

## Researchers release first case studies to analyze inclusive STEM-focused US high schools

## October 21 2013

New studies out of the George Washington University are taking a closer look at a type of high school that is rapidly emerging across the United States: Inclusive, Science, Technology, Engineering and Mathematics (STEM)-focused high schools (ISHSs). Unlike older, highly selective STEM-focused schools that target students already identified as being STEM gifted/talented, ISHSs develop new sources of STEM talent among underrepresented minority students, and provide them with the means to succeed academically and professionally in a STEM field.

The project, titled Opportunity Structures for Preparation and Inspiration (OSPrl), recently released on its website the first two case studies, each presenting an in-depth analysis of the <u>school</u> models at high schools in Texas and North Carolina. The reports indicate how these schools have helped cultivate the strong academic performance of their <u>students</u>, many of whom are first-generation college goers.

"These schools can have the effect of democratizing STEM education and closing achievement and opportunity gaps," said Sharon J. Lynch, Graduate School of Education and Human Development professor of curriculum and pedagogy and lead researcher of the OSPrl project. "They provide a personalized education for students who might not typically have access to high-quality STEM education or to STEM professionals to help guide them through the maze of college admissions and STEM preparation. The characteristics of these types of schools



have never before been studied on site, nor have they been systematically documented and compared in this way."

The studies—conducted by researchers at GSEHD and the Columbian College of Arts and Science (CCAS)—focus on 10 critical components, ranging from curriculum and instruction to outside-the-classroom learning experiences and supports for students. They also highlight the schools' unique, community-based STEM programs that incorporate partnerships with local businesses and universities.

Dr. Lynch, along with co-researcher Tara Behrend, GW assistant professor of organizational sciences within CCAS, Barbara Means, a researcher from SRI International and Erin Peters Burton from George Mason University, comprise the research team. The project was initiated with assistance from GW's Institute on Public Policy (GWIPP) and is funded by \$2.8 million from the National Science Foundation (NSF).

OSPrI, which began in September 2011, will release another six case studies in the coming months, followed by a cross-case analysis based on the eight case studies.

## More information: <u>ospri.research.gwu.edu/</u>

## Provided by George Washington University

Citation: Researchers release first case studies to analyze inclusive STEM-focused US high schools (2013, October 21) retrieved 22 May 2024 from <u>https://phys.org/news/2013-10-case-inclusive-stem-focused-high-schools.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.