

Affordable Learning Georgia Textbook Transformation Grants Proposal Form

Institution Name	Georgia Regents University		
Team Members (Name, Title, Department and email address for each)	Charlotte Chatto, PT, PhD, Assistant Professor, Department of Physical Therapy (cchatto@gru.edu), Georgia Regents University Jeff Mastromonico jmastromonico@gru.edu Director-Educational and Collaborative Technology, Information Technology Services, Georgia Regents University		
Sponsor, Title, Department	Department of Physical Therapy		
Course Name, Course Number and Semester Offered (Spring 2015 Required)	Integration for Practice: Neuromuscular PTHP 8351 Spring Semester, 2015		
Average Number of Students in the Course	35	Number Course sessions per Academic year	one
Award Category (pick one)	x No-Cost-to-Students Learning Materials <input type="checkbox"/> OpenStax Textbooks <input type="checkbox"/> Course Pack Pilots		
List the original course materials for students (including title, whether optional or required, & cost for each item)	<i>All required</i>	<i>[Cost]</i>	
	<ul style="list-style-type: none"> O'Sullivan, Susan; Schmitz, TJ. Improving Functional Outcomes, FA Davis, 2009 Magill, RA. Motor Learning and Control: Concepts and Applications, 2012 Umphred, D. Neurological Rehabilitation, 2012 Somers, MF. Spinal Cord Injury: Functional Rehabilitation, 3rd ed, 2009 	\$57.95	
		\$187.33**	
		\$118**	
		\$63.74	
		Total Cost	
		\$427.02	
Projected Per Student Cost	\$121.69	Projected Per Student Savings (%)	71.5% (as project would replace** books)

1. PROJECT GOALS

Overall project goal is to create a high quality, evidence-based, interactive, electronic resource (iBook) for students in the Doctor of Physical Therapy(DPT) program to have:

- a. Reduced textbook costs.*
- b. Content and resources that are current (and can easily be updated).*
- c. An enhanced and engaging learning experience.*
- d. Have access to required materials without need for internet access.*

1.1 STATEMENT OF PROBLEM

Having been an educator of entry-level physical therapy students for 19 years at Georgia Regents University, I have observed that increasingly, our students choose not to buy textbooks, required or recommended. Often, I am asked if an earlier edition is acceptable because these are much cheaper than the latest edition. With textbook information typically at least 6 years old at the time of publication, an earlier edition is hardly ever acceptable. Unless I tell them to bring their textbooks to refer to, I hardly ever see one in the classroom. They tend to rely on notes taken in class, powerpoint presentations handouts, other students' textbooks, Wikapedia and other online references...some more reliable than others.

In educating health professionals, there are several stakeholders that are affected by this problem. They include: 1) the student who must choose whether or not to spend the money on a textbook; 2) the faculty member who struggles with decisions about which textbooks are absolutely necessary, so that the cost to the student is reasonable without compromising quality; and 3) the most important stakeholder is the patient our students will be treating. I want our students to not only feel prepared, but to provide the highest quality care.

Some key benefits I can foresee for the creation of an iBook that is an open resource for physical therapy students (for access during their program and after graduation) are related to student satisfaction and performance. Students will potentially have the most current, evidence-based information, access to videos for practice, and reduction in anxiety in finding course-related resources. And as a result, student confidence levels and grades on written and practical examinations, as well as their clinical rotations, may show improvement. Ultimately, the patient and family members will benefit from the student's improved educational experience.

1.2 TRANSFORMATION ACTION PLAN

Expected Activities:

- 1. Determine which content areas will be included in the iBook*
- 2. Determine if any higher education Open textbooks and/or educational resources would be relevant to link as resources.*
- 3. Create high quality videos with audio voice-overs, to be embedded in the iBook to allow students opportunity to review and practice. It is conceivable that the videos and instructions could be used to for patient and family education when the students are working in our student/faculty pro bono clinic during clinical immersion activities, clinical rotations and even after graduation.*
- 4. Create interactive patient cases to engage the student*

5. *Determine which applications and games (existing or that could be created) that may provide interactive learning opportunities*

Quantitative and Qualitative Measures

6. *One of the key complaints from my students in PTHP 8351 the past few years has been with the organization of the many electronic resources, such as handouts, web links, and videos. I believe this project will help to solve this problem, reducing anxiety in students trying to find the correct resource. Effectiveness will be measured as follows:*
 - a. *Our standard course and instructor evaluations will measure this aspect and it is expected to be an improved area.*
 - b. *The hope is that this will ultimately lead to higher scores on practical examinations mastery of the information.*
 - c. *Student's confidence levels specifically on performance of psychomotor skills, prior to practical examinations and clinical rotations will also be surveyed following the use of this resource.*
7. *Students will be surveyed on use of the resources during clinical immersion activities at the end of their sixth semester and on the graduation survey*

1.2 TIMELINE

This project has already been started, but without funding for release time. Funding would allow focused time to complete this project. An outline has been created for the iBook and approximately 10 videos have created with voice - over instructions for physical therapy treatment techniques for patients with spinal cord injuries and stroke.

October 1-15: Use qualitative and quantitative student data from Spring 2014 PTHP course and instructor evaluations and have discussions with course faculty to determine additional content to include.

October 15-November 15: Creation of the content, videos; begin creation of the iBook; pilot chapters with current students at no cost to them, soliciting feedback before finalization.

November 15-December 15: Finalizing iBook

December 19: First status report

January 2015: Release to students in PTHP 8351

April/May: Solicit survey information from students related to effectiveness and use of the resource (content, use of videos for practice, confidence levels on practical examinations and during clinical activities) and analyze scores on examinations and compare to prior year.

By June 1: Final report

1.3 BUDGET

Personnel

Jeff Mastromonico, Director- Educational and Collaborative Technology: 5% release time for 9 months: \$5000

Charlotte Chatto, PT, PhD: 10% Release time for approximately 4 hours a week for 6 months: \$5000

Projected Expenses:

Professional Videographer: \$500 (primarily camera set-up and editing)

HERO3+ GoPro Camera to capture the view of the physical therapist during the performance of the treatment techniques: \$300

(Funding for travel expenses does not seem necessary to include)

1.4 SUSTAINABILITY PLAN

This course will always be in the DPT curriculum. I envision this resource being used and updated each year. There is tremendous potential for this resource and others that may be developed in our curriculum to be used in our global outreach initiatives. For example, this iBook project will eventually help us as we are helping create an entry-level physical therapy education program in Haiti, where there is limited internet access and great need for more highly trained rehabilitation professionals.

1.5 REFERENCES& ATTACHMENTS

Please see the attached letter from Dr. Scott Hasson supporting my time on this project, the sustainability of a resource such as this for PTHP 8351 and potentially for other courses in the curriculum.

PROPOSAL SUBMISSION: ALL PROPOSAL DOCUMENTS, REFERENCES, AND ATTACHMENTS SHOULD BE SUBMITTED IN A SINGLE EMAIL TO ALG@GATECH.EDU BY 5:00 PM, EST, SEPTEMBER 8, 2014.