1086-C5-2692 Megan Paddack* (m.paddack@snhu.edu). Building a mathematical community while learning strategies for discovering and writing proofs.

In September of 2009, I was one of two new mathematics faculty members in my department, which was historically a service department with no majors. Over the last few years we launched new majors in math and math education, which included offering an introduction to proofs course. While creating this course, I needed to balance the needs of our students with the expectations of a rigorous math major. I picked out a textbook, I deliberated on topic choices, and I created a syllabus with learning outcomes. Most importantly, I envisioned the students actively engaged, debating the validity and explanatory properties of their own proofs. If they could build a mathematical community and at the same time learn strategies for discovering and writing proofs, our students would be great mathematicians. Creating this classroom environment was as challenging as I thought it would be, and even more rewarding than I thought possible. I am amazed at how the first group of students responded to this course. They challenged each other, and challenged me. I have learned from that first experience and I am now teaching this course for the second time with a new textbook, and a better understanding of what topics might cause distress and how to promote even more engagement. (Received September 25, 2012)