Teaching Statement
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I have two primary goals as an educator: to build a collaborative learning environment that fosters high academic standards and to empower students to challenge existing assumptions. My courses are designed with an intentional framework to develop students' knowledge, skills, and abilities through project-based learning. In the classroom, I build knowledge through integration of activities, like folded lists, which are learning tools based in cognitive psychology. For example, in teaching epidemiology I assigned this technique for understanding foundational concepts. Students used short phrases and sketches to learn the traditional model of infectious disease causation. I approach the learning of skills through the use of open-source software. For example, in teaching GIS courses students used QGIS to create maps of World Bank projects in Africa. Finally, I promote abilities through providing opportunities to demonstrate newly-acquired knowledge and skills.

In courses such as GIS and Public Health, I provide students with the resources they need to research concepts and apply them in practical form. This begins with setting up the course to emphasize group work. Students are actively encouraged to work with their peers to solve problems, including weekly lab assignments. Second, the course is not a power-point style of learning. Each class students are given access to publicly available datasets as well as the software needed to use the data. It is common not to know the direction a project will go. Therefore, I keep a wide range of materials, such as additional data sources, on-hand to support rather than limit creativity. Third, these courses make full use of educational technology. Students search for datasets through online sources such as the U.S. Census Bureau and WorldPop. They use geodatabases to organize spatial information, and use presentation software, such as Piktochart, to present ideas. Finally, during the first class I set the expectation that students will make mistakes. Setting this intention is the most critical aspect of my teaching framework, because it allows for mistakes to be part of a meaningful learning process. I then position myself as a resource through weekly office hours as well as a commitment to working sessions during scheduled class times. Through this approach, students develop their own questions, such as *Can project level disbursements of money to Ebola in Liberia be tracked through an open source methodology?* or *Are Zika cases only contracted in states where Aedes albopictus mosquitoes are located?* This project based approach provides students the opportunity to understand the challenges of working with publicly available datasets and the satisfaction of using data to address a novel question.

A critical component of my teaching is mentoring students. I have mentored five successful student research teams using a similar knowledge, skills, and abilities framework. This work has resulted in two published manuscripts as well as two policy reports for the Secretary of State's Office of Global Health Diplomacy and USAID. Students leave my courses having mastered skills necessary to think critically about a public health problem, having developed skills to answer novel questions using secondary data sources, and with an ability to present that information to an external audience.