

How Do Undergraduate Mathematics Students Approach Proof Structure?

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Abstract: This presentation explores a series of studies in mathematics education focused on students' conceptions of proof. Each study is grounded in a simple heuristic: giving students novel proof task types provides new insights into their understanding of proof. The findings reveal intriguing perspectives on how students conceptualize mathematical proofs, and how these conceptualizations influence their approach to reading and interpreting proofs authored by others.



Dov Zazkis is a faculty member at Bloomfield College of Montclair State University. His research interests lie primarily in the transition to proof at the undergraduate level and in mathematics teacher education. He is particularly interested in the reciprocal relationship between students' and teachers' argument comprehension processes and the strategies they use to formulate and construct arguments. Dr. Zazkis has received recognition for both his research and teaching, including a chapter reprinted in *The Best Writing on Mathematics* (2014) and the Charles Wexler Teaching Award (2021).