Abstract Submitted for the MAR09 Meeting of The American Physical Society

The Assessment of the Impact of REU Programs on Student Classroom Performance CHRIS HUGHES, James Madison University — Supporters of undergraduate research claim that the research experience enhances the success of students in their classes and promotes their progress toward completing a science major. Since there are many other variables that can influence a student's progress through a curriculum, it is frequently difficult to compare students from undergraduate research programs with a suitable control group. At James Madison University, a significant number of chemistry and physics majors participate in summer REU programs on campus. However, since JMU is among the top 10% of undergraduate institutions in the US in undergraduate physics enrollment, there are also a significant number who choose not to stay on campus for summer research. Using several years worth of data, we have determined the change in the GPAs of REU students (N=75) from the semester before the REU to the semester after the REU and compared these with the students who did not participate in summer research (N=663). We have found that the REU students' average GPA increased by a statistically significant amount while the non-REU students' average GPA was unchanged to within a standard deviation. We will also discuss other assessment methods used at JMU and some of the limitations in the interpretation of this study.

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Date submitted: 21 Nov 2008

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