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“But you’re just a physics booster!” – Why political advocacy for high school physics is crucial

PAUL COTTLE, Florida State University

There is no shortage of research-based arguments supporting the importance of high school physics. A study from the University of South Florida demonstrates the importance of high school physics for the preparation of future STEM professionals [1]. A white paper from the National Academy of Education [2] states that the usual biology-chemistry-physics sequence in high school is “out of order” and points out that students in 9th grade biology classes are taught concepts that make no sense to them because they “know little about atoms and next to nothing about the chemistry and physics that can help them make sense of these structures and their functions.” Nevertheless, in Florida the high school physics-taking rate has been declining for several years and a large fraction of the International Baccalaureate programs do not even offer IB Physics. I will argue that physicists must collectively advocate in the political arena for the expansion and improvement of high school physics. I will also provide a few examples of collective actions by scientists that may have influenced the formulation of the new high school graduation requirements in Florida. Finally, I will argue that we must lobby our colleagues in the Colleges of Education to devote their scarce resources to recruiting and training teachers in the physical sciences.

[1] W. Tyson, R. Lee, K.M. Borman, and M.A. Hanson, *Journal of Education for Students Placed at Risk* 12, 243 (2007).

[2] National Academy of Education White Paper “Science and Mathematics Education,” (http://www.naeducation.org/Science_and_Mathematics_Education_White_Paper.pdf).