



Climate Science Education for Underrepresented Students through Collaboration with CABPES

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The Colorado Association of Black Professional Engineers and Scientists (CABPES) is a non-profit organization dedicated to encouraging African-American and underrepresented youth to pursue careers in the engineering and applied science professions. The goal is to increase the number of minority scientific and technical professionals to a level that better represents the minority population, while assisting in meeting the growing demand for engineers and scientists. CABPES works primarily with underrepresented students from grades 6 through 12 and offers assistance with schoolwork as well as counseling for students preparing for college. Professional engineers and scientists volunteer their time and effort to provide this help to students.

While CABPES offers several after-school courses focusing on engineering and math, there is considerable interest in educating and informing students about the growing field of climate science. CABPES, however, lacks the resources and advisors capable of teaching students climate science. To meet this interest and to fill a gap in their curriculum, we are providing resources and materials to the students and instructors at CABPES that will increase their interest in research and scientific activities, develop their knowledge of climate science (specifically sea level change), and provide them with research and hands-on experience that will aid them in future scientific endeavors. The main thrust of this project involves providing 8-week courses on climate change and sea level change twice yearly to CABPES students. With the first of these courses nearing completion, we provide an update on the success of the project to this point and highlight some of the difficulties encountered in relating the science of sea level change to the students at CABPES. We discuss the curriculum of the course that has been created and the activities that are used to help the students better understand climate science. By considering the early success and failures of the project, we provide some recommendations on ways to better communicate the subject of sea level change to high school students. The future of the project is also outlined, including the development of teaching modules that will hopefully be used in the future for dissemination to a wider audience than just the students at CABPES.