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Application Summary

Competition Details

Competition Title:	Textbook Transformation Grants, Round Twelve (Fall 2018-2019)
Category:	University System of Georgia
Award Cycle:	Round 12
Submission Deadline:	09/13/2018 at 11:59 PM

Application Information

Submitted By:	Gwendolyn Boyce
Application ID:	2597
Application Title:	397
Date Submitted:	09/11/2018 at 8:35 AM

Personal Details

Institution Name(s):	Georgia Highlands College
Applicant First Name:	Gwendolyn Michelle
Applicant Last Name:	Boyce
Applicant Email Address:	mboyce@highlands.edu
Applicant Phone Number:	706-295-6326
Primary Appointment Title:	Dean of Health Sciences
Submitter First Name:	Gwendolyn Michelle
Submitter Last Name:	Boyce
Submitter Email Address:	mboyce@highlands.edu
Submitter Phone Number:	706-295-6326
Submitter Title:	Dean of Health Sciences

Application Details

Proposal Title

397

Final Semester of Project

Fall 2019

Requested Amount of Funding

10,800

Type of Grant

No-or-Low-Cost-to-Students Learning Materials

Course Title(s)

Clinical Calculations; Pharmacology; Conceptual Nursing for Paramedics and LPNs

Course Number(s)

NURS 1152; NURS 1002; NURS 1400

Team Member 1 Name

Sue West

Team Member 1 Email

swest@highlands.edu

Team Member 2 Name

Rebecca Maddox

Team Member 2 Email

rmaddox@highlands.edu

Team Member 3 Name

Katie Bridges

Team Member 3 Email

kbridges@highlands.edu

Team Member 4 Name

Michelle Boyce

Team Member 4 Email

mboyce@highlands.edu

Additional Team Members (Name and email address for each)

Sponsor Name

Michelle Boyce

Sponsor Title

Dean of Health Sciences

Sponsor Department

Health Sciences

Original Required Commercial Materials (title, author, price)

Calculating Dosages Online (Access Card), Maryanne Werner-McCullough RN MS MNP and Sandra Luz Martinez de Castillo RN MA EdD, \$79.95

Average Number of Students per Course Section Affected by Project in One Academic Year

50

Average Number of Sections Affected by Project in One Academic Year

5

Total Number of Students Affected by Project in One Academic Year

235

Average Number of Students Affected per Summer Semester

50

Average Number of Students Affected per Fall Semester

50

Average Number of Students Affected per Spring Semester

135

Original Total Cost per Student

\$79.95

Post-Project Cost per Student

\$0

Post-Project Savings per Student

\$79.95

Projected Total Annual Student Savings per Academic Year

\$18,788.25

Using OpenStax Textbook?

No

Project Goals

Georgia Highlands College (GHC) is a very cost-effective way for students to complete a program leading to licensure as a Registered Nurse. Despite the relatively low cost of our college, many students struggle to purchase the required textbooks. Most of our students are working adults and many have families to support. Reducing the burden of the cost of textbooks in the program will provide needed assistance to our students.

There have been no Health Sciences Textbook Transformation Grants so far at GHC. We know of no grants at other nursing programs. If this proposal and textbook are successful, other subject areas in nursing may be appropriate for grant applications. Having multiple open textbooks could greatly impact the cost of a nursing education for our students.

Since all RN programs incorporate clinical calculations into their curriculum, an open textbook covering this subject could be adopted by other programs throughout the University system. Learning clinical calculations is an integral part of every nursing program. Future nurses are required to know how to calculate doses of medication for their patients before they graduate. Other programs could adopt this text and other open textbooks in nursing as they are produced, potentially having a great impact on nursing education in the University system.

At GHC students, must pass a clinical calculations test both years of their two-year nursing program. The passing grade is 90%, and the students are given a second chance to make 90%. Students not making that grade on their second chance must leave the nursing program.

Students understandably experience a great deal of anxiety over these tests. In this project, we will attempt to establish a clear, step-by-step text so students will be more confident when they are tested on clinical calculations in class. We will also invite student feedback using a questionnaire to be able to change any content that is not clear or useful during the trial implementation period (Summer and Fall Semesters 2019).

Students may encounter the subject matter of clinical calculations in several ways: during the first year of nursing for students entering the traditional nursing program, during the bridge program for paramedics and LPNs before they join the traditional students in the second year of the nursing program, and by taking an online elective course in clinical calculations. Three courses in our program will adopt our open textbook. We keep the text and methodology used during instruction consistent across all three courses.

There are two other methodologies besides dimensional analysis. Ratio and proportion and the formula method are also used in some programs. At GHC over the last ten or more years, we have found that dimensional analysis is the most helpful to ensure that students are able to work the more difficult problems in the latter half of the course. (Please see the Transformation Action Plan below for a description of the first and second halves of our clinical calculations course.) The more difficult problems may require six or seven conversion steps before the student reaches the final solution. Units of measurement must be tracked carefully throughout the conversions for the student to identify the correct answer.

Most textbooks on the market present all three methodologies to the student. Students easily become confused and may try to use more than one calculation method. Success in solving problems and passing exams is greatly reduced, especially in the second half of the course, if students try to use multiple methods, their chances for success in working difficult problems are greatly reduced. A focus on dimensional analysis will encourage students to use that methodology beginning with simple problems and progressing to the more difficult problems. An increase in student confidence and reduction of test anxiety should result.

Statement of Transformation

At GHC students, must pass a clinical calculations test both years of their two-year nursing program. The passing grade is 90%, and the students are given a second chance to make 90%. Students not making that grade on their second chance must leave the nursing program.

Students understandably experience a great deal of anxiety over these tests. In this project, we will attempt to establish a clear, step-by-step text so students will be more confident when they are tested on clinical calculations in class. We will also invite student feedback using a questionnaire to be able to change any content that is not clear or useful during the trial implementation period (Summer and Fall Semesters 2019).

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Cost reduction is an obvious benefit of our proposed open textbook. Despite the relatively low cost of our college, many students struggle to purchase the required textbooks. Most of our students are working adults and many have families to support. Reducing the burden of the cost of textbooks in the program will provide needed assistance to our students.

Transformation Action Plan

Our team will be writing our open textbook starting with an outline of instructional content developed over at least ten years of teaching clinical calculations. The topics covered will progress from easy to more difficult. All problem types tested in the nursing program will be covered.

Topics have been verified by examination of multiple published textbooks and the use of two different published textbooks in the nursing program.

Team members and their roles:

Katie Bridges, M. Ed. (Instructional Designer) - Set up the digital structure of the project and making certain that the project will be publishable and available to the University system when it is published in GALILEO Open Learning Materials. Putting the textbook online and ensuring that the digital structure functions appropriately when published in GALILEO Open Learning Materials.

Sue West, MN, RN (Nursing Instructor) – Instructor for NURS 1152 (online Clinical Calculations course).

Compose the first half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (first semester of grant).

Topics to be included in the first half of the textbook include:

Introduction

Review of Basic Mathematics

The Dimensional Analysis Method

The Metric System of Measurement and Conversions within the System

Calculating Doses of Oral Medications

Calculating Doses of Parenteral Medications

Compose the second half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (second semester of grant).

Topics to be included in the second half of the textbook include:

Calculating Doses of Reconstituted Powdered Medications

Calculating Doses of Intravenous Medications

Calculating Doses of Critical Care Intravenous Medications

Calculating Doses of Pediatric Medications

Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Summer Semester and Fall Semester 2019. Evaluation of the effectiveness of the textbook in instruction using a pretest/posttest set of questions and problems covering the scope of the course.

Rebecca Maddox, MN, RN (Director and Professor of Nursing) – instructor for clinical calculations for traditional and LPN/Paramedic bridge students.

Review all narratives and problems to ensure accuracy and understandability before implementation of the text. Review will be done module by module as each topic is completed. Assist in implementation of the open text and evaluation of its effectiveness. Post-implementation evaluation of student satisfaction after a questionnaire is administered. Evaluation of student suggestions for changes to the textbook. Evaluation of student performance using a pretest and posttest. Monitor sustainability after completion of the project.

Michelle Boyce, RDH, DHSc (Dean of Health Sciences) – overall project responsibility and oversight.

Review the text to ensure clarity and understandability before implementation of the text. Assist in implementation of the open text and evaluation of its effectiveness. Post-implementation evaluation of student satisfaction after a questionnaire is administered. Evaluation of student suggestions for changes to the textbook. Evaluation of student performance using a pretest and posttest. Monitor sustainability after completion of the project.

Quantitative & Qualitative Measures

Pretest-Posttest: This test will measure changes in the student's understanding of the content provided. Ten questions from various sections of the text will be presented to the students enrolled in NURS 1152, the online course in clinical calculations, after implementation of the open textbook. The pretest will be presented at an in-class course orientation. For the posttest, results will be integrated into the in-class final exam score to prevent duplication of question types. Problem types in the pretest and posttest will be the same, but numbers in the problems will be changed. Differences in the two scores of each student will be examined.

Satisfaction Survey: This Likert-style questionnaire will be administered to students completing NURS 1152, the online course in clinical calculations. Questions will include the student's level of confidence in the ability to solve calculations problems, level of anxiety about the required calculations exams in the nursing program, opinions about the completeness and usability of the textbook, satisfaction with receiving a no-charge textbook, and other relevant questions. Class sections before and after implementation of the open textbook will be compared.

Recommendations for Change: This short-answer questionnaire will be administered to students completing NURS 1152, the online course in clinical calculations. Recommendations for any changes in the textbook and the method of instruction will be solicited.

Timeline

Fall Semester 2018: Setting up the digital structure of the project and making certain that the project will be publishable and available to the University system when it is published in GALILEO Open Learning Materials (Katie Bridges). Compose the first half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (Sue West). All narratives and problems will be reviewed to ensure accuracy and understandability (Rebecca Maddox, Michelle Boyce).

Spring 2019: Compose the second half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (Sue West). All narratives and problems will be reviewed to ensure accuracy and understandability (Rebecca Maddox, Michelle Boyce). The second half of the textbook includes fewer topics because of the greatly increased level of difficulty of the material. Putting the textbook online and ensuring that the digital structure functions appropriately when published in GALILEO Open Learning Materials (Katie Bridges).

Summer 2019: Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Summer Semester 2019 (Sue West). Evaluation of the effectiveness of the textbook using a pretest/posttest set of questions and problems (Sue West, Rebecca Maddox, Michelle Boyce). Evaluation of student satisfaction and suggestions for changes to the textbook will be done using a questionnaire (Rebecca Maddox, Michelle Boyce).

Fall 2019: Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Fall Semester 2019 (Sue West). Evaluation of the effectiveness of the textbook using a pretest/posttest set of questions and problems (Rebecca Maddox, Michelle Boyce). Evaluation of student satisfaction and suggestions for changes to the textbook will be done using a questionnaire (Rebecca Maddox, Michelle Boyce).

Budget

\$1,000 compensation for time for Katie Bridges for the entire project. Work will be primarily completed during Fall 2018 in setting up the digital structure of the project and during Spring Semester 2019 in putting the textbook online and ensuring that the digital structure functions appropriately.

\$5,000 compensation for time for Sue West for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved during implementation of the textbook with all students registered for NURS 1152 Clinical Calculations during Summer Semester and Fall Semester 2019.

\$3,000 compensation for time for Rebecca Maddox for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved obtaining student performance measures and student feedback during implementation of the textbook with all students taking NURS 1152 during Summer and Fall Semesters in 2019.

\$1,000 compensation for time for Michelle Boyce for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved obtaining student performance measures and student feedback during implementation of the textbook with all students taking NURS 1152 during Summer and Fall Semesters in 2019.

\$800 for travel and expenses, including travel for the kickoff meeting in October and any other necessary expenses.

Total \$10,800

Sustainability Plan

Two nursing faculty members at GHC will be identified as clinical calculations specialists. These faculty members will be responsible for teaching the content area in the three courses affected by the change to an open textbook. The two faculty members will also be responsible for making any changes to the text due to changes in nursing practice or content to be tested in the GHC RN program. Content in clinical calculations is very stable over time and few of these changes are anticipated.

If the text is adopted by faculty at other USG institutions, those faculty may want to contact GHC to suggest changes or copy the textbook to make their own modifications. Faculty at other USG institutions will be encouraged to use the open textbook.

Other institutions may become aware of the open textbook by email and possible presentation at meetings of GANE (Georgia Association of Nurse Educators).

If this proposal is accepted and other areas of instruction in nursing are identified for open-textbook transformation, the same procedure can be used. Faculty experts in the subject will be identified to monitor and maintain the texts. Faculty from other USG nursing programs will be encouraged to use any material we produce.

Acknowledgment

Grant Acceptance

[Acknowledged] I understand and acknowledge that acceptance of Affordable Learning Georgia grant funding constitutes a commitment to comply with the required activities listed in the RFP and that my submitted proposal will serve as the statement of work that must be completed by my project team. I further understand and acknowledge that failure to complete the deliverables in the statement of work may result in termination of the agreement and funding.



COLLEGE

Heritage Hall
415 East Third Ave
Rome, GA 30161

September 8, 2018

Dear ALG Grants Committee Members,

I am pleased to write this letter of support for the Nursing team, as we seek grant funding to incorporate free and open text that will be utilized for three nursing courses-NURS 1152 Clinical Calculations, NURS 1002 Pharmacology, and NURS 1400 Conceptual Nursing for Paramedics and LPNs. There are multiple reasons of efficiency, pedagogy, and instructional transformation which compel me to encourage and support this initiative.

This team of will engage in a thoughtful process that broadly affects the student body at Georgia Highlands. This transformation will have an impact on 235 students per year at Georgia Highlands College through the creation of the first ever free textbook for Nursing Students. This will have a direct savings impact of \$18,788.25 per year.

The successful completion of this open resource will also prompt the design of additional free nursing resources. As stated in the proposal, despite the relatively low cost of our college, many students struggle to purchase the required textbooks. Most of our students our working adults and many have families to support. Reducing the burden of the cost of textbooks in the program will provide needed assistance to our students.

I wholeheartedly endorse this ALG Transformation Grant application from this committed group of educators. This plan is noteworthy and deserves to be accepted. Please allow them to continue their essential work through the approval of the grant.

Sincerely,



Michelle Boyce, RDH, DHS
Dean of Health Sciences
Georgia Highlands College
mboyce@highalnds.edu
706-295-6326 (work)
678-643-0254 (cell)



Textbook Transformation Grants, Round Twelve (Fall 2018-2019)

Proposal Form and Narrative

Applicant, Team, and Sponsor Information

The **applicant** is the proposed Project Lead for the grant project. The **submitter** is the person submitting the application (which may be a Grants Officer or Administrator). The submitter will often be the applicant - if so, leave the submitter fields blank.

Institution(s)	Georgia Highlands College
Applicant Name	Gwendolyn Boyce
Applicant Email	mboyce@highlands.edu
Applicant Phone #	706-295-6326
Applicant Position/Title	Dean of Health Sciences
Submitter Name	Gwendolyn Boyce
Submitter Email	mboyce@highlands.edu
Submitter Phone #	706-295-6326
Submitter Position	Dean of Health Sciences

Please provide the first/last names and email addresses of all team members within the proposed project. Include the applicant (Project Lead) in this list. Do not include prefixes or suffixes such as Ms., Dr., Ph.D., etc.

	Name	Email Address
Team Member 1	Sue West	swest@highlands.edu
Team Member 2	Katie Bridges	kbridges@highlands.edu
Team Member 3	Rebecca Maddox	rmaddox@highlands.edu
Team Member 4	Michelle Boyce	mboyce@highlands.edu
Team Member 5		
Team Member 6		
Team Member 7		

Please provide the sponsor's name, title, department, and institution. The sponsor is the provider of your Letter of Support.

Michelle Boyce, RDH, DHSc Dean of Health Sciences Georgia Highlands College James D. Maddox Heritage Hall 415 East 3rd Ave Rome, GA 30161 Office: 706-295-6326

Project Information and Impact Data

Title of Grant Project	<i>Clinical Calculations for Nursing: The Dimensional Analysis Methodology</i>
Type of Grant	No-or-Low-Cost-to-Students Learning Materials Standard Transformation
Requested Amount of Funding	\$10,800
Course Names and Course Numbers	NURS 1152 Clinical Calculations NURS 1002 Pharmacology NURS 1400 Conceptual Nursing for Paramedics and LPNs
Final Semester of Project	Fall 2019
Average Number of Students Per Course Section Affected by Project	NURS 1152 maximum 150 students per Academic Year NURS 1200 60 students per Academic Year NURS 1400 25 students per Academic Year
Average Number of Sections Affected by Project in One Academic Year	NURS 1152 three semesters per Academic Year NURS 1200 one semester per Academic Year NURS 1400 one semester per Academic Year
Total Number of Students Affected by Project in One Academic Year	A maximum of 235 students per Academic Year
Average Number of Students Affected per Summer Semester	A maximum of 50 students per Summer Semester
Average Number of Students Affected per Fall Semester	A maximum of 50 students per Fall Semester
Average Number of Students Affected per Spring Semester	A maximum of 135 students per Spring Semester
Title/Author of Original Required Materials	None
Original Total Cost Per Student	\$79.95 GHC Bookstore price
Post-Project Cost Per Student	No cost for textbook
Post-Project Savings Per Student	\$79.95
Projected Total Annual Student Savings Per Academic Year	\$18,788.25
Using OpenStax Textbook?	No

Narrative Section

1. Project Goals

Georgia Highlands College (GHC) is a very cost-effective way for students to complete a program leading to licensure as a Registered Nurse. Despite the relatively low cost of our college, many students struggle to purchase the required textbooks. Most of our students are working adults and many have families to support. Reducing the burden of the cost of textbooks in the program will provide needed assistance to our students.

There have been no Health Sciences Textbook Transformation Grants so far at GHC. We know of no grants at other nursing programs. If this proposal and textbook are successful, other subject areas in nursing may be appropriate for grant applications. Having multiple open textbooks could greatly impact the cost of a nursing education for our students.

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There are two other methodologies beside dimensional analysis. Ratio and proportion and the formula method are also used in some programs. At GHC over the last ten or more years, we have found that dimensional analysis is the most helpful in ensuring that students are able to work the more difficult problems in the latter half of the course. (Please see the Transformation Action Plan below for a description of the first and second halves of our clinical calculations

course.) The more difficult problems may require six or seven conversion steps before the student reaches the final solution. Units of measurement must be tracked carefully throughout the conversions for the student to identify the correct answer.

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2. Statement of Transformation

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3. Transformation Action Plan

Our team will be writing our open textbook starting with an outline of instructional content developed over at least ten years of teaching clinical calculations. The topics covered will

progress from easy to more difficult. All problem types tested in the nursing program will be covered.

Topics have been verified by examination of multiple published textbooks and the use of two different published textbooks in the nursing program.

Team members and their roles:

Katie Bridges, M. Ed. (Instructional Designer) - Set up the digital structure of the project and making certain that the project will be publishable and available to the University system when it is published in *GALILEO Open Learning Materials*. Putting the textbook online and ensuring that the digital structure functions appropriately when published in *GALILEO Open Learning Materials*.

Sue West, MN, RN (Nursing Instructor) - Instructor for NURS 1152 (online Clinical Calculations course).

Compose the first half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (first semester of grant).

Topics to be included in the first half of the textbook include:

Introduction

Review of Basic Mathematics

The Dimensional Analysis Method

The Metric System of Measurement and Conversions within the System

Calculating Doses of Oral Medications

Calculating Doses of Parenteral Medications

Compose the second half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (second semester of grant).

Topics to be included in the second half of the textbook include:

Calculating Doses of Reconstituted Powdered Medications

Calculating Doses of Intravenous Medications

Calculating Doses of Critical Care Intravenous Medications

Calculating Doses of Pediatric Medications

Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Summer Semester and Fall Semester 2019. Evaluation of the effectiveness of the textbook in instruction using a pretest/posttest set of questions and problems covering the scope of the course.

Rebecca Maddox, MN, RN (Director and Professor of Nursing) - instructor for clinical calculations for traditional and LPN/Paramedic bridge students.

Review all narratives and problems to ensure accuracy and understandability before implementation of the text. Review will be done module by module as each topic is completed. Assist in implementation of the open text and evaluation of its effectiveness. Post-implementation evaluation of student satisfaction after a questionnaire is administered. Evaluation of student suggestions for changes to the textbook. Evaluation of student performance using a pretest and posttest. Monitor sustainability after completion of the project.

Michelle Boyce, RDH, DHSc (Dean of Health Sciences) - overall project responsibility and oversight.

Review the text to ensure clarity and understandability before implementation of the text. Assist in implementation of the open text and evaluation of its effectiveness. Post-implementation evaluation of student satisfaction after a questionnaire is administered. Evaluation of student suggestions for changes to the textbook. Evaluation of student performance using a pretest and posttest. Monitor sustainability after completion of the project.

4. Quantitative and Qualitative Measures

Pretest-Posttest: This test will measure changes in the student's understanding of the content provided. Ten questions from various sections of the text will be presented to the students enrolled in NURS 1152, the online course in clinical calculations, after implementation of the open textbook. The pretest will be presented at an in-class course orientation. For the posttest, results will be integrated into the in-class final exam score to prevent duplication of question types. Problem types in the pretest and posttest will be the same, but numbers in the problems will be changed. Differences in the two scores of each student will be examined.

Satisfaction Survey: This Likert-style questionnaire will be administered to students completing NURS 1152, the online course in clinical calculations. Questions will include the student's level of confidence in the ability to solve calculations problems, level of

anxiety about the required calculations exams in the nursing program, opinions about the completeness and usability of the textbook, satisfaction with receiving a no-charge textbook, and other relevant questions. Class sections before and after implementation of the open textbook will be compared.

Recommendations for Change: This short-answer questionnaire will be administered to students completing NURS 1152, the online course in clinical calculations. Recommendations for any changes in the textbook and the method of instruction will be solicited.

5. Timeline

Fall Semester 2018: Setting up the digital structure of the project and making certain that the project will be publishable and available to the University system when it is published in *GALILEO Open Learning Materials* (Katie Bridges). Compose the first half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (Sue West). All narratives and problems will be reviewed to ensure accuracy and understandability (Rebecca Maddox, Michelle Boyce).

Spring 2019: Compose the second half of the textbook including narrative descriptions, sample problems, practice problems and answers to the practice problems (Sue West). All narratives and problems will be reviewed to ensure accuracy and understandability (Rebecca Maddox, Michelle Boyce). The second half of the textbook includes fewer topics because of the greatly increased level of difficulty of the material. Putting the textbook online and ensuring that the digital structure functions appropriately when published in *GALILEO Open Learning Materials* (Katie Bridges).

Summer 2019: Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Summer Semester 2019 (Sue West). Evaluation of the effectiveness of the textbook using a pretest/posttest set of questions and problems (Sue West, Rebecca Maddox, Michelle Boyce). Evaluation of student satisfaction and suggestions for changes to the textbook will be done using a questionnaire (Rebecca Maddox, Michelle Boyce).

Fall 2019: Implementation of the textbook with the group of students registered for NURS 1152 Clinical Calculations for Fall Semester 2019 (Sue West). Evaluation of the effectiveness of the textbook using a pretest/posttest set of questions and problems (Rebecca Maddox, Michelle Boyce). Evaluation of student satisfaction and suggestions for changes to the textbook will be done using a questionnaire (Rebecca Maddox, Michelle Boyce).

6. Budget

\$1,000 compensation for time for Katie Bridges for the entire project. Work will be primarily completed during Fall 2018 in setting up the digital structure of the project and during Spring Semester 2019 in putting the textbook online and ensuring that the digital structure functions appropriately.

\$5,000 compensation for time for Sue West for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved during implementation of the textbook with all students registered for NURS 1152 Clinical Calculations during Summer Semester and Fall Semester 2019.

\$3,000 compensation for time for Rebecca Maddox for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved obtaining student performance measures and student feedback during implementation of the textbook with all students taking NURS 1152 during Summer and Fall Semesters in 2019.

\$1,000 compensation for time for Michelle Boyce for the entire project. Work will be primarily completed during Fall 2018 and Spring 2019 Semester. A lesser amount of time will be involved obtaining student performance measures and student feedback during implementation of the textbook with all students taking NURS 1152 during Summer and Fall Semesters in 2019.

\$800 for travel and expenses, including travel for the kickoff meeting in October and any other necessary expenses.

Total \$10,800

7. Sustainability Plan

Two nursing faculty members at GHC will be identified as clinical calculations specialists. These faculty members will be responsible for teaching the content area in the three courses affected by the change to an open textbook. The two faculty members will also be responsible for making any changes to the text due to changes in nursing practice or content to be tested in the GHC RN program. Content in clinical calculations is very stable over time and few of these changes are anticipated.

If the text is adopted by faculty at other USG institutions, those faculty may want to contact GHC to suggest changes or copy the textbook to make their own modifications. Faculty at other USG institutions will be encouraged to use the open textbook.

Other institutions may become aware of the open textbook by email and possible presentation at meetings of GANE (Georgia Association of Nurse Educators).

If this proposal is accepted and other areas of instruction in nursing are identified for open-textbook transformation, the same procedure can be used. Faculty experts in the subject will be identified to monitor and maintain the texts. Faculty from other USG nursing programs will be encouraged to use any material we produce.