

Summer 2017

# Health Care Economics

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Jocelyn Steward, Ethel Callen, Kendolyn Smith

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# Health Care Economics

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## Grants Collection

Affordable Learning Georgia Grants Collections are intended to provide faculty with the frameworks to quickly implement or revise the same materials as a Textbook Transformation Grants team, along with the aims and lessons learned from project teams during the implementation process.

Each collection contains the following materials:

- Linked Syllabus
  - The syllabus should provide the framework for both direct implementation of the grant team's selected and created materials and the adaptation/transformation of these materials.
- Initial Proposal
  - The initial proposal describes the grant project's aims in detail.
- Final Report
  - The final report describes the outcomes of the project and any lessons learned.



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# Initial Proposal

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## Application Details

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### Manage Application: ALG Textbook Transformation Grant

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**Award Cycle:** Round 4

**Internal Submission Deadline:** Monday, September 7, 2015

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**Application Title:** 157

**Submitter First Name:** Jocelyn

**Submitter Last Name:** Steward

**Submitter Title:** Assistant Professor

**Submitter Email Address:** jocelynsteward@clayton.edu

**Submitter Phone Number:** 706-394-0284

**Submitter Campus Role:** Proposal Investigator (Primary or additional)

**Applicant First Name:** Jocelyn

**Applicant Last Name:** Steward

**Co-Applicant Name(s):** Ethel Callen , Kendolyn Smith

**Applicant Email Address:** jocelynsteward@clayton.edu

**Applicant Phone Number:** 706-394-0284

**Primary Appointment Title:** Assistant Professor

**Institution Name(s):** Clayton State University

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

Jocelyn L. Steward, Assistant Professor, Health Care Management,  
jocelynsteward@clayton.edu

Ethel Callen, Academic Advisor, Health Care Management, ethelcallen@clayton.edu

Kendolyn Smith, Assistant Professor, Health Care Management, kendolynsmith@clayton.edu

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

Peter Fitzpatrick, Department Chair, Health Care Management, Clayton State University

**Proposal Title:** 157

### Course Names, Course Numbers and Semesters Offered:

Healthcare Economics= HCMG 3320 = Fall, Spring, Summer  
 Health Care Finance = HCMG 4560 = Fall, Spring, Summer  
 Healthcare Econometrics = HCMG 5020 = Fall, Spring, Summer  
 Health Care Accounting = HCMG 5030 = Fall, Spring, Summer  
 Ethical Issues in Health Care = HSCI 3550 = Fall, Spring, Summer

**Final Semester of Instruction:** Fall 2016

**Average Number of Students per Course Section:** 3320 = 25; 4560 = 23; 5020 = 3; 5030 = 2; 3550 = 26

**Number of Course Sections Affected by Implementation in Academic Year:** 21

**Total Number of Students Affected by Implementation in Academic Year:** 458

**List the original course materials for students (including title, whether optional or required, & cost for each item):** HCMG 3320/5030 = Getzen, Thomas (2013). Health Economics & Financing. 5th edition = Required = \$199.95  
 HCMG 4560/5040 = Mclean, Robert (2003). Financial Management in Health Care organizations = 2nd edition = Required = \$109.99  
 HSCI 3550 = Morrison, Eileen & Furlong, Beth (2014). Health Care Ethics: Critical Issues for the 21st Century = 3rd edition = Required = \$99.95

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

**Requested Amount of Funding:** 15,800

**Original per Student Cost:** 62,942.94

**Post-Proposal Projected Student Cost:** 0

**Projected Per Student Savings:** 47,142.94

**Plan for Hosting Materials:** LibGuides

#### **Project Goals:**

The primary goal of the project is to use the opportunity afforded by the ALG Textbook Transformation Grant to develop no-cost alternatives to traditional textbooks. The proposal

seeks to develop materials for Health Care Economics/Econometrics (HCMG 3320/5020), Health Care Finance/Accounting (HCMG 4560/5030), and Ethical Issues in Health care (HSCI 3550). HCMG 3320, 4560, and HSCI 3550 are required courses for the BS in Health Care Management (HCMG) at Clayton State University (CSU); whereas, HCMG 5020 and 5030 are required courses for students pursuing a MS in Health Administration but did not complete economics or accounting in their undergraduate program. Specifically the project will:

- Reduce overall tuition and fees for students.
- Grant students access to the latest content and resources in an ever-changing health care environment.
- Allow instructors to identify, explore and integrate supplementary course materials to improve student outcomes, retention, and productivity; provide stimulating learning material; and encourage students to be participatory learners.
- Increase students' success by ensuring access to textbooks on the first day of class and throughout the semester.
- Establish benchmarks for assessing, evaluating, and developing other future health care courses.
- Provide a springboard that demonstrates that no-cost alternatives are appropriate in upper division courses, graduate level courses, and other health care related degree programs including medicine, nursing, and physical therapy.

### **Statement of Transformation:**

Clayton State University (CSU) offers the Bachelor of Science (BS) in Health Care Management (HCMG) major, which is the second largest Association of University Programs in Health Administration (AUPHA) certified program in the entire United States of America. The program is also the second largest major offered by the university. The major has more than 500 students pursuing the degree as their primary or dual major. Dual major students have the opportunity to earn a BS in Nursing or BS in Dental Hygiene. Students in the HCMG program are required to take Health Care Economics, (HCMG 3320), Health Care Finance (HCMG 4560), and Ethical Issues in Health Care (HSCI 2550) to complete the degree. In addition, students pursuing other majors may also take these course for elective hours. Last, some graduate students in the MS in Health Administration (MSHA) may enroll in the course as a bridge courses (HCMG 5020 and HCMG 5030) to satisfy admission requirements.

The transformation will use free resources offered through open source platforms including Galileo, eJournals, eBooks, videos, MERLOT, and Cool4ed. The resources will replace the current standard textbooks for Healthcare Economics/Econometrics (\$199.95), Health Care Finance/Accounting, (\$109.99), and Ethical Issues in Health Care (\$99.95), offered through the University's bookstore. The transformation will be beneficial to students who choose not to purchase textbooks due to its costs or lack of financial resources. Therefore, it would be beneficial to offer free resources for students that are looking for the most efficient means of gathering course material and to assist students who are far more engaged with electronic resources than with traditional printed course materials.

Textbooks cost students, on average, \$1,200 a year. While e-textbooks do provide some financial relief from printed textbooks, the price tag can still be high or even more expensive (Senack, 2014). For example, the textbook for HCMG 3320/5020 (Economics/Econometrics) is

priced at the CSU bookstore as \$199.95 (new), \$126.26 (used); \$75 (rent for one semester), and \$62.50 (lifetime digital e-book). The textbook for HCMG 4560/5030 (Finance/Accounting) is \$109.99 (new); \$60 (used) ; \$55 rent (rent for one semester); \$69.04 (120-day digital e-book), and \$183.99 (lifetime digital e-book). It is apparent that the out-of-pocket expense for students will be significant no matter the platform in which the textbook is purchased.

The key stakeholders affected by the transformation include both traditional and non-traditional, undergraduate students who have declared HCMG as their major at Clayton State University. However, students outside the major, graduate, transient, senior citizens, military, or post-baccalaureate students who take the courses will also benefit from the transformation. Clayton State is officially a "laptop campus" and students sign an agreement upon enrollment stating that they have access to a PC and the internet. Because of this laptop policy, students will have access to the material without any additional costs. The University's HUB Center provides software and hardware services to current students in setting up their computers.

Instructors are also key stakeholders. Instructors are aware that many students choose not to purchase the required textbook; yet, instructors need students to have access to the book because not all content can be covered during class. It can be difficult to support the idea that students may not want to buy the textbook knowing how expensive textbooks are; on the other hand, instructors' want students to find the course material useful and if alternative methods (such as no-cost learning material) can effectively replace textbooks, it is an acceptable alternative.

The most significant impact on students is the ability to reduce cost of attendance. The estimated cost of attendance ranges from \$20,664 for an on-campus resident, to a median cost of \$26,022 for an off-campus and the highest is \$38,846 for an off-campus non-resident. A graduate resident has an estimated cost of attendance at \$28,132 and a non-resident is \$49,376. As educators, we are charged with providing high quality education without leaving students overburdened with college debt. The cost of attending college will be reduced by replacing textbooks with no-cost learning material. Approximately, 70% of CSU's students are using financial aid (Pell Grant and student loans) and replacing textbooks can help decrease student loan burden and help to maximize Pell Grant to ensure completion of the degree.

During the 2014-2015 academic year, 458 students enrolled in the courses described in the proposal. The transformation will result in total students' savings of approximately \$62,942.94 per year; this is an average of \$137.43 per student per course. With all HCMG undergraduate students taking the three course, this reduces student's overall costs of attendance by \$412.29. For graduate students taking the two bridge courses, it reduces students' overall cost of attendance by \$274.86.

Many students choose to purchase their textbooks online and sometimes it will arrive later in the semester. In an upper-division course, it is imperative that instruction begins at the start of the course and students need to avoid starting the semester behind. To accomplish this goal, students need resources that are readily available and affordable. Students should not feel they are behind because they do not have the textbook. A study found that 65% of students do not purchase textbooks because of the high costs and those that fail to buy the book, 94% have claimed it to be academically detrimental (Senack, 2014). In addition, some students wait until class begins to purchase the textbook to determine if it is needed (Goodin-Smith &, and

Rader, 2015). This delay can result in students performing poorly. Satisfaction, academic performance, and the ability to stay current are also beneficial to students. Students are oftentimes dissatisfied with textbooks and choose not buy them because, in previous courses, the class used a limited number of chapters from the book (Nawotka, 2012), thus students feel unsatisfied and felt they wasted their money. Choosing free resources will avoid dissatisfaction. Students will have access to course material on the first day of class, which should improve students' academic performance and overall success in the course.

The health care environment is constantly changing and with the upcoming presidential election there may be drastic changes in the current US health care system model. Printed textbooks lack the ability to stay abreast to current topics and thus are constantly updated; this increases the cost to students and fewer used textbook are available for students. For example, the textbook for Health Care Economics was updated because of the 2010 Patient Protection and Affordable Care Act (PPACA). Some students may choose to purchase the earlier version, but the chapter covering the PPACA is missing and thus the cheaper, older version isn't an option for students.

The ALG has previously funded ECON 2105 at Clayton State University to use an OpenStax textbook. This course is a requirement for the HCMG 3320 course. It would be beneficial to students that have used open sources in existing courses to continue this trend in upper-division courses. The continuation of textbook alternatives should prove beneficial to students and increase satisfaction.

No textbook is presently designed to fit the needs of the HCMG program. Although the health care management faculty constantly evaluate the content covered in the program, when information is lacking, quick solutions are limited and more long-term strategies are used such as adopting a new course or a new book. Both options require multiple levels of approval and may not circumvent students' deficiencies and it limits the ability to make quicker changes relevant to the content. The current model of using a textbook does not allow quick changes to the curriculum and outside resources have to be used.

The transformation's impact will be broader than the HCMG department. The transformation can be beneficial to many relevant stakeholders including the department and multiple courses. The department's goals align directly with the university's goals – increased enrollment and graduation. If the cost of learning is decreased, it can result in higher enrollment. If students have access to textbooks on the first day of classes, they are more likely to perform better in the classroom and achieve greater success overall in the entire course. Successful students will continue to make progress through the program thus staying on track for graduation. The transformation impact will allow faculty to establish benchmarks for other courses to be evaluated for future development, implementation, and assessment relevant to deciding to transform additional courses in the department.

Last, there are numerous institutions within the University System of Georgia that offer degrees in a health care related field including Armstrong State University, Georgia Regents University, Georgia Southern University, Columbus State University, Middle Georgia State University, Georgia State University, and the University of Georgia. Many of these degrees require additional fees for students resulting in an increased cost of attendance. Some of these institutions also require similar courses found in the proposal as degree requirements or

electives. Successful transformation can encourage other institutions to implement no-cost learning material and this proposed transformation can be used as a platform for others.

### **Transformation Action Plan:**

The creation of the new course material will involve multiple steps. Prior to beginning the transformation, the team members will consult with other groups at CSU that have received transformation grants from ALG to gain insights on best practices. Next, the team will determine how to transform the course using no-cost learning material available on open sources. This step will be accomplished by evaluating the current content within each course, identify key topics, and use open source material to replace textbook material. In addition, the current teaching model, which is focused on teaching towards the chapters in the book, will be changed to modules. Each module will include relevant key topics based on course objectives and outcomes, goals of the department, and other additional resources such as AUPHA competency models.

After the identification of key topics, the team will identify, review, and select relevant course material. A preliminary review of course material has determined that the courses proposed can be successfully transformed. For example, through MERLOT, the team has discovered successful content relevant to the material taught in the courses, such as obesity for the health care economics/econometrics course, financial ratio calculators for health care finance/accounting, and case studies that enhance critical thinking skills for ethical issues in health care. Within those modules, there will be relevant open source information, chapters from free text, assessment tools including case studies, videos, and research and trade journal articles, videos. Last, the team will review the new course material and implement the modified courses in fall 2016.

Team members already use Desire2Learn (D2L) as their classroom learning management system to post lectures, announcements, quizzes and to upload important documents. The syllabus will need to be modified towards modules with relevant open source material and the elimination of the textbook. The goal is to develop a comprehensive database of resources that an instructor can use to best fit the course they are teaching. Thus the material can be modified based on the type of instruction (seated, asynchronous, or synchronous), the semester the course is offered, or changes that need to be addressed on a class by class basis.

Drs. Steward and Smith have been teaching the proposed course for multiple years and are familiar with the content. Ms. Callen has significant interactions with students and provide an excellent liaison between students and faculty. Because of the changes that are taking place over multiple courses, each team member will be responsible for assisting in all aspects of the project. Dr. Steward will be responsible for overseeing implementation of the project. She will be responsible for assisting others in developing qualitative and quantitative measures. She is the subject matter expert for health care economics/econometrics and health care finance/accounting. Dr. Smith is the subject matter expert for ethical issues in health care. Drs. Steward and Smith will be responsible for identifying key themes. Ms. Callen will provide assistance to Drs. Steward and Smith. Because Ms. Callen has significant interactions with students, as the team develops the course, Ms. Callen will ask for feedback from students. The course will be reviewed and evaluated throughout the semester. Team members will meet

monthly during the semester to discuss the implementation, effectiveness, and future changes. The team members will also attend meetings, participate in training, and view webinars/seminars/workshops offered by ALG. The team will use LibGuides and other platforms for wider distribution.

**Quantitative & Qualitative Measures:** From a quantitative perspective, the goal is to develop a survey to understand how the transformation will help the students. During the spring semester of 2016, we will survey students in the existing courses and ask them questions regarding their use of textbooks. After implementation of the transformation, we will compare the number of unsuccessful grades (Ds), failures (Fs), and withdrawals (Ws/WFs) with the traditional textbook model course. During the spring semester (pre-implementation) and fall semester (post-implementation) of 2016, we will develop a plan to evaluate the same questions administered pre and post implementation. It is hypothesized that the new model will increase students' retention of the material and determine the effectiveness of no-cost alternative. As a qualitative researcher, being able to speak to students regarding their experience will be helpful pre-and post-implementation. We will conduct focus groups and interviews to assess the students' perspective of using textbooks versus no-cost learning material. Questions will include information relevant to usability, functional instruction, and whether students are responsive and encouraging others to take the course based on the utilization of these new course materials. Additional feedback will come from faculty members inside and outside the department.

#### **Timeline:**

Although it is beneficial to begin as early as possible, because the bookstore requires book orders by mid-October a spring 2016 implementation isn't possible. In addition, a summer 2016 implementation date isn't feasible as summer is a significantly shorter semester. Therefore, it is most beneficial to have the start date of implementation of fall 2016.

[This timeline has been converted from a table unreadable by CompetitionSpace. - Administrators]

Timeline

## Activity

October 12, 2015

Steward & Callen attend the ALG Kickoff

October, 2015 – April, 2016

Development of the course: The team will redesign the course into Modules relevant to the important key term needed to know in the course. The team will identify relevant resources to determine how they best fit within the modules. Identify any gaps in the curriculum and delete any areas that are inappropriate in the course.

April, 2016

Distribute survey to students regarding textbook satisfaction for baseline comparison: A survey will be developed that can be administered on Qualtrics that students in the spring 2016 courses will take regarding the use and satisfaction of the current textbook.

April – May, 2016

Qualitative interviews/focus groups with students to help evaluate the content: A small number of students enrolled in the spring 2016 courses will be asked to evaluate the developed content compared to the content provided throughout the semester using standard textbooks.

June – July, 2016

Finalize content, pilot test material in summer, focus group for feedback. Based on results from surveys and interviews, we will finalize the new content. Students in the summer 2016 will pilot test using one module in the course. A focus group will be administered to receive feedback. A finalized version of the content will be ready for implementation.

August – December 2017

Full implementation into the course, develop open access resources, and evaluation: All proposed courses will be fully implemented with the no-cost alternatives. Surveys will be conducted at the end to determine satisfaction the course. Tests scores will be compared to determine that the content provides sufficient knowledge for the student. Feedback will be requested after each module from the student regarding what they found useful and what needs to be modified.

January – March 2017

Organize material on open sources: All proposed courses will be fully implemented with the no-cost alternatives. Surveys will be conducted at the end to determine satisfaction the course. Tests scores will be compared to determine that the content provides sufficient knowledge for the student. Feedback will be requested after each module from the student regarding what they found useful and what needs to be modified.

April, 2017

Complete final report: We will share these resources with our colleagues, especially those in the USG system. LibGuides has built-in social media resources, so we can easily publicize the new resources and share them with other COMM 1110 instructors in the university system. We also will publicize the newly developed resources via the Georgia Communication Association listserv ([gcalist@ec.edu](mailto:gcalist@ec.edu)) and the Georgia State Communication Association Annual Convention, and we will export our D2L master courses to instructors at other USG institutions upon request. These steps will help us to achieve a wider transformative impact in the USG system and beyond, making it much easier for colleagues to transition to a free, open source textbook.

**Budget:**

## Personnel Expenses:

Jocelyn L. Steward

Differential for overload/release time to support the work to transform the learning materials to no-cost format

\$5000

Ethel Callen

Differential for overload/release time to support the work to transform the learning materials to no-cost format

\$5000

Kendolyn Smith

Differential for overload/release time to support the work to transform the learning materials to no-cost format

\$5000

Travel

Travel for team members for ALG Project training

\$800

## Project Expenses:

Total

\$15,800

**Sustainability Plan:**

In order to sustain future offering of the course, we plan to continue to offer these courses each semester since the course are required for the BS in Health Care Management. In addition, the course serves as a bridge course for those students entering the MHA Program who lack the previous coursework in economics or finance. We will continue to meet and discuss the success of the course as well as areas for continued and enhanced development including the addition of current digital learning materials, evaluation of student feedback, and ensure ongoing achievement of the desired learning outcome. After successfully completing multiple course transformations, the team can assist others who wish to transform their classes as well within the department and the College of Health; as well as across the

university. With the Complete Georgia initiative, it is imperative that we keep costs low and allow students more opportunities to complete their degree on time. With changes in federal Pell Grant, many students cannot afford to pay for summer school out of pocket. If students are able to reduce their textbook expenses, perhaps those funds can be used towards tuition in the summer. In addition, the format is to develop a skeleton of basic tools that the instructor can then develop based on their own interest. By developing this toolbox, sustainability can be maintained so that if the instructor changes, the continuity of the content remains the same. Therefore, there will be more consistency regarding what students learn throughout the course.

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## References

Goodin-Smith, O and Rader, Daniel. (2015, January 17). Students break the bank to buy their books. *USAToday*. Retrieved from: <http://college.usatoday.com/2015/01/17/students-break-the-bank-to-buy-their-books/>.

Murphy, Lauren. (2012, April 23). Top 10 Most Expensive Majors. GradGuard. Retrieved from: <http://blog.gradguard.com/2012/04/top-10-most-expensive-majors/>

Nawotska, Edward. (2012, September 11). "Are College Students Buying Required Textbooks? 75% in US say No." Publishing Perspectives. Retrieved from: <http://publishingperspectives.com/2012/09/are-college-students-buying-required-textbooks-75-in-us-say-no/>

Senack, Ethan (2014, March). Affordable Textbooks: A Policy Guide. Student PIRGs. Retrieved from <http://uspirg.org/sites/pirg/files/reports/POLICY%20GUIDE%20-%20Affordable%20Textbooks.pdf>.

Letter of support



Dr. Peter G. Fitzpatrick  
Department Chair & Professor  
Health Care Management Department/College of Health  
Clayton State University  
2000 Clayton State Blvd, Morrow, GA 30260  
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August 28, 2015

Re: Letter of Support for the Affordable Learning Georgia Grant Proposal

As the Department Chair for the Department of Health Care Management (HCMG) at Clayton State University (CSU), I am pleased to offer my support to Drs. Steward and Smith and Ms. Ethel Callen to develop a no-cost alternative to textbooks. The proposal submitted covers the following courses: Health Care Economics/Econometrics (HCMG 3320/5020), Health Care Finance/Accounting (HCMG 4560/5030), and Ethical Issues in Health care (HSCI 3550). The proposal seeks to eliminate the need for textbooks and use free online resources in the classroom. HCMG 3320, 4560 and HSCI 3550 are required courses for the BS in Health Care Management; whereas, HCMG 5020 and 5030 are required courses for students pursuing a MS in Health Administration, and did not complete economics or accounting in their undergraduate education. Three courses (3320, 4560, and 3550) have two sections offered every fall and spring semester and one section during the summer semester. One section of the graduate courses (5020 & 5030) are offered every semester. There are twenty-one course sections impacted within the program with a cost savings of \$62,942.94.

With the increased interest in the Health Care Management major, we have continuously seen a growth in our enrollment at Clayton State University (CSU). The proposal is aligned with our initiatives to provide high-quality education to our students while being mindful of the burden of increased costs in higher education. The team members have intimate knowledge of the challenges that our students face and stay abreast of changes that occur within the health care field. Having reviewed the proposal, I am confident that the faculty and staff involved in the proposal have the expertise, knowledge, and determination to complete the project and will be completed and delivered with high quality.

I look forward to the sharing the knowledge gained through this endeavor within the department, across the college, and throughout CSU. The College of Health, through its responsibilities for receipt and distribution of grant funding, will ensure sustainability of the proposed project.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter G. Fitzpatrick", written over a horizontal line.

Peter G. Fitzpatrick, Ed.D, R.Ph.  
Department Chair & Professor

# Syllabus

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## COURSE OUTLINE

### HEALTH CARE ECONOMICS

MODULES	Open source links
MODULE 1: INTRODUCTION TO HEALTH CARE ECONOMICS	<ul style="list-style-type: none"> <li>- <a href="#">Macro vs. Micro economics</a></li> <li>- <a href="#">Social determinants of health</a></li> <li>- <a href="#">Economics: A to Z</a></li> <li>- <a href="#">What is economics? Understanding the discipline</a></li> </ul>
Module 2: History of Modern Medicine	<ul style="list-style-type: none"> <li>• <a href="#">The evolution of modern medicine by William Osler</a></li> <li>• <a href="#">Brief history of modern medicine</a></li> <li>• <a href="#">1918 Flu pandemic</a></li> <li>• <a href="#">Ancient Egyptian Aspirin</a></li> <li>• <a href="#">Shaman/Witch doctors</a></li> </ul>
Module 3: International comparisons of health and health expenditures	<ul style="list-style-type: none"> <li>- <a href="#">Life expectancy could be topic in health care debate</a></li> <li>- <a href="#">Crossing the bridge: Do wealthy people live longer</a></li> <li>- <a href="#">Why medical tourism is booming</a></li> </ul>
Module 4: Supply and demand	<ul style="list-style-type: none"> <li>- CASE FOR PRICE CEILING: <a href="http://thehealthcareblog.com/blog/2009/07/27/the-case-for-price-ceilings-for-health-services/">http://thehealthcareblog.com/blog/2009/07/27/the-case-for-price-ceilings-for-health-services/</a></li> <li>- <a href="#">The economics of health care</a></li> <li>- <a href="#">Supply, demand, and health care</a></li> </ul>
Module 5: Health Insurance	<ul style="list-style-type: none"> <li>- <a href="#">Health Insurance and Mortality in US Adults</a></li> <li>- <a href="#">Uninsured, heal thyself, or: A new argument for universal health care</a></li> <li>- <a href="#">Uninsured Americans 2012: More than 45 million lacked health insurance last year, CDC report</a></li> <li>- <a href="#">The uninsured</a></li> </ul>
Module 6: Patient Protection and Affordable Care Act	<ul style="list-style-type: none"> <li>- <a href="#">The health care reform proposals of Hilary Clinton and Donald Trump</a></li> <li>- <a href="#">If you ask Maine</a></li> <li>- <a href="#">Times Topics: Health Care Reform and the Supreme Court</a></li> </ul>
Module 7: Physicians Learning Objectives	<ul style="list-style-type: none"> <li>- <a href="#">Flexner Report</a></li> <li>- <a href="#">Medical specialties</a></li> </ul>

	<ul style="list-style-type: none"> <li>- <a href="#">Medical careers: how much money do doctors make?</a></li> <li>- <a href="#">Doctor salaries</a></li> </ul>
Module 8: Hospitals	<ul style="list-style-type: none"> <li>- <a href="#">Improve patient experience to increase patient loyalty</a></li> <li>- Becker hospital review: <a href="#">50 things to know about the hospital industry</a></li> <li>- US News &amp; World Report: <a href="#">Best hospitals</a></li> <li>- <a href="#">Information regarding hospitals from CDC</a></li> <li>- <a href="#">Saving Grady Memorial Hospital</a></li> <li>- <a href="#">US Government still pays Civil War benefits</a></li> </ul>
Module 9: Pharmaceuticals	<ul style="list-style-type: none"> <li>- <a href="#">Mandatory provider review and pain clinic laws reduce the amounts of opioids prescribed and overdose death rates</a></li> <li>- <a href="#">New Tylenol cap will have warning label</a></li> <li>- <a href="#">Old school medicine ads</a></li> </ul>
Module 10: Pharmaceuticals	<ul style="list-style-type: none"> <li>- <a href="#">What is the difference between marginal benefits and marginal costs?</a></li> <li>- <a href="#">Marginal costs &amp; benefits</a></li> <li>- <a href="#">World Health Organization: No Seriously, stop abusing antibiotics</a></li> <li>- <a href="#">Why marginal benefits equals marginal costs in economics...Always!</a></li> <li>- <a href="#">Putting a price on human life</a></li> </ul>

### Health care finance

MODULES	Open source links
<b>Module 1: Introduction to health care finance</b>	<ul style="list-style-type: none"> <li>- <a href="#">Legal duties and avoiding liability: A nonprofit board member primer</a></li> <li>- <a href="#">Generations in the workplace: new blood for your board</a></li> <li>- <a href="#">Why are hospital CEOs paid so well?</a></li> <li>- <a href="#">48 statistics on for-profit hospital operator executive</a></li> <li>- <a href="#">Medical bills prompt more than 60% of U.S. bankruptcies.</a></li> <li>- <a href="#">Nerd Wallet finds medical bankruptcy accounts for majority of personal bankruptcies</a></li> </ul>
<b>Module 2: Learning Objectives: Valuation, Financial markets, long-</b>	<ul style="list-style-type: none"> <li>- <a href="#">2016: National state of financial and economic education</a></li> <li>- <a href="#">Chapter 3: Financial analysis: Concepts of financial assets value</a></li> </ul>

term financing, short-term, and external financing sources	<ul style="list-style-type: none"> <li>- Boundless book: <a href="#">Finance Hub</a></li> <li>- <a href="#">Stock investing for dummies</a></li> <li>- <a href="#">Investing 101: a tutorial for beginning investors</a></li> <li>- <a href="#">Investing for dummies</a></li> </ul>
Module 3: Financial Accounting	<ul style="list-style-type: none"> <li>- <a href="#">Debits and Credits</a></li> <li>- Boundless: <a href="#">Accounting hub</a></li> <li>- <a href="#">Introduction to financial accounting</a></li> <li>- <a href="#">Basic accounting concepts</a></li> </ul>
Module 4: Financial Condition analysis	<ul style="list-style-type: none"> <li>- Health care finance: <a href="#">Operating indicator ratios</a></li> <li>- <a href="#">Financial indicators for critical access hospitals</a></li> <li>- <a href="#">Accessing the financial and operational condition of New Jersey Hospitals</a></li> <li>- <a href="#">Best practices in hospital key financial indicators – setting and achieving goals</a></li> </ul>
Module 5: Time Value of Money (TVM)	<ul style="list-style-type: none"> <li>- <a href="#">Tax withholding: Good for government, bad for taxpayers</a></li> <li>- <a href="#">Understanding the cost of money</a></li> <li>- <a href="#">Janet Yellen</a></li> </ul>
Module 6: Managerial accounting	<ul style="list-style-type: none"> <li>- <a href="#">Cost accounting foundations</a></li> <li>- <a href="#">Cost accounting for health care organizations</a></li> <li>- <a href="#">Four mistakes of cost reduction in health care</a></li> <li>- <a href="#">How the cost center mindset is costing hospitals millions</a></li> </ul>
Module 7: Learning Objectives: Budgeting and Variance Analysis	<ul style="list-style-type: none"> <li>- <a href="#">How to budget your money with the 50/20/30 guidelines</a></li> <li>- <a href="#">Understanding variance analysis</a></li> <li>- <a href="#">Tools to plan, monitor, &amp; manage financial status</a></li> </ul>
Module 8: Supply chain	<ul style="list-style-type: none"> <li>- <a href="#">5 Ways supply chain can reduce rising healthcare costs</a></li> </ul>
Module 9: Working capital management	<ul style="list-style-type: none"> <li>- <a href="#">Improve working capital management</a></li> <li>- <a href="#">Working capital management: everything you need to know</a></li> <li>- <a href="#">Managing working capital</a></li> <li>- <a href="#">Working capital management</a></li> <li>- <a href="#">Strategies for managing working capital</a></li> </ul>
Module 10: Cash management and revenue cycle management	<ul style="list-style-type: none"> <li>- <a href="#">Hospital revenue cycle management: 5 ways to improve</a></li> <li>- <a href="#">What is revenue cycle management and why is it important?</a></li> </ul>

## ETHICAL ISSUES IN HEALTH CARE

CONCEPT	OPEN SOURCE MATERIAL
Overall	Information for most of the material can be found free online at: <a href="#">Medical Ethics An Online Textbook</a>
Week 1-2: Introduction to ethics	<ul style="list-style-type: none"> <li>- American Nursing Association (2014). Short Ethics Definitions. Retrieved from <a href="http://nursingworld.org/MainMenuCategories/EthicsStandards/Resources">http://nursingworld.org/MainMenuCategories/EthicsStandards/Resources</a></li> <li>- Kellogg Library (2003). Bioethics - Introduction and Definition. Retrieved from <a href="http://www.library.dal.ca/kellogg/Bioethics/definition.htm">http://www.library.dal.ca/kellogg/Bioethics/definition.htm</a>.</li> <li>- <a href="#">Maintaining ethics in a healthcare setting</a></li> </ul>
Weeks 3-4: Ethical theories and practice	<ul style="list-style-type: none"> <li>- <a href="#">Personal and moral autonomy</a></li> <li>- <a href="#">Medical ethics principles</a></li> </ul>
Weeks 5-6: Biotechnology and Reproductive Rights	<ul style="list-style-type: none"> <li>- <a href="#">Ten common questions about medical futility</a></li> <li>- <a href="#">The science behind genetically modified humans</a></li> </ul>
Weeks 7-8: Healthcare rationing and organ transplants	<ul style="list-style-type: none"> <li>- <a href="#">Retrieving organs from non-heart-beating organ donors: a review of medical and ethical issues</a></li> <li>- <a href="#">Dutch kidney donation revealed to be a hoax</a></li> </ul>
Weeks 9: Patient Privacy and confidentiality	<ul style="list-style-type: none"> <li>- <a href="#">Medical records privacy</a></li> </ul>
Weeks 10: Tuskegee Syphilis Experiment	<ul style="list-style-type: none"> <li>- <a href="#">The Tuskegee Syphilis Experiment</a></li> <li>- <a href="#">Presidential apology</a></li> </ul>
Weeks 11: Henrietta Lacks	<ul style="list-style-type: none"> <li>- <a href="#">Henrietta Lacks – Biography</a></li> <li>- <a href="#">Henrietta Lacks – Immortal Cells</a></li> </ul>
Weeks 12-13: Advanced Directives	<ul style="list-style-type: none"> <li>- <a href="#">DNR and DNI</a></li> <li>- <a href="#">Sample: health care power of attorney</a></li> </ul>
Weeks 14-15: Physician assisted suicide, Right to die	<ul style="list-style-type: none"> <li>- <a href="#">Death with dignity</a></li> <li>- <a href="#">Self-determination is freedom</a></li> </ul>

# Final Report

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# **Affordable Learning Georgia Textbook Transformation Grants**

## **Final Report**

**Date:** 12.23.2016

**Grant Number:** 157

**Institution Name(s):** Clayton State University

**Course material website:** <http://claytonuniv-hcmg-alcourses.weebly.com/>

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

- Jocelyn L. Steward, Assistant Professor, Department of Health Care Management, [jocelynsteward@clayton.edu](mailto:jocelynsteward@clayton.edu)
- Ethel Callen, Academic Advisor, Academic Advising Center, [ethelcallen@clayton.edu](mailto:ethelcallen@clayton.edu)
- Kendolyn Smith, Assistant Professor, Department of Health Care Management, [kendolynsmith@clayton.edu](mailto:kendolynsmith@clayton.edu)
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**Project Lead:** Jocelyn L. Steward

**Course Name(s) and Course Numbers:**

- HEALTHCARE ECONOMICS - HCMG 3320/HEALTH ECONOMICS - HCMG 5020
- HEALTH CARE FINANCE - HCMG 4560/HEALTHCARE ACCOUNTING - HCMG 5030
- ETHICAL ISSUES IN HEALTH CARE - HSCI 3550

**Semester Project Began:** Fall 2015

**Semester(s) of Implementation:** Fall 2016

**Average Number of Students Per Course Section:**

- HCMG 3320/5020 = 45/Fall, Spring Semester & 15/Summer
- HCMG 4560/5030 = 45/Fall, Spring Semester & 15/Summer
- HSCI 3550 = 45/fall, Spring Semester & 15/Summer

**Number of Course Sections Affected by Implementation:** 5

**Total Number of Students Affected by Implementation:** 315

### **1. Narrative**

**Summary of transformation experience**

The primary goal of the project was to use the opportunity afforded by the Textbook Transformation grant to develop no-cost alternatives to traditional textbooks. The team created or found open-source materials for Health Care Economics/Econometrics (HCMG 3320/5020), Health Care Finance/Accounting (HCMG 4560/5030), and Ethical Issues in Health care (HSCI 3550). Specifically, the project reduced overall costs for students, granted students access to the latest content and resources in an ever-changing health care environment. The project allowed instructors to identify, explore and integrate supplementary course materials to improve student outcomes, retention, and productivity; provide stimulating learning material; and encourage students to be participatory learners. Increased students' success by ensuring access to textbooks on the first day of class and throughout the semester. It established benchmarks for assessing, evaluating, and developing other future health care courses. It provided a springboard that demonstrates that no-cost alternatives are appropriate in other health care related degree programs including medicine, nursing, and physical therapy, upper division, and graduate level course.

The biggest challenge with implementing the no-cost material is the lack of a centralized location for free open-source course material. While there are free textbooks for lower-division courses, there is a lack free textbooks for upper-division, specialized courses. Therefore, the course developers had to take additional time to look for content, evaluate content, and appropriately incorporate the content into the course.

The biggest accomplishment was that we completed the project with positive feedback from the students, our most relevant stakeholder. We found that students had an overwhelming positive experience to not using textbooks. In addition, we found that by not using textbooks, we spent more time focused on the content that was most relevant for the course and avoid glossing over material that was available (in a traditional textbook), but not important to the course.

The overall course transformation involved the elimination of the textbook and the class was transformed into the use of modules or key concepts. Each was designed around a list of learning objectives. All courses provided free content with websites, PowerPoint presentations, and class lectures.

The most important impact is the cost savings we provided to the students at the institution. As financial aid decreases, students will be able to focus their limited funds on paying for tuition and fees and less on purchasing textbooks. We found that most students spent over \$200 per semester on textbooks. During the semester of implementation, we saved our students at least \$15,000 total or an average of \$150 per course. We had a total of 133 students enrolled in all five courses in the fall of 2016. Students that were taking more than one course would save even more.

### **Transformative impacts on your instruction**

The transformation of our instruction was positive. We received great feedback from students that elimination of textbooks allowed us to focus on the important concept. Students could walk away with a more direct understanding of the content they needed to know for the course. We seek to develop new and interesting ways to provide instruction such as the use of interactive videos and apps. We

understand the need to stay abreast to current trends and try to ensure that our students receive the best education.

### **Transformative impacts on your students and their performance**

Students expressed pleasure in being able to access different material (websites, videos) to help them understand content that was difficult. We did find a decrease in the number of withdrawals, D's, and WFs, and failures in the course. We would like to explore this more to determine if these results are statistically significant to support our hypothesis that not only does elimination of textbooks lessen the financial burden on students but can be developed into a positive experience.

### **Describe lessons learned, including any things you would do differently next time.**

The biggest lesson learned is that while finding no-cost alternative is important to students, we must be mindful of the time it takes to develop a course in this method. We would recommend an instructor takes at least a year to teach the course and then another year to develop the course with no-cost alternatives. Although we received excellent feedback from students, we should have asked for more specific feedback on things we could have done to improve the current model. We should have asked more reflective questions regarding what material they liked and what material they didn't like.

## **2. Quotes**

Overall, the experience from students were positive regarding the elimination of textbooks. We received great feedback on what works and what are some areas for improvement. The following are three quotes from students evaluating their experience with the no-cost learning material.

- *Books limit the information that is taught, having alternatives allows the professor to teach in different ways*
- *Professors need to continue to look for additional avenues to save students money on textbooks. Can you help us find the book on Amazon, the library, or free digital books?*
- *Using news, websites, blogs, etc. helps us to connect the material with the real world and what's going on currently. I like to know how is the material going to help me in my job.*

## **3. Quantitative and Qualitative Measures**

### **3a. Overall Measurements**

*Total number of students affected in this project: Fall 2016 = **128** (completed survey)*

- *Positive: **70** % of **128** number of respondents*
- *Neutral: **19** % of **128** number of respondents*
- *Negative: **11** % of **128** number of respondents*

## Student Opinion of Materials

We experienced conflicting information regarding the use no-course material. Our data provided multiple conclusions. We found that students liked and disliked the use of digital material, but mainly disliked the use of electronic textbooks. In addition, we found students surveyed stated they did have other professors use no-cost alternatives but in focus group stated they did not. Although there was some clear stand-outs regarding the use on no-cost alternatives there was discussion that printing material (which some prefer to do) was not cost-effective but they weren't interested in purchasing a course packet that could be bought that included the course material. The results may be due to the non-homogenous student population that consists of traditional and non-traditional students with various ways in which they prefer to receive their material. We would conclude that having options for students (free, no printed, or digital textbooks) is better choosing only one method

## Student Learning Outcomes and Grades

**Was the overall comparative impact on student performance in terms of learning outcomes and grades in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

- x   Positive: Higher performance outcomes measured over previous semester(s)
- Neutral: Same performance outcomes over previous semester(s)
- Negative: Lower performance outcomes over previous semester(s)

## Student Drop/Fail/Withdraw (DFW) Rates

**Was the overall comparative impact on Drop/Fail/Withdraw (DFW) rates in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

### Drop/Fail/Withdraw Rate:

  12   % of students, out of a total   133   students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

- x   Positive: This is a lower percentage of students with D/F/W than previous semester(s) =

- \_\_\_\_ *Neutral: This is the same percentage of students with D/F/W than previous semester(s)*
- \_\_\_\_ *Negative: This is a higher percentage of students with D/F/W than previous semester(s)*

### 3b. Narrative

Because the courses were designed differently than was previously delivered, the ability to sufficiently compare outcomes is muddled by these differences. Instructors should modify course content and course style to develop a better course for the students. Therefore, it is difficult to determine with statistical significant if student outcomes improved. We did use one module from the health care economics course that had limited changes, Module 9 concerning pharmaceuticals. We compared the data from Fall 2016 to Fall 2014 as Fall 2015 did not use online quizzes to test the material. The chart below outlines the differences seen between these two semesters. The textbook was required in 2014 but not in 2016. Because of the slight differences in student population between day and evening courses, we decided to compare the two separately. Day courses are oftentimes taken by traditional students and evening courses are often taken by non-traditional students; yet, there may be some non-traditional students who take day classes and vice versa. The results indicated an improvement in the quiz scores.

	Day – 2014	Day 2016
Average quiz score	42%	46%
	Evening – 2014	Evening – 2014
Average quiz score	69%	76%

In addition, we find the following overall outcomes in final grades, which also indicate an improvement in the overall final grades

	Day – 2014	Day 2016
Average final grades	75%	71%
	Evening – 2014	Evening – 2014
Average final grades	79%	79%

### Summary of quantitative and qualitative data

We surveyed students taking the five courses under the ALG grant. Analysis of results follows

#### Demographics analysis

Most students taking the survey are upper-level undergraduate students at the junior or senior level. This is indicative of the fact that most students taking health care management courses, especially those under the ALG grant are those at these academic levels. Most students are female and African-American. While higher than the average student population at Clayton State University, it is still representative of the female, African-American-dominant student population. Most students are between the ages of 18 – 35, which is a representation of the student population at Clayton State University

### **Questions inquiring about the student's purchasing habits and satisfaction of textbooks analysis**

Most students (68%) indicated that more than half of their courses required the purchase of a textbook. Results should indicate a higher percentage as courses that didn't require the use of textbooks as most students took the class in the courses developed for ALG grant. These courses did not require the purchase of textbooks. Further analysis should be done to understand this results.

Most students (67%) indicated that they purchased books for more than half of their courses that required textbooks. Only 32% of students stated they purchased all the textbooks required of the course. This supports the initiative of having more free, open-source material available to students as 68% of the student population surveyed are potentially being deficient in learning the content for the course.

Most students (75%) indicated that they purchased the textbooks because it is required, while only 15% indicated that the purchase of the textbook resulted in being successful in the course. This indicates that students do not feel that the textbook is beneficial to their success in the course. This supports initiatives to develop alternative methods to delivering content beyond textbooks in which students feel the material provided has a direct correlation with success in the course.

Most students (72%) indicated they spent \$200 or more in one semester for textbooks. In addition, most (69%) of students indicated that students wanted to purchase a textbook but were prohibited due to the cost of textbooks. This supports the initiative that free, open-source content is beneficial in making higher education more affordable.

The question regarding the reasons why students did not purchase textbooks, supports the notion that textbooks can be a financial hindrance to students in higher education. Seventy-five percent of students indicated they didn't purchase textbooks because it is too expensive and forty-one percent indicated that they didn't purchase textbooks because they didn't have the money.

Surprisingly, most (69%) of students indicated that they had taken courses in which free content was used to replace textbooks. In addition, most (66%) of students would prefer a course with this format. Furthermore, most students (70%) indicate that they would prefer a course with free online content over a course that required a textbook (10%). This is an indication of the trend in higher education of schools looking for ways to reduce the cost of education by eliminating textbooks and that is a trend supported by students.

While the results of the survey support the argument that textbooks are creating financial distress on students, there was no clear indication that the cost of textbooks resulted in students not taking a course. In addition, most students (84%) indicated that they did not withdraw or drop a course due to the cost of textbooks. Therefore, the results indicate that while free content to replace textbooks is

beneficial, it doesn't appear to negatively affect a student taking the courses needed for degree completion.

While the benefit of free online content is indicative, the ability to access the content may be troublesome for students. The results of the survey indicate that most students (77%) always had access to reliable internet off-campus and most students (97%) had a working electronic device (i.e, laptop, tablets, smart phones), that could be used to access the online content. This supports the ability for universities to continue to support initiatives to replace textbooks.

Another surprising result was that only a small number of students (23%) indicate a level of dissatisfaction with their current textbooks. In addition, there was no clear indication that students would either purchase the same or less textbooks in the next semester. This indicates that students are typically still satisfied with textbooks, even though they are dissatisfied with the costs. Possible conclusions are that students are familiar with the format of the textbooks and no-cost alternatives should focus on providing content that best mimic the format of textbooks.

### MEAN RANK RESULTS

While no-cost alternative to textbooks, as indicated in the survey, is preferred, it should be recognized that some courses may not be able to find adequate material to replace the textbook or it may be too daunting of a task. The study, therefore, wanted to determine the type of physical textbooks was most desired by students and find the no textbook options that were most desired by students.

Students were asked to rank from 1-5 (one being most preferred) for the type of textbooks they preferred. Students were surveyed in the health care economics course that has both a day and an evening section. We used mean rank to analyze the data so that the differences in class sizes (evening is larger than day) can be standardized. The options that received the lowest mean rank are those that have higher preference. The number of students in the day course is 15 and the evening course is 28. Demographics are similar to those students who took the survey described previously.

#### Results sorted by mean rank (versus how they were presented to students)

##### Group A. Physical textbooks

###### Day course

Preference	Mean rank	Option
1	2.21	Hard or soft copy textbooks that you rent
2	2.64	Hard or soft copy textbooks that you purchase or own
3	2.79	Digital textbooks that you rent
4	3.57	Digital textbooks that you purchase and own
5	3.79	Condensed textbooks that the professor develops with the publisher that you purchase and own

###### Evening course

Preference	Mean rank	Option
1	2.08	Hard or soft copy textbooks that you rent
2	2.84	Condensed textbooks that the professor develops with the publisher that you purchase and own

3	3.08	Hard or soft copy textbooks that you purchase or own
4	3.44	Digital textbooks that you rent
5	3.56	Digital textbooks that you purchase and own

### Analysis:

#### Day course

Results indicated that students prefer to rent a hard or soft copy of the textbooks. Renting textbooks are oftentimes cheaper and thus can lower the cost of a students' overall education. The next highest preference is hard or soft copy textbooks that the student purchases. These two results indicate that students still prefer a standard textbook for courses. This is supported by the data received from the survey. Instructors that choose to use textbooks should look for textbooks that are available in multiple platforms including hard-copy, soft-copy, or digital. The least chosen preference are textbooks that a professor develops with the publisher. These are textbooks in which content that is not relevant to the course are omitted. The low score may indicate that this method isn't commonly used and students were not easily able to associate the format therefore, possibly resulting in negative score. Digital textbooks fell in the middle of the ranking score. Although digital textbooks are becoming more prominent, results indicate it isn't as popular a choice. One possibility is that the student population surveyed are those that are not use to digital textbooks. Yet, the students who completed the exercise vary in age and the population of the students in the program are those in which digital content is common and familiar. Last, students may still prefer a physical versus digital book because it is what they are most used to.

#### Evening course

The top-ranking option was physical textbooks that students rent was the same as the day course. Similarly, the digital textbooks, either renting or owning, was ranked lower than physical copies. The biggest difference was found in what method was preferred second. The evening courses were drawn to the idea of a condensed textbook, which was ranked last in the day course. The reason for this result is not known.

### Group B. No textbook options

#### Day course

Preference	Mean rank	Option
1	2.00	Optional textbooks, all material is offered online (PowerPoint, readings, videos)
2	2.07	No textbooks all material is offered online (PowerPoint, readings, videos) – current class model
3	2.71	Optional textbooks, all material is offered both online and in a bounded printed copy available to purchase at the bookstore
4	3.21	No textbooks, all material is offered both online and in a bounded printed copy available to purchase at the bookstore

#### Evening course

### Group B. No textbook options

Preference	Mean rank	Option
1	2.28	No textbooks all material is offered online (PowerPoint, readings, videos) – current class model
2	2.36	No textbooks, all material is offered both online and in a bounded printed copy available to purchase at the bookstore
3	2.6	Optional textbooks, all material is offered online (PowerPoint, readings, videos)
4	2.76	Optional textbooks, all material is offered both online and in a bounded printed copy available to purchase at the bookstore

### Day course analysis

Student indicated that they preferred an optional textbook and all content offered online. This indicates, and is supported by the survey, that students still prefer the use of textbooks in their courses. This also supports the conclusion that open source content developed to replace textbooks should be designed to mimic textbooks as best as they can. The least preferred method was no textbooks and material offered both online and offered as a bounded print copy available in the bookstore. This model isn't commonly used at the University and thus the results may indicate that the student doesn't understand, or has had no exposure to the model, versus does not prefer it. Further analysis should be done to explore this result.

### Evening course analysis:

The biggest difference in the results between the day and the evening course is the ranking of no textbooks versus optional textbooks. Students in this class ranked the no textbook use as the preferred model, which was the format of the current class. This may indicate a difference in the financial situation between those that are traditional and non-traditional students.

Last, we asked student to list their top 3 choices out of Group A and Group B. Students were asked to indicate their first, second, and third choices. We then looked at which responses received the highest number of frequencies (either 1, 2, or 3)

### Day course

Frequency	Option
1	Optional textbooks, all material is offered online
2	Hard or soft copy textbooks that you rent
3	No textbooks, all material is offered online

### Evening course

Frequency	Option
1 – Tie	Hard or soft copy textbooks that you rent and No textbooks, all material is offered both online and in a bounded printed copy available to purchase at the bookstore
2 – Tie	No textbooks, all material is offered online and Optional textbook, all material is offered online

3	Condensed textbooks that the professor develops with the publisher that you purchase and own
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**Day course:** Results indicate that no-cost alternatives are the preferred overall method with the option of purchasing the textbook. In addition, renting the physical textbook is preferred over buying or purchasing or renting the digital. The current model that was used with no textbooks, all material is offered online did receive the most number ones in the ranking score.

**Evening course:** Results are harder to interpret due to the ties in the first and second frequency. We can conclude that overall, similarly both courses preferred the option of renting, optional or no textbooks with open source material. Students again ranked the desire to have printed material or textbook available to purchase. The current model that was used with no textbooks, all material is offered online did receive the most number ones in the ranking score.

We conclude that the results do not indicate a significant preference in one model of another. Considering the type of students is important when deciding on alternative models to textbooks. We conclude that the best model, based on the results, is one in which there is an optional hard or soft copy textbook (that can be purchased or rented) with free, open-source material available online and with the option to purchase said material. What we find is that students want the option to choose what works best for them. Although students do like the option of having material online, it is contradictory in that digital textbooks do not provide the same level of satisfaction. Future research should be done to explore this.

### **Focus group**

After completing the ranking exercise, students then participated in a focus group. The focus group lasted about 20 minutes and a semi-structured interview was conducted by a member of the team and another member taking notes.

Students have an overwhelming support for the elimination of textbooks, for a variety of reasons that have been supported by the literature. Some conflicting information (discussed previously) regarding digital textbooks was discovered. But, overall we found saturation and confirmation of the data obtained in the survey and the ranking exercise.

### **Co-Factors**

The biggest factor that affected the outcome of the study is course developer fatigue. The material that was developed at the beginning of the course is more robust than those available further in the course. We will continue to revisit the later material and add content as needed. An additional factor that influenced outcomes was the feedback we received from students that students still prefer printed material. Many students found it cost-prohibitive to print course material. The reduction of online material needs to be evaluated in the future. In addition, we need to inform students how to print PowerPoint material in a method that saves students money on printing.

### **Sustainability Plan**

We currently have a website in which all material is available to students at Clayton State University. This website is also available to anyone outside Clayton State University. The website is set-up so that we can easily check for links that may be non-functioning and to add additional content as needed

### **Future Plans**

The results of the project indicate a continued need to evaluate how best to provide content to the student. We found that students, while appreciative of the discontinued use of textbooks, indicated that they do still like the use of textbooks in the classroom. Future modifications include providing material in a way that mimics textbooks, the use of cheaper textbooks, and the ability for students to rent textbooks. We are pleased that the overall project was satisfactory for the students.

### **Professional activities**

We have presented our study at the 2016 Teaching and Learning Conference in Athens, GA. We plan submitting papers to conferences at AcademyHealth and Academy of Management that are being held in Atlanta, GA in 2017

### **6. Description of Photograph**

(left-right). Dr. Jocelyn L. Steward, team leader, faculty, and course developer, Ms. Ethel Callen, academic advisor and course developer, Dr. Kendolyn Smith, faculty, and course developer