

## **P116T180029**

Lead Applicant: The Regents of the University of California (Davis)

Consortium Institutions: University of California, Davis (CA); Hope College (MI); Saint Mary's College (IN); University of Arkansas, Little Rock (AR); Prince George's Community College (MD); Contra Costa Community College District (CA): Contra Costa College, Diablo Valley College, and Los Medanos College; Los Rios Community College District (CA): American River, Cosumnes River, Folsom Lake and Sacramento City College.

Award: \$4,949,843    Project Period: Up to 48 months

### **Expanding the LibreTexts Project into the Next-Generation Hub for Construction, Dissemination, and Usage of Open Educational Resource Textbooks**

#### **Summary:**

“Expanding the LibreTexts Project into the Next-Generation Hub for Construction, Dissemination, and Usage of Open Educational Resource Textbooks” will create an open online set of textbooks and other materials that can be used across the undergraduate and career technical education curriculum

Our effort will build on the best practices that we established over the past decade in the development of the LibreTexts. These are the same efforts that make LibreTexts the largest, highest ranked, and most visited open educational resource (OER). To this end, we propose to expand the LibreTexts into an expansive living library of content that can be customized to faculty needs.

We will expand the library with a new "trade" library dedicated to career and technical education (CTE) fields. While we intend to pursue a "no gap left behind" policy of broad construction across both academic and CTE fields, priority in the construction effort will first be focused on chemistry, where we will complete the OER textbooks to enable a zero textbook cost (ZTC) option for an American Chemical Society ACS certified curriculum for a Bachelor's degree.

This will be the first comprehensive set of ZTC OER textbooks for a STEM Bachelor's degree curriculum. Given that chemistry is a “central science” and plays a supporting role to many other degrees, the complete *Chemistry LibreTexts* will have broad impact and will be a powerful example for other fields to follow. Simultaneously we will be expanding LibreTexts Libraries in Physics, Mathematics, Biology, Statistics, Psychology and Neuroscience.

In-depth assessment and analysis of student use on a large scale will provide feedback to

instructors and developers for improve their courses, and will provide feedback to students so they can improve their learning. We will disseminate our OER materials nationwide and internationally.

Our project includes a consortium of 12 campuses, of which five are independent institutions and seven are part of two large community college districts in California. The independent institutions are University of California, Davis (CA), Hope College (MI), Saint Mary's College (IN), University of Arkansas, Little Rock (AR), and Prince George Community College (MD). The two community college districts are Contra Costa Community College District (CA) and Los Rios Community College District (CA) that encompass the seven community colleges, Contra Costa College, Diablo Valley College, Los Medanos College, Sacramento City College, American River College, Cosumnes River College, and Folsom Lake College. The California State University system is also a partner.

The project organization entails effort in five teams: (1) Construction new materials, (2) Harvesting for inclusion of materials developed by others under open license, (3) developing new leading edge technology to guide student learning, (4) dissemination of LibreTexts OER and recruiting new collaborators, and (5) formative and summative assessment and analysis