Reacting to Galileo: Introducing a New Approach for Gen Ed Science

MICHAEL PETTERSEN, Washington and Jefferson College — Either Galileo was right, or he was wrong; either way, why was there ever any debate about it? And why should we care today about the opposing ideas, which proven wrong so long ago? In the “Reacting to the Past” series of curricular materials, students engage with key turning points in human intellectual history by taking sides and recreating the original debate. In this way, students personally identify with points of view that they would otherwise find wrong, boring, and incomprehensible – and they learn how we test ideas by challenging them, and defend them by marshalling evidence, which is the core of critical thinking. Students almost universally report that the “Reacting” experience is tremendously engaging. I shall describe an application of the “Reacting” format to the case of Galileo. The scientific issues involved are comprehensible to non-science majors, the cultural context of Renaissance Italy is rich and wonderful, and Galileo’s personal history is tremendously moving. The materials include labs designed to be taught by non-scientists teaching cross-disciplinary liberal arts courses. Other “Reacting” science materials have been published or are under development.