**Affordable Learning Georgia Textbook Transformation Grants**

**Final Report for Mini-Grants**

# General Information

Date: December 20, 2018

Grant Round: 11

Grant Number: M32

Institution Name(s): Georgia Highlands College

Team Members:

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Project Lead: Dr. Sarah Tesar

Course Name(s) and Course Numbers: Principles of Chemistry I & II, CHEM 1211k and CHEM 1212k

Final Semester of Project: Fall 2018

Average Number of Students Per Course Section: 24

Number of Course Sections Affected by Implementation of Revised Resources: 30

Total Number of Students Affected by Implementation of Revised Resources: 720

# Project Narrative

The goal of our project was to expand our library of free resources hosted on our Lib Guide and to increase the accessibility of those resources by adding closed captioning to our video library. We started the project in the spring of 2018 and planned to finish the work during the Fall 2018 semester. Works revised were primarily the Principles of Chemistry Lib Guide: [GHC Lib Guide](http://getlibraryhelp.highlands.edu/c.php?g=722488). We already had a library of videos produced from a previous grant, so our goal was to fill in and supplement those videos based on student requests. We also wanted to create a set of practice problems with answer keys for each chapter to supplement the available textbook resources. Math review is something that is lacking in the OpenStax textbook and is an important component of the courses we teach. As a result, we wanted to create a math review section of our Lib Guide. The problem sets and math review took longer than originally anticipated. Original material had to be created, gathered and organized according the OpenStax Chemistry textbook. The videos much easier to produce this time since we had experience with the software, and we were adding to a database rather than creating from scratch. The most difficult part of this project was inserting the closed captioning for each video. The software provided by YouTube to start the process is inconsistent and often requires extensive editing. Editing the files not a difficult process but is very time consuming. One ten-minute video can take upwards of thirty minutes to close caption using the software provided. We currently have over 130 videos on our channel. We were able to close caption over 100 of them. If we could have done anything differently I think it would have been to close caption as we create the videos rather than waiting until the end and doing a large batch all at once.

# 2. Materials Description

We created more than 15 new videos for our Lib Guide. The videos are a mixture of content with a bit more of a focus on CHEM 1212k since the database of those videos was sparser. We tried to focus the content of the videos on student requests made during the spring semester. We also created practice problem sets for chapters 1 - 17 that include answer keys. A math review packet, written in the style of a laboratory, was created and posted on the Lib Guide. The packet includes an introduction, an explanation of each concept and a practice problem section. We tested the math review in our Fall lab sections as an introductory lab and received positive reviews from students. We closed captioned almost all of the videos on our YouTube channel and are in the process of updating the Lib Guide with the captioned videos. Our most popular video has over a thousand views on YouTube and many of our other videos have views numbering in the hundreds. Student feedback indicates that students like the layout of the Lib Guide and organization. We receive many requests each semester for more videos.

# 3. Materials Links

The videos are housed in our Lib Guide and our D2L sections but are also publicly available on our YouTube channel:

[GHC Chemistry](https://www.youtube.com/channel/UC1UF-jXEm3K9R6lqMt0xKZw/videos?view_as=subscriber)

# 4. Future Plans

We plan to continue creating new videos as they are requested and to continue captioning them as we post. We have been invited to present our work to the Board of Regents monthly meeting in February 2019