well as their abilities to make sense of what they observe in meaningful ways. In essence, we are trying to unpack teachers' in-the-moment decision making. In this talk, I will explore this often overlooked part of teaching by drawing from two NSF-funded research projects—Studying Teachers Evolving Perspective (STEP) focused on teachers in grades K–3 and Responsive Teaching in Elementary Mathematics (RTEM) focused on teachers in grades 3–5. I will define and provide examples of what it means to notice children's mathematical thinking effectively and share data related to the development of this expertise.