

Ancillary Materials Subgroup Report

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What are ancillary materials and why are they important?

Ancillary materials include but are not limited to question banks, presentation slides, full lecture videos, videos of faculty explaining specific concepts, quizzes, tests, data files, active learning assignments, solution manuals, and more. Many, if not most, commercial textbook vendors now make ancillary, or supplementary, materials available to faculty when they decide to use a textbook for their course(s).¹ They are a powerful incentive for faculty to continue to use commercial textbooks since they can save faculty a great deal of time and immediately provide lecture slides, notes, and assessments upon textbook adoption.

Ancillary materials are important because there is increasing evidence that lack of ancillary resources impact OER and open textbook adoption. According to K.C. Green, “[o]ver 40% of the respondents to a 2016 survey of 2,902 faculty members at 29 higher education institutions ranked instructor supplements and student supplements (ancillary resources) as important or very important factors in textbook adoption.”²

This report attempts to address how the Open Textbook Network can encourage the creation of ancillary materials, distribute and advertise their availability, and possible issues with maintenance and growth. The report also includes examples of tools for housing ancillary materials and possible next steps.

¹ In October, for example, the publishing company Cengage announced a new line of OER-based materials that uses free textbooks from OpenStax and other sources, and adds assessment and other materials, charging fees starting at \$25 per student.

² Green, K.C. (2016). Going Digital: Faculty Perspectives on Digital and OER Course Materials. In 2016 ICBA Meeting. Orlando: ICBA. Retrieved from <https://www.campuscomputing.net/content/2016/2/19/going-digital-2016>

How do we encourage the creation of ancillary materials?

The majority of the open textbooks currently found in the Open Textbook Library do not include ancillary materials. This suggests a number of problem areas:

1. Ancillary materials need to be created for existing open textbooks.
2. Ancillary materials need to be created for books that are currently in development.
3. Ancillary materials may already exist for an open textbook, but are not found with the book itself or through the Open Textbook Library record page.

There are a number of possible solutions for these problems:

- **Encourage the creation of ancillary materials at the time of authoring open textbooks.** Publishers, including library publishers, should strongly encourage faculty authors to also include appropriate ancillary materials with finished titles. We need to create an expectation that ancillary materials are an important part of a finished open textbook from the beginning.
- **Encourage faculty that are adopting existing open textbooks to create ancillary materials, or share ancillary materials that have already been created.** Faculty that adopt open textbooks without any ancillary materials most likely are creating their own. Encourage them to share those materials either through the book itself, or on the Open Textbook Library record page.
- **Include ancillary materials funding in existing grant mechanisms, or include the opportunity for faculty to apply for additional funding to create ancillary materials or a teacher's version at the time of open textbook creation.** Many open textbooks are created through grant awards and processes. Make sure that funds provided for open textbook creation also include ancillary material creation, or provide the opportunity to apply for additional funds.
- **Create an initiative specifically designed to create ancillary materials.** An excellent example of this is the "Content Camp" put on by Ohio State University in the summer of 2017. This was a pilot to bring faculty from across several institutions in Ohio to collaboratively author and review large test banks in three disciplines: Macroeconomics, Biology and Sociology. The pilot is further examining the time, tools, and resources required to create not only a test bank useful in one course with a specific textbook, but one that can be used and customized by many instructors in an iterative, sustainable process in many courses across institutions.
- **In training and workshops, encourage attendees to author and share ancillary materials if they adopt a textbook.** During OTN site visits, open textbook presenters should provide detailed information and encourage the creation of these materials. This could be done through a small stipend/grant or as an alternative to completing an open textbook review.
- **Partner with colleges or departments to develop ancillary materials for existing open textbooks.** For example, UMass Amherst is currently working on a system-wide

concept to partner with Colleges of Education at 3 campuses (Amherst, Boston, Lowell, specifically with Joe Berger formerly at UMA now at UMB) to potentially flip each college to open pedagogical approaches and assist the faculty toward the students creating sustainable assignments.

How do we distribute ancillary materials and advertise their availability?

As more ancillary materials are created and made available, advertising their availability is surprisingly challenging. The following are some ideas for the advertising of ancillary materials.

- **Open textbooks themselves should advertise the availability of ancillary materials when they are available.** Open textbooks could link to ancillary materials, or include ancillary materials with the book themselves, where it is possible. This will make it easier for faculty that are considering adopting the open textbook to have the materials with the book itself.
- **Catalog records in the Open Textbook Library should include information about the availability and location of ancillary materials.** This could also include a note that highlights that ancillary materials are available with the book, when that is the case, and a link to the materials. Eventually, it would be nice if people could either browse or search (filter) for books known to have ancillary materials. (See recommendations section below for additional information)
- **Authors of ancillary materials should contact the author or the publisher to notify of materials created.** The author or publisher can then either link to the material or add the material directly to the open textbook.

The hosting and distribution of ancillary materials can pose several challenges. For example, ancillary materials may require a separate hosting location, they may require an account or password to access (for example, test banks or other assessments), they might not be updated with a new textbook version, or they may not even be openly licensed. While it is certainly easiest if the author of the open textbook also creates and hosts the ancillary materials, that is not always possible. Many of the ancillary materials written by faculty that have adopted textbooks also need a place to host those materials.

What are other organizations or institutions doing to address the issue of distribution of ancillary materials?

- [OpenStax](https://openstax.org/details/books/prealgebra) provides a free core set of ancillary resources available through its website for every book it publishes. See <https://openstax.org/details/books/prealgebra> for an example of OpenStax hosted materials. Note that some materials are available only to accounts that are known faculty (see lock icons)

- OpenStax also offers a [OER Commons Community Hub](#) that includes user-created videos, homework assignments, student learning guides, and course syllabi for most of their open textbooks.
- OER Commons can be used to host ancillaries such as lectures, assignments, slides, and other materials. However, all materials in OER Commons are completely open and accessible by everyone.
- Ohio State University (OSU) experimented with Proola - <http://proola.org> - to host ancillary materials. They were unsatisfied and may now attempt to write their own distribution application.
 - “[Proola] was a nice tool developed by a faculty member at Nebraska and it did most of what we needed it to do at the time, but there were some logistical concerns about growth and development – primarily around the ability to support a large user base with the types of access/privileges we wanted while still functioning in the way that the creator/developer envisioned.” - Michael Shiflet, Ohio State
- Ohio State and Penn State are currently creating a web based tool where registered users can download assessment items organized by discipline and learning objective. They are planning to validate users when they register, to make sure they are instructors. The system will generate a file that can be uploaded to an LMS. Users will also be able to give feedback to other users, hopefully adding to item quality and contributing to a strong community of practice.
- University of Minnesota Libraries includes a call for supplementary material in all their open textbooks. The materials that faculty adopters submit are stored in Google Drive and faculty request access to the material. As more books include supplementary materials and as more requests come in this solution will be harder to manage. For example: <http://open.lib.umn.edu/mediaandculture/back-matter/question-bank/>
 - (With the growth of ancillary requests and materials, solutions like the University of Minnesota Libraries (stored in Google Drive) will be harder to manage.)
- Users of the Canvas LMS also have access to the Canvas Commons which can be used to host openly licensed materials.

Other possible tools to host ancillary materials:

- <https://ximera.osu.edu/>
- <https://chem.libretexts.org/>
- <https://openstax.org/details/books/us-history#resources>
- <http://proola.org>
- <http://myopenmath.com>

Recommendations

The Ancillary Materials Subgroup recommends the following based on information provided in the report.

1. Advertise availability of ancillary materials through the Open Textbook Library. The Open Text Library should consider the following:
 - a. Open Textbook Library record pages should list ancillary material availability for each book. This could be on the record page itself, or separate record pages that list ancillary material for specific titles.
 - b. The Open Textbook Library should allow for the submission of ancillary materials much like it does for the submission of new open textbooks. Ancillary material creators, or those people that know of existing materials, could fill out a Google form indicating type of material created, permissions, CC license, description (abstract) of material, location, and the textbook the material(s) correspond to. The Open Textbook Library would verify the information and post it.
 - c. In addition, on the “Submit an Open Textbook” form, there should be a space to also include ancillary material information when submitting a new open textbook for inclusion in the library.
 - d. To encourage ancillary authors to create or submit materials created, include a note on the Open Textbook Library record pages that ancillary materials are needed for open textbooks that do not include any materials.
2. Continue to investigate hosting and distribution tools for ancillary materials. Eventually recommend hosting and distribution tool(s) and use them through the OTL.
 - a. Investigate a partnership with OER Commons to provide a community space (or a new [microsite](#) which could provide password protection) to author and host freely accessible ancillary materials. OpenStax currently has a partnership with OER Commons for this purpose.
 - b. Investigate and possibly offer support to the effort from Ohio State and Penn State (through the Big Ten Academic Alliance) to create a web based tool to host and distribute ancillary materials such as assessment items organized by discipline and learning objective.
 - c. Actively follow the two options above, if those options should fail the OTN should consider developing their own hosting mechanism.
3. In OTN training and workshops, describe the need for ancillary materials and encourage attendees to author and share ancillary materials.
 - a. Develop training for creating ancillary materials
 - b. Fold into existing OTN training the option of receiving a stipend for authoring ancillary materials (e.g. participants can pick review track or ancillary track, or perhaps ancillary track is open only to individuals who have completed review track)

- c. Consider hosting or sponsoring a Content Camp event to author ancillary materials (this could be associated with the OTN faculty fellows program).
- 4. Establish best practices for creating ancillary materials, for example:
 - a. Open licensing
 - b. Host ancillary material in the same location as the associated open textbook.
 - i. When hosting is not option link to ancillary materials.
 - c. Ensure published content is easily adaptable (e.g. not, for instance, a SoftChalk file or file format associated with a proprietary service).
 - d. Meets web accessibility W3C standards.
 - e. Use Digital Object Identifier (DOI) and/or persistent links to ensure access to the documents in perpetuity.
 - f. Ensure materials reflect the disciplinary variability; for example question banks, syllabi.
- 5. Pursue external funding opportunities that support the creation of ancillary materials.