

Georgia State University

Preparing Georgia's High School Science Teachers to Integrate Interdisciplinary, Inquiry-based, Hands-on Research Modules in the Classroom

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This project is a new partnership between DeKalb, Henry, and Cobb County schools, Atlanta Public Schools and Georgia State University (GSU)'s Colleges of Education and Arts and Sciences. The project is geared towards preparing Georgia's high school science teachers to integrate interdisciplinary, inquiry-based, hands-on research modules in the classroom. In a three day workshop eighteen 9th – 12th grade teachers will gain instructional strategies and deepen their content knowledge and laboratory skills in Biology, Chemistry, Microbiology, Environmental Science, Biotechnology, and Engineering based on Georgia's Performance Standards (GPS), Georgia Standards of Excellence (GSE), and next Generation Science Standards (NGSS). Teachers will be provided with resource and laboratory materials and trained to implement an exciting research module (Bioreactors: A Foundation for Biotechnology) in their classroom during the 2017-2018 school year. GSU's Bio-Bus Program, a 30 foot mobile instructional laboratory that travels to Georgia's K-12 schools and presents exciting hands-on activities, will conduct follow-up school visits to the teachers' classrooms to assist in the implementation of the module, and to enhance teachers' comfort level with the content and laboratory experiments. To ensure high sustainability after the project period ends, a professional learning community (PLC) will be established, providing a place for teachers to share best practices, offer suggestions and seek assistance from a team of professors, Bio-Bus staff, and teaching assistants regarding the content and classroom activities. Through this project, teachers enhance content knowledge and confidence levels, master innovative teaching strategies, and student learning is enhanced. Hence, Georgia's students are better equipped to become tomorrow's leaders.

Arts & Sciences Unit of Institute of Higher Education

Georgia State University—College of Arts and Sciences

Unit of Institute of Higher Education that prepares teachers & principals

Georgia State University—College of Education and Human Development

High Need LEA(s)

DeKalb County
Henry County
Cobb County
Atlanta Public Schools