

1067-Z5-1339 **Keith Weber*** (keith.weber@gse.rutgers.edu), Graduate School of Education, 10 Seminary Place, New Brunswick, NJ 08840. *Mathematics Majors' Evaluation of Mathematical Arguments and Their Conception of Proof.*

Twenty-eight mathematics majors were observed as they read and evaluated ten mathematical arguments. The results of this study suggest that: (a) mathematics majors do not hold empirical proof schemes, as is widely believed, but many are convinced by perceptual arguments, (b) they will often accept an argument as “mostly correct” and as a valid proof even if they do not understand a pivotal claim within the argument, and (c) many lack particular proof-reading skills needed to recognize the flaws in some arguments. (Received September 21, 2010)