Copyright Licensing Issues
Implicated by the Learning Object Repository

Preliminary Report

Prepared for

The Texas Higher Education Coordinating Board

by

Carol Simpson, Ed.D., J.D.
Schwartz & Eichelbaum, Wardell Mehl and Hansen, P.C.

&

Dr. William E. Moen, Principal Investigator
<william.moen@unt.edu>

Draft

January 25, 2010
## Table of Contents

1. Introduction ................................................................................................................................. 1  
2. Fair Use and Traditional Course Material Creation ................................................................. 1  
3. Issues ........................................................................................................................................... 2  
   3.1. Sources of Materials in Courses Issues .............................................................. 2  
      3.1.1. The Issues ........................................................................................................ 2  
      3.1.2. Preliminary Recommendation ................................................................. 3  
   3.2. Upstream License Issues ......................................................................................... 3  
      3.2.1. The Issues ........................................................................................................ 3  
      3.2.2. Preliminary Recommendation ................................................................. 5  
   3.3. Downstream License Issues ..................................................................................... 5  
      3.3.1. The Issue ........................................................................................................ 5  
      3.3.2. Preliminary Recommendation ................................................................. 8  
References ...................................................................................................................................... 9  
Licenses Referenced in Report ................................................................................................. 9
Copyright Licensing Issues Implicated by the Learning Object Repository

1. Introduction
As a component in the broader project, The Texas Course Redesign Learning Object Repository: Research and Development for a Production System, carried out by the Texas Center for Digital Knowledge (TxCDK) at the University of North Texas, we are examining issues related to intellectual property and licensing of course content produced as part of the Texas Course Redesign Project.

The Texas Higher Education Coordinating Board (THECB) made awards to Texas institutions to redesign large-enrollment undergraduate courses and produce course content that exploited new learning and instructional technologies. In the Request for Proposals (RFP), the following language appeared:

The intellectual property developed as part of the TCRP pursuant to this contract is the property of the THECB. The THECB grants to the Award Applicant(s) a license to sell the intellectual property described in this RFP to private institutions of higher education, as well as to other institutions of higher education outside Texas. The profits of such sales will be divided equally between THECB and the Award Applicant(s). The intellectual property described in this RFP will be made available without charge to public institutions of higher education in Texas.

TxCDK designed an implementation of a learning object repository to hold the output from the Texas Course Redesign Project. The final version of the repository is called the Texas Course Redesign Repository (TCRR) and is available at: http://txcdk1.unt.edu/TCRR/. The course redesign projects did not explicitly create “learning objects” but rather course content (and sometimes complete courses). TxCDK project staff decomposed the course materials into varying levels of granularity, yet the assumption of intellectual property (IP) asserted in the RFP covers all content no matter how it is made into discrete learning objects. Statements about the IP and licensing are included in the metadata records for each learning object.

In 2009, the THECB began working with the University of Texas Telecampus to develop and implement a statewide learning object repository, which will hold the outputs of the Texas Course Redesign Project and other learning materials. This new repository, referred to as TxLOR (Texas Learning Object Repository), will inherit the IP and licensing issues related to Texas Course Redesign materials as well as IP and licensing for all other materials submitted to the TxLOR.

This document is an initial outline of the IP and licensing issues we have identified to date in our examination of the TCRR materials. It is intended to list the various issues that will need to be addressed as the TxLOR moves forward.

2. Fair Use and Traditional Course Material Creation
Preparation of material for face-to-face university courses by individual faculty members follows an established set of intellectual property guidelines. Typically a professor owns his teaching materials or uses limited amounts of the work of others under a claim of fair use. Further uses beyond fair use (such as the creation of course packs of readings) require licensing. In an online or digital environment, the playing field shifts to an unrecognizable landscape. Ownership of intellectual property has shifted from an instructor-owned model to one of university ownership or shared ownership (Armatas, 2008).

Nevertheless, instructors may still use the materials of others under a claim of fair use. Fair use contemplates limited (in both scope and duration) use of materials. However, use of materials under license from the copyright owner may negate the availability of a claim of fair use in using the materials. And use for a commercial purpose (even if the ultimate end user will use the materials for teaching) is a use that is presumptively unfair (Armatas, 2008).
As more instruction moves online or into a networked environment, instructors digitize instructional materials (or create born-digital materials) to create content-rich courses and they frequently employ the works of others (either in whole or in part) within their course materials. The use of the works of others within an instructor’s online course may still entitle the individual instructor to the protection of a claim of fair use under the TEACH Act. But when the instructor’s course materials are distributed beyond his own use and licensed to others (either for free or for a fee), complex intellectual property issues must be resolved to protect all the parties to the transaction. These issues can be grouped around three key concepts:

1. Source of materials in courses issues
2. Upstream license issues
3. Downstream license issues

The following sections address each of these in turn. Some conclusions are still in the developmental stages awaiting input from stakeholders on several fronts. As a general matter, the key stakeholder groups include course content developers, state university end users, Texas non-public university and out-of-state potential licensees, and the THECB. THECB and TxLOR will need to develop policies that serve the needs of the state, the content creators, and potential users of the content.

3. Issues

3.1. Sources of Materials in Courses Issues

3.1.1. The Issues

As a baseline proposition, a creator owns the copyright in a work he creates. Barring some other specific arrangement that would grant some or all of the rights to another or otherwise limit the rights of the creator, the creator may determine how and when his work may be used, subject to the limitations of fair use. As Issues 2 and 3 will demonstrate, clear documentation of the origin and license of each piece of non-original material within a learning object is critical to determine what distribution and commercialization options exist for material included in a learning object repository (LOR).

In preparing this report, the researchers conducted preliminary interviews with creators of learning objects contained in the LOR to gain an understanding of the types of materials within the LOR and the processes used in their creation. The researchers plan to conduct more in-depth interviews to clarify some of the issues raised during the preliminary discussions.

The most startling and concerning finding from the preliminary interviews was that many of the developers relied heavily on content from other sources, such as online material from textbook publishers and images from books and websites as the foundation for their learning objects. Some had assistance—from teaching or research assistants and campus based development centers—in creating their objects. When asked if the developers could identify the sources of all the material included within their learning objects, the interviewees were confident that they could not, especially for material created by assistants and development centers. In inspecting samples of learning objects, few documented the source of images and sound recordings, for example. Provenance of the non-original materials, including bits of computer code in applets, widgets and web page functionality, will be almost impossible to document retroactively, according to the preliminary interviewees. Those who assisted the creators by making web pages or integrated documents are now likely graduated and gone from campus, and even if they were available to interview would likely not be able to document the sources of the materials they used. Without an understanding of the source of the materials, it will be exceptionally difficult to determine if materials are available to license in any commercial endeavor (see Issues 2 and 3). As the recent discovery of GPL licensed code in Microsoft applications has shown (Fried, 2009), diligence in identifying material used under restrictive licenses is critical before further distribution in a manner that may violate the terms of the original license.
3.1.2. Preliminary Recommendation

All material submitted to the LOR must be documented as to origin and any pre-existing licensing or permission agreements. Non-original sub-elements of each object must contain, at minimum in metadata, documentation of the creator, copyright status, type of license, and any downstream licensing or adaptation restrictions. This recommendation would require, at minimum, retrospective investigation of each object currently in the repository and a prospective requirement for future contributors to include the necessary source information in the metadata of each contributed object.

3.2. Upstream License Issues

3.2.1. The Issues

The course developers have relied upon a rich source of images, widgets, applets, software, and music to create engaging learning objects. The developers chose items created by others, in most instances, but some incorporated portions of works by others into new creations (such as using computer code applet libraries to add functionality to web pages). Therefore some inquiry into the authority to use the borrowed material is appropriate. Many of the works will be covered by some license or other point of access. For example, if a professor uses material found on the website of the publisher of the textbook the professor chose for his course, access to that material may be conditioned on the professor’s selection (and the students’ purchase) of the associated text. Another professor who uses an object created with that material may not have access to the resource if the second professor does not choose the same textbook. Further, if the first professor actually copied the material from the textbook publisher’s website, he may have permission to use that material within his own classes but not to adapt or further distribute the material. If a professor uses an image from a Creative Commons licensed website, his use of that image is conditioned on acceptance of the license restrictions the image creator applied to the image. Each potential license type can generate multiple scenarios depending on the specific facts involved. Below are twelve different scenarios of license options that could appear in even a single, complex learning object. Many other licensing schemes are possible – these are only the major alternative licenses in widespread use. The downstream licensing aspects of each scenario will necessitate an inventory of the non-original aspects of each learning object to determine if commercial licensing of the learning object is possible and what risks the THECB takes in licensing the objects to others.

1. **Public domain material**: Professor uses public domain materials in a learning object. The public domain material may be freely adapted. The owner of the copyright in the resulting learning object owns only the material added to the public domain material. The original public domain material remains in the public domain forever.

2. **Original material created previously by professor**: Within a new learning object that will reside in the repository, Professor uses material he created previously. If the professor owns the copyright in the material being used, the professor may grant himself permission to use his own material. Use within the repository would be covered by the same conditions as material created by others outside the university. However, if the professor has included that material in other works, such as articles or textbooks, the copyright on those materials may no longer belong to the professor even though he originally created them. In that case, the professor may require permission to use the previously created material from the current copyright owner. The material may be owned (in whole or in part) by a previous educational employer, in which case there may be restrictions on how the professor may use the material. For example, the professor may have retained a right to use the material personally, but does not have the right to re-license the work to others. Each previously created work included within a learning object will need a separate analysis.

3. **Material created and owned by others**: Professor uses commercially available material or other material the rights of which are owned by others. Examples of such material would be charts and graphs from books, student work, commercially available maps or images, poems, essays, plays or other textual materials not created or owned by THECB-controlled institutions. Such materials may be suitable for a claim of fair use when an individual professor selects those items to use in a face-to-face course, or when a small excerpt is used for criticism or commentary. Professor may
not adapt the material (including translation) without permission of the copyright holder. Neither professor nor THECB owns the content, but may own content around which this material is used.

4. **Creative Commons\(^1\)** attribution (only) licensed material: Professor uses Creative Commons attribution licensed material within a learning object. The material may be adapted and included within other objects as long as the material is appropriately attributed to the original creator.

5. **Creative Commons noncommercial licensed material**: Professor uses Creative Commons noncommercial licensed material within a learning object. Professor is free to use the material within his own classes. Use for licensed courseware, however, is not within the license for the Creative Commons material. Additional permission is needed for inclusion within the repository if commercial licensing is anticipated.

6. **Creative Commons no-derivatives licensed material**: Professor uses Creative Commons no-derivatives licensed material within a learning object. Professor is free to use the material within his own course as long as he makes no changes to the Creative Commons material.

7. **Creative Commons share-alike licensed material**: Professor uses Creative Commons share-alike licensed material within a learning object. Share-alike licenses are used in conjunction with other Creative Commons licenses, so the professor will need to investigate other license restrictions on the material. Professor may use the material within his learning objects if other licensing restrictions are met.

8. **GNU Public License\(^2\)** licensed material: Within a learning object Professor uses some computer code or other material that was made available under the GNU Public License. If the Professor includes the original GNU-licensed material intact within his learning object, he must conspicuously and prominently display on each copy an appropriate copyright notice. If Professor modifies the original work he must include notice of who made the modifications and when. Further, additional modifications to the software may not be patented unless use is free to all. Professor or LOR may not build in any type of protection mechanism to prevent access to the GNU Public licensed material.

9. **GNU Lesser Public License licensed material**: Professor uses material licensed under a GNU Lesser Public License (LPL) within a learning object. The Lesser Public License is similar to the Public License, except that the section of the Public License that would prevent installation of a protection mechanism is omitted. Further, Professor may combine GNU LPL licensed material and other non-public domain material (such as proprietary material from other sources or material written under a grant) under any license Professor chooses as long as the GNU LPL material is “prominently" identified as being included and so licensed. Professor must also include the copyright notice for the GNU LPL material, include a copy of the GNU LPL license document, and follow one of two protocols if the work is computer software.

10. **GNU Affero Public License licensed material**: Professor uses material licensed under a GNU Affero Public License within a learning object. Most of the terms of the GNU GPL apply. If used on any network (including the Internet), Professor must include a prominent notice to offer users the corresponding source code of the work and the ability to download the source.

11. **Free Art License licensed material**: Professor uses within a learning object some artwork that is included under the Free Art License. The original artwork is protected by copyright, but downstream users are allowed to reproduce and modify copies under the Free Art License. The professor must attach the identical Free Art License to all copies of the work or indicate precisely where the license can be found, specify to the recipient the name(s) of the author(s) of the

---

\(^1\) Creators who use Creative Commons licenses may combine more than one license condition into the license for a given work. When such is the case, the use of the work relies on meeting the conditions of all aspects of the various licenses. See the discussions of other Creative Commons licenses to understand the impact of a specific licensing provision. For a full explanation of Creative Commons and its licenses go to: http://creativecommons.org/about/licenses.

\(^2\) All GNU licenses are maintained by the Free Software Foundation, and may be viewed in their entirety at http://www.gnu.org/licenses/. The site has links to many other types of licenses, as well.
originals (including the professor’s if he has modified the work), and specify to the recipient where to access the originals (either initial or subsequent). If the work has been modified the work must so indicate and, if it is possible, what kind of modifications have been made. If the artwork can no longer be accessed apart from the larger work in which it is incorporated, then incorporation shall only be allowed under the condition that the larger work is subject either to the Free Art License or a compatible license. To use the Free Art License, Professor must mention the following elements on his work:

[Name of the author, title, date of the work. When applicable, names of authors of the common work and, if possible, where to find the originals].

Copyleft: This is a free work, you can copy, distribute, and modify it under the terms of the Free Art License http://artlibre.org/licence/lal/en/

12. **Design Science License licensed material:** Professor uses material—either textual, graphic, or software code—under a Design Science License within a learning object. Any derivative work must have a new name so there can be no confusion with the original. Professor must attribute the original elements to the original creator and clearly identify any additions or changes, along with the dates. Professor must either include the source data with the work or include a dated offer to provide the source data, good for three years or as long as the resulting work is in print (whichever is longer). In addition, professor must also provide a publicly-accessible URL where a potential user can request a copy of the source code at a cost not to exceed transportation and media costs. An additional alternative is to pass along a third-party’s offer to provide source code, but it only applies to non-commercial users and if such an offer was included with the object when Professor got the work.

13. **Commercially licensed material:** Professor uses material licensed through institutional subscriptions (such as links to the website of the publisher of an adopted text or direct links to journal articles available through a campus subscription) as part of a learning object. URLs which comprise links are not copyrightable information, similar to a street address. However, the content represented by the link is protected by the publisher and may have either terms of use associated with the web page or some type of access protection mechanism (such as a login and password). Depending on the terms of the publisher’s license to the professor or the developing university, the content may not be available to a licensee of the learning object. Each link source must be evaluated separately.

3.2.2. Preliminary Recommendation

Each learning object within the LOR, and each object as it enters the LOR, should be checked for metadata that identifies copyright owners of all portions of the learning object, all potential licensing issues affecting a given object, as well as the creative history of the individual object.

3.3. Downstream License Issues

3.3.1. The Issue

Inclusion of copyright protected material within learning objects that will be downstream licensed generates a multitude of legal concerns. Each professor who contributes learning objects to the repository has probably used some material from outside sources. While the use of these outside sources of material is likely a fair use under United States copyright law, when the resulting works are licensed to other institutions the educational performance and display exemptions fall away. An individual end-user may claim the exemption, but the intermediate provider of the courseware may not have a viable claim, especially if the exchange is a commercial transaction.

The researchers have not yet interviewed any potential downstream licensees. However, we anticipate they will express the desire to modify learning objects to suit individual teaching styles and student profiles. In addition, preliminary interviews showed that learning object developers are concerned that material will be distributed to other universities and adapted in ways that may not reflect favorably on the
original creator. The preliminary interviews with developers indicate that they would like to see adaptation restrictions placed on downstream users. Some scenarios discussed include either a disclaimer of ownership to the original creator when an object is modified, or a history of modifications maintained as part of the metadata for each learning object.

The researchers plan to ask potential licensees what types of licenses they would find most appealing: campus-wide licenses to the entire LOR catalog; individual faculty member licenses to the entire LOR catalog; or some form of individual object license. A possible fee-per-student license will also be included in the questions for the potential downstream licensees. They may have other ideas for licensing strategies. Clarifying license issues for an individual item will be much simpler for a small object. However, when licensing an entire course that may be filled with objects used under any number of licenses, each of which sets specific downstream requirements, both the licensor and licensee have a mountain of obstacles to overcome. Until the data are collected on what potential downstream licensees wish to license and what uses they will make of the licensed content, it is impossible to analyze with any confidence how the content of the learning objects will affect THECB’s plans to license the content of the LOR. For a preliminary look at the potential impact, we will discuss the sample scenarios identified in Issue 2 above in terms of the effect of the included materials on downstream licensing.

The downstream licensing aspects of each scenario below will necessitate an inventory of the non-original aspects of each learning object (see Issue 1) to determine if commercial licensing of the learning object is possible, what objections the creators of the objects have to the licensing terms, and what risks the THECB takes in licensing the objects to others.

1. **Public domain material**: Any learning object based on or including public domain material may be sold, licensed, or given freely. If an instructor at an out-of-state or Texas private university wishes to pull the public domain material from an object licensed from THECB, there is nothing to prevent such use. The material is freely available to all, and any attempt to extend copyright-like protection through restrictive licensing may be considered abuse of copyright.

2. **Original material created previously by professor**: Whether the THECB may license material a professor created previously will depend on the ownership of the materials. If the professor owns the copyright in the material being used, the professor may grant THECB a license to use the material. Use within the repository would be covered by the same conditions as material created by others outside the university. However, if the professor has included material from other works, such as articles or textbooks, and the copyright on those materials no longer belongs to the professor, THECB will need to pursue permission or license to include the works in any further distribution or licensing. The same process will affect any material owned (in whole or in part) by a previous educational employer. Each previously created work included within a learning object will need a separate analysis.

3. **Material created and owned by others**: Material owned fully by others withholds the right of distribution. While the right of first sale allows physical copies to be transferred without permission (such as giving away a copy of a book), redistribution of digital copies is generally covered by license. The material must be licensed for both free and commercial distribution.

4. **Creative Commons attribution (only) licensed material**: Professor uses Creative Commons attribution licensed material within a learning object. Material may be redistributed by THECB, either without charge or commercially, as long as the Creative Commons material is appropriately attributed to the original creator. Downstream licensees may also redistribute the Creative Commons material within the learning object, and neither THECB nor the professor can prevent such distribution of the Creative Commons attribution (only) portion of the learning object. Downstream users may also adapt the Creative Commons portion of the learning object, and neither THECB nor the professor can prevent such modification of the Creative Commons portion of the learning object.

5. **Creative Commons noncommercial licensed material**: Professor uses Creative Commons noncommercial licensed material within a learning object. Since use for Texas state universities is
free, distribution to those entities is within the license. Use for licensed courseware, however, is not within the noncommercial license for the Creative Commons material.

6. **Creative Commons no-derivatives licensed material**: Professor uses Creative Commons no-derivatives licensed material within a learning object. The no-derivatives licensed materials may be included in material distributed free or commercially, but downstream licensees may not adapt or change the no-derivatives licensed material.

7. **Creative Commons share-alike licensed material**: Professor uses Creative Commons share-alike licensed material within a learning object. Share-alike licenses are used in conjunction with other Creative Commons licenses. Any distribution of the Creative Commons share-alike material must be under the same conditions as the original license. For example, if the share-alike material also contained a “noncommercial” license, any such material that the professor included in a learning object could not be commercially distributed, and anyone who obtained a copy of the learning object would also be bound by the noncommercial license, as well.

8. **GNU Public License licensed material**: Professor uses some computer code or other material that was made available under the GNU Public License within a learning object. Any work based on the GNU licensed work must be distributed without restriction, and include both the copyright notice of the original work plus a disclaimer of warranty to make clear that any modifications to the original are not the responsibility of the original authors. Further, additional modifications to the software may not be patented unless use is free to all. GNU Public Licensed material may be sold, so inclusion will not prevent commercial licensing, but the licensing must allow further development and distribution by the recipients, which may be a problem for object creators. All work that includes GNU licensed code must be distributed with the resulting source code3 (or access to it), as well.

9. **GNU Lesser Public License licensed material**: Professor uses material licensed under a GNU Lesser Public License within a learning object. Professor or LOR may install a protection mechanism. Further, GNU LPL licensed material combined with non-free material may be distributed under any license as long as the GNU LPL material is “prominently” identified as being included and so licensed, includes the copyright notice for the GNU LPL material, includes a copy of the GNU LPL license document, and follows one of two protocols if the work is computer software.

10. **GNU Affero Public License licensed material**: Professor uses material licensed under a GNU Affero Public License within a learning object. Most of the terms of the GNU GPL apply. Professor or LOR may also add some or all of the following terms to the license of material derived from Affero licensed material as long as the original license owner does not object:

    a. Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
    b. Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
    c. Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
    d. Limiting the use for publicity purposes of names of licensors or authors of the material; or
    e. Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

3 When “source code” is mentioned in the above licenses, it refers to the editable version of a work. For example, in the case of software written in C language and compiled, the version in C is the source code, and the compiled version is the object code. In the case of a PDF document, the editable version of the document (in Word or Adobe format) is the source code and the PDF is the object code.
f. Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

Note that to add any of the terms above, LOR must contact the original license owner for permission (actually, lack of objection). Additionally, if the work is used on any network (including the Internet), all GNU APL licensed works must have a prominent notice to offer users the corresponding source code of the work and the ability to download the source. The GNU APL also allows APL and GPL licensed works to be combined into one and conveyed together, with two licenses attached each governing their respective parts.

11. **Free Art License** licensed material: Professor uses within a learning object some artwork that is included under the Free Art License. The authors of the originals may have given the right to distribute the originals under the same conditions as the copies. Further, any distribution of the derivative work must be under the same license or any compatible license. If the artwork can no longer be accessed apart from the larger work in which it is incorporated, then the larger work must be subject either to the Free Art License or a compatible license. Sub-licenses are not authorized by this license.

12. **Design Science License** licensed material: Professor uses material—either textual, graphic, or software code—under a Design Science License (DSL) within a learning object. Any reproduction or derivative work of the original must be distributed under the same license, but any work within which the derivative work is included does not need to be so distributed (e.g., a web page that includes a DSL-licensed widget does not have to be distributed under the DSL license, though the widget itself is free for anyone to use). Professor or LOR may not add any additional restrictions to the Design Science License. The license contains a specific disclaimer of warranty and liability sections.

13. **Commercially licensed material**: Professor uses material licensed through institutional subscriptions (such as links to the website of the publisher of an adopted text) as part of a learning object. Each license will require individual evaluation to assess whether the license allows the original institutional licensee to distribute links to the content to downstream users. The need for access to proprietary information that requires a second license or subscription should be made clear to potential licensees before purchase, and any warranty disclaimed in the information provided by third party providers.

Many other licenses could potentially impact a given learning object. Because of the multitude of potential licenses, THECB may need to classify the existing and incoming learning objects according to their availability to different classes of licensees. When the scenario indicates that anyone who receives a copy of the learning object containing prior content may further distribute the content (see e.g., Creative Commons Share-Alike license or GNU Public License), THECB stands to have downstream licensees redistribute the content in competition with THECB.

### 3.3.2. Preliminary Recommendation

Each learning object within the LOR should be identified as available for licensing within THECB institutions or out-of-state/Texas private institutions, or both, based on the licensing status of the material contained within that learning object. Restricted access to the LOR could filter what an individual “shopper” might see as available for download or license. Further, licensing options for objects should address warranty and modification issues. Further input by designers and potential licensees will inform additional recommendations in this area.

---

References


Licenses Referenced in Report

Creative Commons Licenses: http://creativecommons.org/about/licenses

Design Science Licenses: http://www.fsf.org/licensing/licenses/dsl.html

Free Art Licenses: http://artlibre.org/licence/lal/en

GNU General Public Licenses: http://www.fsf.org/licensing/licenses/index_html#GNUGPL