

Abstract Submitted  
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**Princeton University Materials Academy for underrepresented students**<sup>1</sup> DANIEL STEINBERG, SARA RODRIGUEZ MARTINEZ, Princeton Univ, LINDA CODY, Princeton High School, Princeton, New Jersey, United States — Summer 2016 gave underrepresented high school students from Trenton New Jersey the opportunity to learn materials science, sustainability and the physics and chemistry of energy storage from Princeton University professors. New efforts to place this curriculum online so that teachers across the United States can teach materials science as a tool to teach “real” interdisciplinary science and meet the new Next Generation Science Standards (NGSS). The Princeton University Materials Academy (PUMA) is an education outreach program for underrepresented high school students. It is part of the Princeton Center for Complex Materials (PCCM), a National Science Foundation (NSF) funded Materials Research Engineering and Science Center (MRSEC). PUMA has been serving the community of Trenton New Jersey which is only eight miles from the Princeton University campus. We reached over 250 students from 2003-2016 with many students repeating for multiple years. 100% of our PUMA students have graduated high school and 98% have gone on for college. This is compared with overall Trenton district graduation rate of 48% and a free and reduced lunch of 83%. We discuss initiatives to share the curriculum online to enhance the reach of PCCM’ PUMA and to help teachers use materials science to meet NGSS and give their students opportunities to learn interdisciplinary science.

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