Interpreting proof feedback: Do our students know what we’re saying?

Instructors often write feedback on students’ proofs even when there is no expectation for the students to revise and resubmit the work. To learn how students interpret such feedback, we interviewed eight advanced mathematics undergraduates and asked them to respond to professor comments on three or four written proofs. The participants were asked to interpret and justify each comment and then write a revised version of each proof. Using the theoretical frameworks of communities of practice and legitimate peripheral participation, we analyzed the interviews and written data, compared the students’ interpretations of the comments to expert consensus, and identified patterns and commonalities in their responses and actions. A noteworthy finding was that even though students were able to identify and correctly implement the professor’s recommended changes, they sometimes misinterpreted the professor’s intentions. (Received September 10, 2015)