Padraig M. McLoughlin* (mcloughl@kutztown.edu), 265 Lytle Hall, Department of Mathematics, Kutztown University of Pennsylvania, Kutztown, PA 19530. On Doing Mathematics: Why We Should Not Encourage Feeling, Believing, or Interpreting Mathematics.

P. J. Halmos recalled a conversation with R. L. Moore where Moore quoted a Chinese proverb. That proverb provides a summation of the justification of the methods employed in teaching students to do mathematics with a modified Moore method (MMM). It states, "I see, I forget; I hear, I remember; I do, I understand."

In this paper we build upon the suggestions made in, On the Nature of Mathematical Thought and Inquiry: A Prelusive Suggestion (2004, ERIC Document ED502336) and attempt to explore why the differences between reading, seeing, hearing, witnessing, and doing give rise to the contrast between and betwixt feeling, believing, interpreting, opining, and knowing.

We refine in this paper the philosophical position proposed in the 2004 paper and accentuate how reading, seeing, or hearing do not lead to understanding whilst feeling or believing do not lead to truth. We submit that ‘interpreting’ gives the impression Math is as imprecise as Psychology and is rooted in relativism (the ‘eye of the beholder’) rather than certain conditional truth deduced from axioms. We posit that feeling, believing, & ”interpreting mathematical phenomena,” are actually harmful to authentic meaningful mathematical learning. (Received September 20, 2011)