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Abstract for an Invited Paper for the MAR13 Meeting of the American Physical Society

Broadening participation in Natural Sciences and Mathematics at the University of Maryland Baltimore County¹ PHILIP ROUS, University of Maryland Baltimore County

Over the past two decades, UMBC has undertaken a series of efforts to broaden participation in the natural sciences and mathematics, beginning with the establishment of the Meyerhoff program. Using as examples the multiple initiatives that followed, and with a focus on the challenge of increasing access and success of all students who enter as both freshmen and transfer students, I will describe a model of culture change that we have employed repeatedly to understand and guide our efforts in broadening participation. Particular attention will be paid to the concept of cultural capital, the role of innovators and the challenge of scaling small-scale innovations towards institutional change.

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