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M. Padraig McLoughlin\* (mcloughl@kutztown.edu), 265 Lytle Hall, Department of Mathematics, Kutztown University of Pennsylvania, Kutztown, PA. Incorporating Inquiry-Based Learning in the Calculus Sequence: A Most Challenging Endeavour.

A course in the Calculus sequence is arguably the most difficult course in which inquiry-based learning (IBL) can be achieved with any degree of success within the curriculum in part due to 1) the plethora of majors taking Calculus to which the sequence relates to their majors in what is considered an 'applied' manner; 2) the sequence is intertwined such that 'coverage' matters since if a critical concept or area was not 'covered' in Calculus I or II it might do serious harm to the student in Calculus II or III where the understanding the topic may depend significantly on said material which was not 'covered.'

So, this paper argues (pedagogical and practical justification are submitted) for use of a modified Moore method (MMM) which employs elements of the classic Moore method (students doing rather than seeing, hearing, or reading) which creates a moderate pace for the course; not too fast (as perhaps in a traditional German seminar (recitation) method) nor too slow (as perhaps in a constructivist or pure Moore method course) and presents the model for use the MMM in the Calculus sequence. Further, it is proposed that the MMM assists students to establish a firm foundation for subsequent course work and creates the potential for maximal possibility to master the material. (Received September 09, 2008)