

Application Details

Manage Application: ALG Textbook Transformation Grants

Award Cycle: Round 9

Internal Submission Deadline: Sunday, April 30, 2017

Application Title: 319

Application ID: #001740

Submitter First Name: Lacy

Submitter Last Name: Hodges

Submitter Title: Assistant Director, Center for Academic Enrichment

Submitter Email Address: lacy.hodges@gatech.edu

Submitter Phone Number: 404-385-7648

Submitter Campus Role: Provost / Academic Affairs Office

Applicant First Name: Lacy

Applicant Last Name: Hodges

Co-Applicant Name: --

Applicant Email Address: lacy.hodges@gatech.edu

Applicant Phone Number: 404-385-7648

Primary Appointment Title: Assistant Director, Center for Academic Enrichment

Institution Name(s): Georgia Institute of Technology

Submission Date: Monday, May 1, 2017

Proposal Title: 319

Final Semester of Instruction: Spring 2018

Team Members (Name, Title, Department, Institutions if different, and email address for each):

Fred Rascoe, Scholarly Communication Librarian, Library, fred.rascoe@library.gatech.edu

Seth Porter, Co-coordinator of Library Instruction, Library, seth.porter@library.gatech.edu

Sponsor, (Name, Title, Department, Institution):

Christopher Reaves, Director, Center for Academic Enrichment, Georgia Institute of Technology

Course Names, Course Numbers and Semesters Offered:

GT 1000: First Year Seminar; Fall 2017, Spring 2018

Average Number of Students per Course Section: 20

Number of Course Sections Affected by Implementation in Academic Year: 95

Total Number of Students Affected by Implementation in Academic Year: 1900

List the original course materials for students (including title, whether optional or required, & cost for each item): GT 1000 First Year Seminar custom eBook (required), cost: \$37.25

Proposal Categories: No-Cost-to-Students Learning Materials

Requested Amount of Funding: \$15,120.00

Original per Student Cost: \$37.25

Post-Proposal Projected Student Cost: \$0

Projected Per Student Savings: \$37.25

Projected Total Annual Student Savings: \$70,775.00

Creation and Hosting Platforms Used ("n/a" if none):

Georgia Tech Center for Academic Enrichment website (to host materials)

YouTube (for videos, tutorials, other visual learning objects)

Project Goals:

GT 1000 is a one-credit hour, letter graded class offered to incoming Georgia Tech students. The course is not mandatory, but approximately 65% of first-year students enroll in the course each year. The course is designed to help students successfully transition to Georgia Tech

through focus on academic success skills, career development skills, communication skills, and campus resources.

Goals for the GT 1000: First Year Seminar Free Textbook Project include:

Reduce cost of course for all students enrolled in GT 1000: First-Year Seminar

Increase instructor use of text across all sections of GT 1000

Revise and streamline textbook materials to better reflect the format and scope of the GT 1000 course

Make text and resources available to all USG schools, peer institutions, and any other interested entity to freely access, reuse, and incorporate into their respective curricula

Create open-access materials and resources that can be easily updated to ensure the accuracy of the materials

Utilize technology to increase the pedagogical effectiveness of resources through the incorporation of digital learning objects, including an online toolkit for instructors, videos to promote creating a flipped classroom, and interactive activities for use by both instructors and enrolled students

Statement of Transformation:

The project seeks to redesign the current for-cost eBook required for all students enrolled in GT 1000: First-Year Seminar as a free, open-access text available to all students. The open-access text would include readings, activities, resources, and digital learning objects relevant to first-year student success.

As part of the GT 1000, all enrolled students are required to purchase a custom e-text that currently costs \$37.25; in the 2016-17 academic year, 1,850 students enrolled in GT 1000 spent a total of \$68,912.50 on the textbook. The text includes materials written by Georgia Tech faculty and staff, as well as selections from third-party texts on student success in the first year. Based on our assessment data for GT 1000, the book has low buy-in from both students and instructors teaching the course; approximately 65% of GT 1000 sections do not use the book in any way.

Feedback from instructors has shown that the book has too much material for them to easily review before the semester begins, resulting in a lack of assigned materials from the textbook. We have also received feedback from both instructors and students that the current format of the book is not intuitive and information is difficult to locate in the text. By making the text more streamlined and easier-to-use for our instructors, it will increase the buy-in from instructors, who can more easily incorporate the materials from the textbook into their curriculum. The current text has a great deal of valuable information for students, but it is not being utilized by instructors in their classes.

Feedback from students has shown that the materials that are included are redundant and in

need of updating. Additionally, the purchase of the textbook for students only grants them access to the eBook for two years, which means they are not able to continue accessing information on key curricular and co-curricular opportunities discussed in the book after their second year of college. Students have also expressed frustration at being required to purchase a text which is not utilized in their class. This project will not only create a more usable text, but will also eliminate the textbook costs for students taking the course, thereby making their overall college experience more affordable.

In addition to the enrolled students and instructors, GT 1000 also incorporates Team Leaders, second through fifth year student mentors who work alongside the instructors to ensure our first-year students transition successfully to Georgia Tech. Currently, the Team Leaders do not have access to the textbook unless they purchase the book themselves. Consequently, they are unable to effectively facilitate discussions for any readings assigned by the instructors. Because the Team Leaders are such an integral part of the class, this contributes to the lack of incorporation of readings from the text into many sections of GT 1000.

Additionally, the openness of the new text will invite more regular revision and adaptation. Because we strive to ensure GT 1000 meets the needs of an ever-evolving cohort of first-year students, instructors, and peer leaders, the course undergoes regular self-studies to ensure it is fulfilling the needs of all involved. An open-access text would allow us to more readily and regularly reflect any changes to the program or university that is important for our students to know. Each year, approximately 70% of our Team Leaders are new to the program; an open-access text would allow our Team Leader Advisory Board to regularly update materials for Team Leaders, based on the feedback from those who served during the preceding year. This isn't currently feasible for the text due to the various timelines of our Team Leader recruitment and our publisher-set timelines for updates to the text. And because 20% of GT 1000 students go on to become Team Leaders, we would also be able to incorporate their feedback into improving the information available to the next cohort of students who enroll in the course.

GT 1000 is not a mandatory class. Around 65% of our incoming freshman do take the course, but approximately 1,200 incoming students do not. By having an open-access, free textbook, even the students who are not registered for GT 1000 can benefit from the resources and materials in the text designed to ensure all of our first-year students have a successful transition to the university. Our campus partners will also benefit, as they can ensure that the materials being presented in GT 1000 are providing our incoming students with accurate, up-to-date information. Additionally, while some of the information in the textbook will be specific to resources at Georgia Tech, other parts of the textbook—such as the sections focused on career development skills and academic success skills—will be useful for students regardless of institute affiliation. An open access text would therefore also benefit students at institutions outside of Georgia Tech.

A successful transformation of the current textbook will benefit enrolled first-year students, student team leaders, course instructors, and campus partners at Georgia Tech. A

successfully transformed open textbook can also benefit by being a resource for other USG schools, as well as any other institutions across the country and world.

Transformation Action Plan:

The transformation will begin with a thorough review of all current textbook information. Materials that are redundant, extraneous, or out-of-date will be removed from the current textbook. We will need to identify any materials whose copyright is not currently held by Georgia Tech and will need to eliminate these materials from the text. Next, we will identify campus partners who can contribute new materials from the text in order to replace any necessary chapters, activities, or resources. New course materials will be created by the GT 1000 program director, as well as by campus partner program directors and coordinators. While much of this stage of the project will focus on the text portion of the eBook, we will also begin working to create activities, resources, and digital learning objects that can be utilized alongside the traditional text. Resources may include: videos, presentations, assignments, activities, and projects.

GT 1000 instructors are currently provided with a template syllabus that includes suggested readings for each class meeting, so these will need to be revised and updated to reflect the new textbook. In addition, all instructors have access to resource site through our Learning Management System, T-Square (Sakai). This site, like the current textbook, would greatly benefit from streamlining, updating, and a more user-friendly design. We would move the current resources from T-Square to the Center for Academic Enrichment website, which would not only improve the usability of the materials, but would also ensure easily accessible IT support for the electronic materials hosted online.

Open access will be provided through moving the materials from a log-in required site (T-Square) to an open website through the Center for Academic Enrichment, which oversees the GT 1000 program. All contributors will also be asked to provide a Creative Commons Attribution license to ensure open access of materials.

Team members for this project include Dr. Lacy Hodges, Assistant Director of the Center for Academic Enrichment and the program director for GT 1000, and Fred Rascoe, Scholarly Communication Librarian, and Seth Porter, Co-Coordinator of Library Instruction. Dr. Hodges will be responsible for overseeing the creation of content for the textbook as well as for communicating with administration, instructors, team leaders, and students to ensure materials for the textbook fit with course goals and learning outcomes. Mr. Rascoe will assist in the coordination of Creative Commons Attribution licenses for all included content and will ensure that all materials are appropriately attributed and licensed. Mr. Porter will provide guidance for the design and implementation of assessment techniques for the textbook, and will assist in designing both quantitative and qualitative assessment measures as well as in the analysis of these measures. Additionally, because all team members also serve as GT 1000 instructors, the team will be able to directly observe the usability and effectiveness of the text in the GT

1000 course throughout the academic year.

Quantitative & Qualitative Measures: The effectiveness and use of the open source textbook will be assessed in the following ways: Quantitative Assessments Pre- and post-semester learning outcome assessment GT 1000 includes six learning outcomes that all students enrolled in the class should be able to reliably demonstrate upon successful completion of the course. The pre- and post-assessment survey includes questions focused on assessing student ability/knowledge for all six learning outcomes. All students enrolled in GT 1000 are asked to complete both the pre- and post-semester surveys, though neither survey is required for students in the course. All students who complete either survey are required to include their Georgia Tech ID number. This allows us to match pre- and post-semester survey responses by students and to analyze learning outcome transformation by particular students. By comparing the pre- and post-semester survey responses for individual students, we will be able to assess how successfully the students in the course are learning the specified outcomes. Additionally, questions will be included on the post-semester survey that asks students to identify if and how the textbook was used in their section of GT 1000. This will allow us to assess the textbook's specific impact on the learning outcomes. Instructor Textbook Use Survey All instructors will be asked to complete a post-semester survey regarding their use of the textbook. We currently have data from 2014-2016 regarding how often instructors used the previous version of the textbook, so we can create a comparison of the change in textbook usage with the introduction of the new textbook. This will allow us to analyze instructor buy-in for the textbook, as well as how many sections of GT 1000 are using the textbook as part of their curriculum. Questions will also be asked regarding individual aspects of the textbook and how often they were used in sections of GT 1000. This data will allow us to assess the usage of various elements of the textbook (readings, videos, activities, etc.) across sections of GT 1000. Qualitative

Assessment Focus groups Focus groups will be formed for each of the three cohorts who may benefit from the textbook: current GT 1000 students, instructors, and team leaders. The focus groups will meet twice each semester (Fall and Spring) and will be asked to provide feedback on the use of the textbook in their section of GT 1000. These focus groups will allow the Center for Academic Enrichment to measure the usefulness of the GT 1000 textbook for a variety of interested groups. Feedback survey Surveys will be sent to GT 1000 students, instructors, and team leaders asking for their opinion regarding the textbook. The survey will be sent at the end of each semester (Fall and Spring) and will ask both closed and open-ended questions regarding the user's opinion of the textbook. Included questions will address the ease of use of the textbook and associated materials, the usefulness of the textbook, and suggestions for improving the textbook and associated resources. This survey will be separate from the learning assessment and textbook use surveys.

Timeline:

May 2017: Textbook review begins; contact campus partners to update materials; outline of tool kit and new materials; web developer begins back-end work on tool kit

June 2017: Updated materials due to GT 1000 program director; Project Team compiles and develops all materials online

July 2017: Instructors introduced to new materials during Annual GT 1000 Instructor Training and Workshops

August 2017: Materials go live online through Center for Academic Enrichment website; Pre-Semester GT 1000 survey released to students to assess current Learning Outcome objective knowledge and skills

September-November 2017: Focus groups are assembled and meet monthly to discuss use of textbook in GT 1000 classes. Three focus groups will be formed: one for instructors, one for GT 1000 students, and one for team leaders.

December 2017: Post-Semester Assessment distributed to all GT 1000 instructors, students, and team leaders.

January-March 2018: Fall post-semester data quantitative and qualitative data is analyzed and compiled, including the pre- and post-semester learning outcome assessment. Pre-semester survey is sent to all Spring 2018 GT 1000 students. Focus groups are created and meet throughout the Spring semester.

April 2018: Post-Semester Assessment distributed to all Spring GT 1000 instructors, students, and team leaders

May 2018: Spring & Fall post-semester data is analyzed and compiled; final report is written evaluating success and efficacy of new textbook mode.

Budget:

Web Developers (Graduate Students)

\$14/hr, 30 hr/week, 26 weeks (Summer and Fall 2017): \$10,920.00

Textbook Materials Coordinators (Undergraduate Students)

\$10/hr, 20 hr/week, 11 weeks (Summer 2017): \$2,200.00

Supplies for Assessment Workshops/Focus Groups (Fall 2017, Spring 2018)

Instructor Assessment workshops (4): \$400

Student Assessment workshops (4): \$400

Team Leader Assessment workshops (4): \$400

Travel & Expenses: \$800

Total Budget: \$15,120.00

Sustainability Plan:

GT 1000 is offered in both Fall and Spring every academic year, and will continue to be offered to all incoming freshman. The open-access e-text would be maintained by the Center for Academic Enrichment, as it will be hosted on our departmental website. Funding will follow the "Institutional Method" explained by Stephen Downes in his article "Sustainable Models for Open Educational Resources" (1). Because GT 1000 is a fundamental course for all Georgia Tech students, any required funding necessary to update or maintain the text would be funded by the institution as a regular part of the GT 1000 program. Updates and revisions to materials can also occur through the Center for Academic Enrichment's leveraging of existing resources, such as the Georgia Tech library's and/or Georgia Tech Cable Network's multimedia services to create updated videos.

The materials and resources would be maintained by the director of the GT 1000 program as a regular part of the program each year. The program director would collaborate with campus

partners regularly and often to ensure the content of all available materials is accurate and up-to-date, and would revise materials as needed. This would help to ensure that the materials are trusted and authoritative as the designated campus offices would serve as a kind of editorial board for their individual content. Additional resources would also be created by GT 1000 instructors, thus working to ensure that many of the consumers of these materials are also the creators of the materials, which often creates a more sustainable model for OER (1). The GT 1000 program director would also collaborate with the Office of Information Technology's web developer in order to ensure the technological elements of the text were maintained.

In order to continue to revise the content of the text and make sure it is relevant and up-to-date for incoming students, we will continue to assess the resources and materials through the use of regular assessment workshops. Advisory groups will be formed each academic year for instructors, GT 1000 students, and team leaders. These groups will meet twice a semester in order to provide feedback regarding both the content and structure of the materials available. We will also continue to include the eBook and resources in our pre- and post-assessment surveys for instructors, students, and team leaders. This will allow us to continue to update the materials for the class and to ensure all materials and resources are meeting the needs of all groups involved in GT 1000.

Updates to the materials will not only include content changes, but may also consist of changes in the method of delivery for particular materials, including creation of digital learning objects such as videos, tutorials, and other multimedia resources.

To the committee for Affordable Learning Georgia:

Please accept this letter written in support of transforming the current GT 1000: First Year Seminar textbook from a required purchase by Georgia Tech first-year students to a free, open-access textbook. Approximately 1,900 first year students at Georgia Tech register for GT 1000: First-Year Seminar, a course designed to assist incoming students transition from high school to college. Research has shown that students taking this course as well as participating in Freshmen Year Experience are retained at higher percentages and perform better academically than students who do not participate. This course also provides an opportunity for 300 upperclassmen to act as peer mentors, “team leaders” to incoming students, as well as provide an outlet for about a 100 university staff, whose normal job responsibilities fall outside the classroom, to be able directly participate in educating our students. A version of the course has been offered at Georgia Tech for the last 30 years and it is as much a part of the university culture as the RAT cap and the Ramblin’ Wreck, but changes need to be made to the textbook to ensure its continued use with today’s ever changing society and technology.

A big part of the success and sustainability of GT1000 has been its ability to offer a valuable curriculum and experience on limited resources. Currently, the course relies exclusively on volunteers from the Georgia Tech community to be instructors and team leaders. The course is coordinated with a professional staff from the Center for Academic Enrichment that is dedicated to ensuring its continued popularity amongst the students, faculty and staff. The current model of using a private publisher to provide a purchasable e-book does not provide the flexibility to update the current text and prohibits us from providing content to our increasingly financially overburdened students and parents. This grant would help us bring more affordable resources to all of our students, as well as providing a current more malleable platform that we could more readily update and provide fresh and interesting content that resonates with today’s students.

If you require any additional information or have questions please let me know.



Christopher W. Reaves, PhD
Director of Center for Academic Enrichment
Georgia Institute of Technology

References for Affordable Learning Georgia Textbook Grant Proposal

1. S. Downes, "Models for Sustainable Open Educational Resources", *Interdisciplinary Journal of Knowledge and Learning Objects*, vol. 3, 2007.
<https://www.oecd.org/edu/cei/36781698.pdf>
2. C. Vaz de Carvalho, P. Escudeiro, M. Caiero Rodriguez, and M. Llamas Nistal, "Sustainability Strategies for Open Educational Resources and Repositories", *Latin American Conference on Learning Objectives and Technology (LACLO)*, 2016.
<http://ieeexplore.ieee.org/document/7751806/>

Affordable Learning Georgia Textbook Transformation Grants

Round Nine

For Implementations beginning Summer Semester 2017

Running Through Spring Semester 2018

Proposal Form and Narrative

Submitter Name	Lacy Hodges
Submitter Title	Assistant Director, Center for Academic Enrichment
Submitter Email	Lacy.hodges@gatech.edu
Submitter Phone Number	404-385-7648
Submitter Campus Role	Academic Affairs
Applicant Name	Lacy Hodges
Applicant Email	Lacy.hodges@gatech.edu
Applicant Phone Number	404-385-7648
Primary Appointment Title	Assistant Director, Center for Academic Enrichment
Institution Name(s)	Georgia Institute of Technology

Team Members	Fred Rascoe, Scholarly Communication Librarian, Library, fred.rascoe@library.gatech.edu Seth Porter, Co-coordinator of Library Instruction, Library, seth.porter@library.gatech.edu				
Sponsor, Title, Department, Institution	Christopher Reaves, Director, Center for Academic Enrichment, Georgia Institute of Technology				
Proposal Title	GT: 1000 First-Year Seminar Free Textbook Transformation				
Course Names, Course Numbers and Semesters Offered	GT 1000: First-Year Seminar; Fall 2017, Spring 2018				
Final Semester of Instruction	Spring 2018				
Average Number of Students Per Course Section	20	Number of Course Sections Affected by Implementation in Academic Year	95	Total Number of Students Affected by Implementation in Academic Year	1,900
Award Category (pick one)	<input checked="" type="checkbox"/> No-or-Low-Cost-to-Students Learning Materials <input type="checkbox"/> OpenStax Textbooks <input type="checkbox"/> Interactive Course-Authoring Tools and Software <input type="checkbox"/> Specific Top 100 Undergraduate Courses				
List the original course materials for students (including title, whether optional or	GT 1000 First Year Seminar custom eBook (required), cost: \$37.25				

required, & cost for each item)	
Requested Amount of Funding	\$15,120.00
Original Per Student Cost	\$37.25
Post-Proposal Projected Per Student Cost	\$0
Projected Per Student Savings	\$37.25
Projected Total Annual Student Savings	\$70,775.00
Creation and Hosting Platforms Used	Georgia Tech Center for Academic Enrichment website (to host materials) YouTube (for videos, tutorials, other visual learning objects)

NARRATIVE

1.1 PROJECT GOALS

GT 1000 is a one-credit hour, letter graded class offered to incoming Georgia Tech students. The course is not mandatory, but approximately 65% of first-year students enroll in the course each year. The course is designed to help students successfully transition to Georgia Tech through focus on academic success skills, career development skills, communication skills, and campus resources.

Goals for the GT 1000: First Year Seminar Free Textbook Project include:

- Reduce cost of course for all students enrolled in GT 1000: First-Year Seminar
- Increase instructor use of text across all sections of GT 1000
- Make text and resources available to all USG schools, peer institutions, and any other interested entity to freely access, reuse, and incorporate into their respective curricula
- Revise and streamline textbook materials to better reflect the format and scope of the GT 1000 course
- Create open-access materials and resources that can be easily updated to ensure the accuracy of the materials
- Utilize technology to increase the pedagogical effectiveness of resources through the incorporation of digital learning objects, including an online toolkit for instructors, videos to promote creating a flipped classroom, and interactive activities for use by both instructors and enrolled students

1.2 STATEMENT OF TRANSFORMATION

The project seeks to redesign the current for-cost eBook required for all students enrolled in GT 1000: First-Year Seminar as a free, open-access text available to all students. The open-access text would include readings, activities, resources, and digital learning objects relevant to first-year student success.

As part of the GT 1000, all enrolled students are required to purchase a custom e-text that currently costs \$37.25; in the 2016-17 academic year, 1,850 students enrolled in GT 1000 spent a total of \$68,912.50 on the textbook. The text includes materials written by Georgia Tech faculty and staff, as well as selections from third-party texts on student success in the first year. Based on our assessment data for GT 1000, the book has low buy-in from both students and instructors teaching the course; approximately 65% of GT 1000 sections do not use the book in any way.

Feedback from instructors has shown that the book has too much material for them to easily review before the semester begins, resulting in a lack of assigned materials from the textbook. We have also received feedback from both instructors and students that the current format of the book is not intuitive and information is difficult to locate in the text. By making the text more streamlined and easier-to-use for our instructors, it will increase the buy-in from instructors, who can more easily incorporate the materials from the textbook into their curriculum. The current text has a great deal of valuable information for students, but it is not being utilized by instructors in their classes.

Feedback from students has shown that the materials that are included are redundant and in need of updating. Additionally, the purchase of the textbook for students only grants them access to the eBook for two years, which means they are not able to continue accessing information on key curricular and co-curricular opportunities discussed in the book after their second year of college. Students have also expressed frustration at being required to purchase a text which is not utilized in their class. This project will not only create a more usable text, but will also eliminate the textbook costs for students taking the course, thereby making their overall college experience more affordable.

In addition to the enrolled students and instructors, GT 1000 also incorporates Team Leaders, second through fifth year student mentors who work alongside the instructors to ensure our first-year students transition successfully to Georgia Tech. Currently, the Team Leaders do not have access to the textbook unless they purchase the book themselves. Consequently, they are unable to effectively facilitate discussions for any readings assigned by the instructors. Because the Team Leaders are such an integral part of the class, this contributes to the lack of incorporation of readings from the text into many sections of GT 1000.

Additionally, the openness of the new text will invite more regular revision and adaptation. Because we strive to ensure GT 1000 meets the needs of an ever-evolving cohort of first-year students, instructors, and peer leaders, the course

undergoes regular self-studies to ensure it is fulfilling the needs of all involved. An open-access text would allow us to more readily and regularly reflect any changes to the program or university that is important for our students to know. Each year, approximately 70% of our Team Leaders are new to the program; an open-access text would allow our Team Leader Advisory Board to regularly update materials for Team Leaders, based on the feedback from those who served during the preceding year. This isn't currently feasible for the text due to the various timelines of our Team Leader recruitment and our publisher-set timelines for updates to the text. And because 20% of GT 1000 students go on to become Team Leaders, we would also be able to incorporate their feedback into improving the information available to the next cohort of students who enroll in the course.

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A successful transformation of the current textbook will benefit enrolled first-year students, student team leaders, course instructors, and campus partners at Georgia Tech. A successfully transformed open textbook can also benefit by being a resource for other USG schools, as well as any other institutions across the country and world.

1.3 TRANSFORMATION ACTION PLAN

The transformation will begin with a thorough review of all current textbook information. Materials that are redundant, extraneous, or out-of-date will be removed from the current textbook. We will need to identify any materials whose copyright is not currently held by Georgia Tech and will need to eliminate these materials from the text. Next, we will identify campus partners who can contribute new materials from the text in order to replace any necessary chapters, activities, or resources. New course materials will be created by the GT 1000 program director, as well as by campus partner program directors and coordinators. While much of this stage of the project will focus on the text portion of the eBook, we will also begin working to create activities, resources, and digital learning objects that can be utilized alongside the traditional text. Resources may include: videos, presentations, assignments, activities, and projects.

GT 1000 instructors are currently provided with a template syllabus that includes suggested readings for each class meeting, so these will need to be revised and updated to reflect the new textbook. In addition, all instructors have access to resource site through our Learning Management System, T-Square (Sakai). This site, like the current textbook, would greatly benefit from streamlining, updating, and a more user-friendly design. We would move the current resources from T-Square to the Center for Academic Enrichment website, which would not only improve the usability of the materials, but would also ensure easily accessible IT support for the electronic materials hosted online.

Open access will be provided through moving the materials from a log-in required site (T-Square) to an open website through the Center for Academic Enrichment, which oversees the GT 1000 program. All contributors will also be asked to provide a Creative Commons Attribution license to ensure open access of materials.

Team members for this project include Dr. Lacy Hodges, Assistant Director of the Center for Academic Enrichment and the program director for GT 1000, and Fred Rascoe, Scholarly Communication Librarian, and Seth Porter, Co-Coordinator of Library Instruction. Dr. Hodges will be responsible for overseeing the creation of content for the textbook as well as for communicating with administration, instructors, team leaders, and students to ensure materials for the textbook fit with course goals and learning outcomes. Mr. Rascoe will assist in the coordination of Creative Commons Attribution licenses for all included content and will ensure that all materials are appropriately attributed and licensed. Mr. Porter will provide guidance for the design and implementation of assessment techniques for the textbook, and will assist in designing both quantitative and qualitative assessment measures as well as in the analysis of these measures. Additionally, because all team members also serve as GT 1000 instructors, the team will be able to directly observe the usability and effectiveness of the text in the GT 1000 course throughout the academic year.

1.4 QUANTITATIVE AND QUALITATIVE MEASURES

The effectiveness and use of the open source textbook will be assessed in the following ways:

Quantitative Assessments

Pre- and post-semester learning outcome assessment

GT 1000 includes six learning outcomes that all students enrolled in the class should be able to reliably demonstrate upon successful completion of the course. The pre- and post-assessment survey includes questions focused on assessing student ability/knowledge for all six learning outcomes.

All students enrolled in GT 1000 are asked to complete both the pre- and post-semester surveys, though neither survey is required for students in the course. All students who complete either survey are required to include their Georgia Tech ID number. This allows us to match pre- and post-semester survey responses by students and to analyze learning outcome transformation by particular students.

By comparing the pre- and post-semester survey responses for individual students, we will be able to assess how successfully the students in the course are learning the specified outcomes. Additionally, questions will be included on the post-semester survey that asks students to identify if and how the textbook was used in their section of GT 1000. This will allow us to assess the textbook's specific impact on the learning outcomes.

Instructor Textbook Use Survey

All instructors will be asked to complete a post-semester survey regarding their use of the textbook. We currently have data from 2014-2016 regarding how often instructors used the previous version of the textbook, so we can create a comparison of the change in textbook usage with the introduction of the new textbook. This will allow us to analyze instructor buy-in for the textbook, as well as how many sections of GT 1000 are using the textbook as part of their curriculum.

Questions will also be asked regarding individual aspects of the textbook and how often they were used in sections of GT 1000. This data will allow us to assess the usage of various elements of the textbook (readings, videos, activities, etc.) across sections of GT 1000.

Qualitative Assessment

Focus groups

Focus groups will be formed for each of the three cohorts who may benefit from the textbook: current GT 1000 students, instructors, and team leaders. The focus groups will meet twice each semester (Fall and Spring) and will be asked to provide feedback on the use of the textbook in their section of GT 1000. These focus groups will allow the Center for Academic Enrichment to measure the usefulness of the GT 1000 textbook for a variety of interested groups.

Feedback survey

Surveys will be sent to GT 1000 students, instructors, and team leaders asking for their opinion regarding the textbook. The survey will be sent at the end of each semester (Fall and Spring) and will ask both closed and open-ended questions regarding the user's opinion of the textbook. Included questions will address the ease of use of the textbook and associated materials, the usefulness of the textbook, and suggestions for improving the textbook and associated resources. This survey will be separate from the learning assessment and textbook use surveys.

1.5 TIMELINE

May 2017: Textbook review begins; contact campus partners to update materials; outline of tool kit and new materials; web developer begins back-end work on tool kit

June 2017: Updated materials due to GT 1000 program director; Project Team compiles and develops all materials online

July 2017: Instructors introduced to new materials during Annual GT 1000 Instructor Training and Workshops

August 2017: Materials go live online through Center for Academic Enrichment website; Pre-Semester GT 1000 survey released to students to assess current Learning Outcome objective knowledge and skills

September-November 2017: Focus groups are assembled and meet monthly to discuss use of textbook in GT 1000 classes. Three focus groups will be formed: one for instructors, one for GT 1000 students, and one for team leaders.

December 2017: Post-Semester Assessment distributed to all GT 1000 instructors, students, and team leaders.

January-February 2018: Fall post-semester data quantitative and qualitative data is analyzed and compiled, including the pre- and post-semester learning outcome assessment.

April 2018: Post-Semester Assessment distributed to all Spring GT 1000 instructors, students, and team leaders

May 2018: Spring & Fall post-semester data is analyzed and compiled; final report is written evaluating success and efficacy of new textbook mode.

1.6 BUDGET

Web Developers (Graduate Students)

\$14/hr, 30 hr/week, 26 weeks (Summer and Fall 2017): \$10,920.00

Textbook Materials Coordinators (Undergraduate Students)

\$10/hr, 20 hr/week, 11 weeks (Summer 2017): \$2,200.00

Supplies for Assessment workshops (Fall 2017, Spring 2018)

Instructor Assessment workshops (4): \$400

Student Assessment workshops (4): \$400

Team Leader Assessment workshops (4): \$400

Travel & Expenses: \$800

Total Budget: \$15,120.00

1.7 SUSTAINABILITY PLAN

GT 1000 is offered in both Fall and Spring every academic year, and will continue to be offered to all incoming freshman. The open-access e-text would be maintained by the Center for Academic Enrichment, as it will be hosted on our departmental website. Funding will follow the “Institutional Method” explained by Stephen Downes in his article “Sustainable Models for Open Educational Resources” (1). Because GT 1000 is a fundamental course for all Georgia Tech students, any required funding necessary to update or maintain the text would be funded by the institution as a regular part of the GT 1000 program. Updates and revisions to materials can also occur through the Center for Academic Enrichment’s leveraging of existing resources, such as the Georgia Tech library’s and/or Georgia Tech Cable Network’s multimedia services to create updated videos.

The materials and resources would be maintained by the director of the GT 1000 program as a regular part of the program each year. The program director would collaborate with campus partners regularly and often to ensure the content of all available materials is accurate and up-to-date, and would revise materials as needed. This would help to ensure that the materials are trusted and authoritative as the designated campus offices would serve as a kind of editorial board for their individual content. Additional resources would also be created by GT 1000 instructors, thus working to ensure that many of the consumers of these materials are also the creators of the materials, which often creates a more sustainable model for OER (1). The GT 1000 program director would also collaborate with the Office of Information Technology’s web developer in order to ensure the technological elements of the text were maintained.

In order to continue to revise the content of the text and make sure it is relevant and up-to-date for incoming students, we will continue to assess the resources and materials through the use of regular assessment workshops. Advisory groups will be formed each academic year for instructors, GT 1000 students, and team leaders. These groups will meet twice a semester in order to provide feedback regarding both the content and structure of the materials available. We will also continue to include the eBook and resources in our pre- and post-assessment surveys for instructors, students, and team leaders. This will allow us to continue to update the materials for the class and to ensure all materials and resources are meeting the needs of all groups involved in GT 1000.

Updates to the materials will not only include content changes, but may also consist of changes in the method of delivery for particular materials, including creation of digital learning objects such as videos, tutorials, and other multimedia resources.

1.8 REFERENCES & ATTACHMENTS

References

1. S. Downes, "Models for Sustainable Open Educational Resources", *Interdisciplinary Journal of Knowledge and Learning Objects*, vol. 3, 2007. <https://www.oecd.org/edu/cei/36781698.pdf>
2. C. Vaz de Carvalho, P. Escudeiro, M. Caiero Rodriguez, and M. Llamas Nistal, "Sustainability Strategies for Open Educational Resources and Repositories", *Latin American Conference on Learning Objectives and Technology (LACLO)*, 2016. <http://ieeexplore.ieee.org/document/7751806/>