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How well is our undergraduate program promoting mathematics majors ability to read, understand, use and write proofs by the time they graduate? Each semester our department administers and analyzes student performance on assessments at three points in the program: Before and after our Introduction to Abstract Mathematics course and during the final capstone course for mathematics majors. The assessments are based on a framework proposed by Mejia-Ramos, Fuller, Weber, Rhoads, & Samkoff (2012). The framework allows faculty to monitor the development of student reasoning and proof comprehension during the undergraduate program. Our cyclic, iterative assessment model develops detailed insights about undergraduates' abilities to read, interpret, critique and write proofs. These insights are used to collaboratively develop, implement and revise pedagogy and curricula. Several goals of the project are to: *Engage mathematicians in systematic reflection on the nature of student proof capabilities. *Collaborate with mathematicians to devise and implement pedagogical changes in the transitional undergraduate proof course that lead to measurable improvements in students' proof capabilities. (Received September 25, 2017)