Introducing proof through argumentation: An analysis of K-12 tasks.

In this talk, we present the results of a study focused on engaging students in argumentation to support their growth as mathematical learners, which strengthens math majors' reading, comprehending, and writing proofs. We identify five argumentation categories that promote the learning of argumentation skills and enrich mathematical reasoning at the undergraduate level. Using these categories, we present and discuss rich learning tasks in first- and second-year mathematics courses that meaningfully engage students in mathematical argumentation, in particular undergraduate mathematics majors. (Received September 20, 2016)