

1135-VK-2218 **Jeffrey D Pair*** (jeffrey.pair@csulb.edu). *Introducing the IDEA Framework for the Nature of Pure Mathematics.*

Research has revealed that many students view mathematics as an impersonal and uncreative subject—a body of unchanging knowledge. To combat such naive views, our field needs a humanistic vision and explicit goals for what we hope students understand about the nature of mathematics. The goal of this study was to identify humanistic characteristics of pure mathematics that may serve as goals for undergraduate students' understanding, and to tell real-life stories to illuminate those characteristics. Using the methodological framework of heuristic inquiry, the researcher identified such characteristics by collaborating with a professional mathematician, by co-teaching an undergraduate transition-to-proof course, and being open to mathematics wherever it appeared in life. The results of this study are the IDEA Framework for the Nature of Pure Mathematics and ten corresponding stories that illuminate the characteristics of the framework. The IDEA framework consists of four foundational characteristics: Our mathematical ideas and practices are part of our Identity; Mathematical ideas and knowledge are Dynamic and forever refined; Mathematical inquiry is an emotional Exploration of ideas; and Mathematical ideas and knowledge are socially vetted through Argumentation. (Received September 25, 2017)