

1145-VK-694 **Jenna P Carpenter***, carpenter@campbell.edu. *Teaching “Proof”: Helping Students Learn from Their Mistakes.*

Abstract algebra is among the suite of courses where students often first encounter rigorous proofs and the expectation to generate such proofs on exams. Teaching students “how to prove” is challenging, particularly when they are not mathematically mature enough to spot the gaps or errors in their logic. Showing students common proof types and structures can help, but they still often struggle with replicating logically adequate and complete proofs on exams. As a result, students can feel overwhelmed and frustrated. This talk will examine a strategy for converting students’ mistakes on exam proofs into an opportunity to accelerate the development of their proving skills and, at the same time, build confidence and strengthen motivation. (Received September 13, 2018)