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Glenn Stevens* (ghs@math.bu.edu). *Empiricism as unifying theme in the Standards for Mathematical Practice.*

In the early 20th century, E. H. Moore, who is often referred to as the father of American mathematics, accepted a challenge from his colleague, John Dewey, to work out “the real correlation of mathematics with science” and thus introduced his famous laboratory method into the teaching of mathematics. While this experiment was eventually abandoned, the underlying ideas that E. H. Moore introduced continue to be influential in American mathematics via the work of his students, R. L. Moore and A. E. Ross, among others.

Focus on Mathematics (FoM) is a collaboration of mathematicians with teachers that is the centerpiece of a community of mathematical practice that has been evolving for over two decades. Central to the FoM approach is the dictum “Experience First” and its corollary “Experience before Formality” both of which elaborate Moore’s laboratory method.

In this talk we will discuss the “Experience First” principles and consider ways in which these principles can be used to lend coherence to the Standards for Mathematical Practice, as well as the Content Standards. The ideas will be illustrated with concrete examples of mathematical activities that have been used successfully in our work with teachers in the *Focus on Mathematics* community. (Received September 17, 2014)