



# Global Public Health

---

## Building Course Community with a Student-Partnered e-textbook



Dr. Amy Acton and her team will develop an e-textbook for PUBHLTH2010: Introduction to Global Public Health suitable to replace existing print textbooks in the field. This textbook will provide a core curriculum, making use of digital features to enhance the delivery and currency of information. In addition, Dr. Acton will develop a pedagogical model that guides students to develop and contribute material to the e-textbook, the best of which may be incorporated into future editions. The text and curriculum will serve as the basis for the increasing number of sections of this gateway course and be available for adoption by students and instructors at other institutions.

## College of Public Health

### Lead

- **Amy Acton** <acton.44@osu.edu>  
Clinical Assistant Professor “Introduction to Global Public Health”

### Team

- **Michael Bisesi** <mbisesi@cph.osu.edu>  
Senior Associate Dean CPH and Director, Center for Public Health Practice
- **Anand Khurma** <akhurma@cph.osu.edu>  
Instructional Development Specialist, Center for Public Health Practice
- **Chris Rea** <rea.49@osu.edu>  
Doctoral Candidate CPH and Teaching Assistant, Introduction to Global Public Health
- **Don Shymanski** <shymanski.2@osu.edu>  
Director, CPH Information Systems
- **2 students** from BSPH and Undergraduate Minor (TBD)

### Task-Specific Team Members

- **Katherine Renick** <krenick@cph.osu.edu>  
Manager, Research Administration Services, CPH
- **Daniel Sabatino** <dsabatino@cph.osu.edu>  
Web Application Developer, CPH Information Systems

## OCIO/Learning Technology

### Project Lead

- **Henry Griffy** <griffy.2@osu.edu>  
LT Faculty Development Support

### LT Constituents

- **Robert Griffiths** <griffiths.44@osu.edu>  
LT Faculty Development Lead
- **Tom Evans** <evans.1517@osu.edu>  
LT Faculty Development Support
- **Joni Tornwall** <tornwall.2@osu.edu>  
Quality Matters Expert
- **Eric Schnell** <schnell.9@osu.edu>  
University Libraries
- **Stephanie Rohdieck** <rohdieck.1@osu.edu>  
University Center for the Advancement of Teaching

### Background

Global Public Health is tasked with promoting and ensuring the health and well being of individuals and populations, both domestically and internationally. Given the pressing concerns of health care reform and the well-documented shortage of public health workers, The Ohio State University has invested heavily in the creation and expansion of the College of Public Health (CPH). Public Health education, at OSU and elsewhere, has traditionally been focused on graduate-level education and training. In recent years, however, the focus has expanded in scope to include undergraduate content and courses, including a new BS in Global Public Health (beginning Autumn 2012) and a Minor in Global Public Health.

“Introduction to Global Public Health” (PUBHLTH 2010) is the gateway class for undergraduate study in Public Health. In addition, CPH collaborations with related disciplines will recruit students from several majors and minors. Given the pressing need for a well-educated society, empowered with regard to the multitude of factors affecting health and well-being, a GE version of the course is currently in development. Future opportunities are being considered by CPH: remote courses (such as distance learning/ hybrid classes at OSU satellite campuses), continuing education, medical education, high school education and outreach through STEM initiatives, and new employee orientation.

### Problems/Challenges

Interest in PUBHLTH 2010 has exploded, necessitating wait-lists, expanded class sizes, and added sections. Future growth is anticipated. The challenge is to enable this growth while maintaining consistency and quality, as SEIs and qualitative class evaluations indicate past students have placed a high value on the deep level of personal engagement and student-centered learning fostered by faculty. With one instructor teaching all sections of the course, content is consistent. Individual attention and mentoring are promoted through mandatory office hours. Future expansion will require multiple instructors and the creation of a new teaching model. Thoughtfully trained and mentored TAs will need to ensure quality content, student engagement, and relationship building.

A second problem, identified by students and instructors, is the lack of engaging, up-to-date undergraduate Public Health textbooks. Paper textbooks are expensive and outdated, failing to convey rapid developments in the field, evolving policy, and current events. (This problem is exacerbated by the global focus of PUBHLTH 2010.) Students have demonstrated openness to non-traditional textbooks by responding well to the replacement of a standard textbook by original source materials: PDFs and student-generated content hosted in the course-management system (Carmen). However, Carmen is not the best medium for delivering the course texts as the course grows, and PDFs are not the best format for delivering rich information.

### Solutions

The creation of an innovative, 21st century teaching model for PUBHLTH 2010, incorporated in a shared curriculum and facilitated by an e-textbook co-created by instructors and students.

The project team proposes to enhance this curriculum by designing an interactive and engaging e-textbook that builds upon the student-centered learning model that is the heart of the current course. Specifically, the e-textbook will feature student-generated content: redesigned assignments will capture the most compelling projects, offering students the opportunity to submit their work for inclusion in future editions. Student editors will capture and catalog submissions as well as research and contribute original content. The digital nature of the e-textbook will also allow for inclusion of current information and links to real-time resources. The e-textbook will serve as the vehicle for a cyclical relationship among the instructors, past students, and current students that fosters engaged learning.

This project will provide a solid foundation for this endeavor by building a framework for the e-textbook, using existing course content, and establishing tools and processes for gathering, curating, and editing student work and other resources to be included in future versions of the textbook. A business model will be developed for managing the distribution of the e-textbook and support for project personnel.

As much as possible, the e-textbook will: be interactive, engaging, and dynamic; incorporate current events and data; support multimedia; provide immediate feedback and assessment; be self-pacing; facilitate class management; leverage the learning community of current and past students; be low cost; be portable; be capable of providing learning analytics. It will be designed to foster collaboration with other Ohio and national institutions, as well as global partners.

The project will also involve developing a business model to develop and sustain the curriculum and e-textbook. This model will involve the hiring and oversight of student interns, who will manage the collection, curation, and editing of student-generated content. The business model will also manage the composition and distribution of the e-textbook in a way that maximizes its distribution, minimizes costs to students, and provides for the sustainability of the project.

“The object of education is to prepare the young to educate themselves throughout their lives.”

- Robert M. Hutchins, American Educator

The goal of this Global Public Health Impact Grant Project Team is to enable the continued growth and expansion of undergraduate education in Global Public Health while maintaining outstanding student engagement and interaction; we aspire to create a new teaching model for the gateway course, PUBHLTH 2010, in which students are co-creators and co-curators of an “Introduction to Global Public Health” e-textbook.

### Project Objectives contributing to Project Goals

By the end of Spring 2013 Semester...

- **Build a Foundation for an Authoritative and Marketable, Dynamic, Interactive e-textbook that Incorporates Student-contributed Material:**
  - Build an e-text frame/container for existing course content with a chapter for each item of existing course content, that item linked and/or embedded, and an introductory description
  - Draft a table of contents for the complete textbook, as well as a description of the structure and contents of future chapters
  - Maintain the highest standards of accessibility, usability, and interoperability.
- **Modify Curriculum to Integrate the e-textbook into Teaching and Assignments:** (e-textbook/instructor to students)
  - Incorporate relevant portion of the textbook into at least one suitable part of the Spring 2013 pilot of the course
  - Develop standard documentation and training to enable students to use advanced features of textbook
- **Adapt Assignments to Generate and Capture Content for Future Versions of the Textbook:** (students to e-textbook/students)
  - Images submitted as part of the “This is public health” archival image gathering assignment will serve as illustrations for Chapter One.
  - Group presentations that students give in the middle of the term will be captured in forms suitable for use in the e-textbook and/or course materials for future semesters.
  - The “TED Talk” presentations that students produce at the end of each term will be captured in forms suitable for use as e-textbook and/or course materials for future semesters.
  - Design routine ways to capture and catalog each assignment, including relevant rights and permission information.
- **Design Sustainable Editorial and Distribution Models for the Textbook and Curriculum:** (overarching organizational model)
  - Establish a workflow to review, select, and edit student-generated content.
  - Hire and train student editors to manage that workflow and curate student-generated material for the e-textbook and course.
  - Choose and implement appropriate distribution model (pay, open-access, hybrid) and set up rights and permission-gathering protocols accordingly.
  - Build list of likely Grants and Funding Sources (Top Ten)

### Project and Process Goals

- Identify, master, and utilize cutting edge educational technology to benefit the students
- Create an inspiring, more personal educational experience in a learning community, similar to that of a small liberal arts college, but within the large institution of OSU (best of both worlds).
- Consider new ways to engage students in the community as part of the class experience, both locally and internationally (service learning)
- Instructors will develop best practices for incorporating student work into course materials.
- Instructors will develop best practices for producing and delivering course-specific ebooks.
- Students will gain basic knowledge about the nature, history, and practice of Public Health as a global practice.
- Students will gain research skills for learning more about Public Health using electronic resources.
- Students will demonstrate the ability to integrate their abstract knowledge about Public Health with their own experience.

•Students will gain skills of researching and presenting information about specific topics in Public Health in multiple formats.

## In-Scope

- e-textbook production:
  - Outline of entire e-textbook (chapter titles, description)
  - Model for Standard Chapter structure
  - Build e-text frame/container for existing course content
- Curriculum Revision: related to adoption of new textbook chapter
- Assignment Adaptation: related to content for new textbook
- Curation of Student Content: technical, procedural, and rights-related aspects
- Editorial and Distribution Model Design: technical, procedural, and rights-related aspects

## Out-of-Scope

- e-textbook composition: additional chapters, related material
- Curriculum Revision: other changes; GE creation; cross-department collaborations
- Assignment Adaptation: non-textbook related revision, additional assignments
- Curation of Student Content: uses of material for non-textbook related purposes, e.g., portfolio
- Editorial and Distribution Model: implementation
- Other:
  - Partnerships with other courses, colleges, and/or institutions beyond OSU
  - Utilization of model in other courses
  - Development of GE Model (will happen concurrently but beyond this project's scope)
  - Additional assignments
  - Online community beyond assignment and textbook management systems
  - Grant applications, etc.

## Strategic Projects Alignment

- OCIO Digital First
- Interdisciplinary Initiatives (across colleges)
- Service Learning
- Global perspective
- CPH Strategic Plan

### Objective 1: The e-textbook Composition

- **The e-textbook shell/frame will...**

- Enable a thorough review of the subject
- Incorporate multiple forms of media (in existing course content)
  - still images
  - interactive images
  - audio
  - video
  - network-linked features?

- **Textbook will make effective use of technologies** (no error, well-evaluated)

- Accessibility
- Device agnosticism
- Multimedia
- Sustainable

- **Students will find value in textbook (see Objective 2)**

- In its organization of content
- In its technical delivery of content

- **The outline will...**

- Provide working model for further chapters sufficient to produce a textbook sufficient for a full course
- Provide a standard structure and format
- Describe the text and multimedia to be presented
- Describe the instructor- and student-provided content

- **Completed framework will meet or exceed all relevant requirements/standards and clearly convey all national and CPH core content topics:**

- ASPHA
- Peer-review

- **Composition procedures will be documented**

- so that others can continue the work on /this/ book
- so that others can use same procedure to develop their own book

### Objective 2: Incorporation of the e-textbook

- **Students will like the textbook**

- Students will prefer the e-textbook to traditional textbooks
- Students will prefer the e-textbook to other course materials

- **Students will learn from the textbook**

- Students will read the textbook
- Students will demonstrate retention of information

- **Textbook will promote class community and investment**

- Textbook-related discussions are active

- Students felt textbook enabled them to pursue their own interests

- **Technological aspects of the textbook will enhance and not interfere with learning**

### Objective 3: The Assignments

- **Quality of assignments as assignments:**

- Assignments will align with course & program learning objectives
- Students will indicate that the assignments were clear and reasonable
- Students will value the assignments and the work they do (“not just another syllabus moment”)
- Students will indicate that the assignments contributed to their learning
- Assignments will encourage interest in PH and opportunities for future study
- “I wish all my classes did this.”

- **Quality of work elicited:**

- Students will want their work included in the textbook
- Assignments will prompt high-quality, textbook-level work from students
- Students will report that the potential for publication inspired them to pursue high quality on these assignments than they otherwise might have
- Students will consider including assignments in their resumes/portfolios

- **Assignments will promote class community and investment:**

- Teams work together effectively (“I never like group work, but...”)
- Assignments enable students to pursue individual interests
- Students will fill the editorial position
- Students will express deep interest/enthusiasm in personal areas of study
- Students will express that assignments increased their engagement in the course
- Improved feelings about and grasp of Public Health

- **System for gathering assignments:**

- All assignments will be captured in high-quality/high-resolution versions
- Assignments will be captured in versions that make it easy to preserve, work with, and incorporate in textbook
- System will make it possible to track decisions about all eligible student assignments
- System will require no more than 3 minutes per item per decision
- System will minimize error and be designed to fail-safe
- Students will express comfort/self-efficacy about their control over their work and decisions about rights/privacy
- Students are willing to grant permission to use their work
- System makes it quick and easy to find student work individually and categorically (by assignment type, by subject, by quality, etc.)
- System is accessible

### Objective 4: The Business Model

- **Student Editor Positions**

- Students will apply for this position, accept the job, and do good work
- Position will contribute to students’ personal/professional goals

- **Editorial process**

- (same as assignment gathering system -- maybe even same system?)

- Low-maintenance
- Inter-operable with Assignment Gathering System

• **Business Model/Distribution system**

- Results in greatest possible ease of acquisition
- Reduced cost for students
- Accessible to all students
- Financially sustainable
- Transferable to other textbooks
- Approval from all relevant OSU fiscal officers

### Project Assumptions

- No similar (better) e-textbook exists or is near publication
- The textbook produced by this project will be competitive with any other e-textbooks
- The technical skills required to produce this textbook are within team's abilities
- The pedagogical skills required to produce textbook-level content are within team's abilities
- Student-generated content can be of sufficient quality to justify inclusion
- Legal hurdles to incorporating student material will be surmountable

### Projects Risks

Risk Description				Mitigation
student lack of access to platform	1		3	design with accessibility in mind work with our IT, library and DU
waning enthusiasm of team	1		3	work through strategic plan quickly clear goals, tasks, responsibilities match tasks to individual expertise, passion empowerment of team to be creative celebrate our accomplishments
competing agendas/ demands	1		3	set clear timeline, consistent meeting times, clearly communicate limits
other e-textbooks				
technical difficulties				
staff re-assignment				
student non-participation				

### Obstacles / Constraints

- Competing demands (work, family)
- Copyright issues
- Quality/ emerging competing products
- Money/ Time to complete entire book
- Institutionalizing and sustaining (costs and management)

### Schedule Considerations / Other Projects / Related Projects

More fluid in summer, unknown adjustments for staff and faculty with switch to semester schedule/ currently revising curriculum (both a strength and a time consideration)

- Time
- Technology
- Administrative barriers

- Rights/permissions

### **Department**

- Conversion to semesters
- Launch of Public Health major (and related inter-departmental work/ competing responsibilities)
- GE status

### **Learning Technologies**

- 6 other Impact Grant projects will overlap in whole or in part, two as Henry's primary focus
- Impact Grant application/selection processes in October-November and April-May
- OCIO LT's Innovate Conference March 26, 2013