Cascading compliance requirements for thesis-related data and software

A survey of institutional policy at American (AAU) research universities

Gail Peretsman-Clement

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Caltech Library
A. Introduction: Why Worry About Compliance Requirements for Thesis Data?
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B. Compliance Requirements Impact Legal Interoperability of Thesis Data
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C. Research Question: Do University IP Policies Adhere to Legal Interoperability Principles for Thesis Data??
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B. Compliance Requirements Impact Legal Interoperability of Thesis Data

C. Research Question: Do University IP Policies Adhere to Legal Interoperability Principles for Thesis Data??

D. Recommendations and Next Steps
Why Worry About Compliance for Thesis Data?

Cascading compliance requirements for thesis-related data
Graduate student researchers are the workhorses of the American research enterprise

**Figure: AAU 2015, Fig. 3**

**Figure: NCES 2012, Table 1, p. 9**

Cascading compliance requirements for thesis-related data
IP around Graduate Student research tends to be fuzzy because of multiple interests and stakeholders

1. Graduate research is commonly **supported with sponsor funds** and thus subject to **compliance** requirements around sharing of research results

2. Graduate students are ’sub-faculty’: **employees with less agency** of their work than faculty or staff scientists

3. Graduate students in research-intensive disciplines publish their findings in **multiple disparate channels** that need to be linked together
To Achieve Greatest Possible Data Sharing, We Need to Carefully Curate Graduate Student Data, *particularly*

Figure: Sarah Pease carefully shucks oysters to avoid damaging the animal inside, Virginia Sea Grant, 2008, https://www.flickr.com/photos/virginiaseagrant/21073901051, (CC BY-ND 2.0)
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Thesis Sharing not = Data Sharing

Tectonics of Central and Eastern California,
Late Cretaceous to Modern

Thesis by
Francis Joseph Sousa

In Partial Fulfillment of the Requirements for the
degree of
Doctor of Philosophy

CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, California

2016
(Defended May 17, 2016)

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Francis Joseph Sousa
ORCID: 0000-0003-1623-4023
Thesis Data =
Complex Set of Objects linked across Disparate Platforms

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<tr>
<td>Author</td>
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Cascading compliance requirements for thesis-related data
Thesis Data Sharing:
Multiple ownership interests and rights assertions

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<td>Stock-J-M</td>
<td>UNSPECIFIED</td>
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<tr>
<td>Research team member</td>
<td>Scharer, Katherine</td>
<td>Scharer-K</td>
<td>UNSPECIFIED</td>
</tr>
<tr>
<td>Research team member</td>
<td>Hudnut, Kenneth</td>
<td>Hudnut-K-W</td>
<td>UNSPECIFIED</td>
</tr>
<tr>
<td>Research team member</td>
<td>Akciz, S. O.</td>
<td>Akciz-S-O</td>
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</tr>
<tr>
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<td>Wilkosky, Ryan D.</td>
<td>Wilkosky-R-D</td>
<td>UNSPECIFIED</td>
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<tr>
<td>Research team member</td>
<td>Harvey, Janet C.</td>
<td>Harvey-J-C</td>
<td>UNSPECIFIED</td>
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Thesis Data Sharing Governed by Cascading Compliance Requirements

1 Copyright Statutes
Thesis Data Sharing Governed by Cascading Compliance Requirements

1. Copyright Statutes
2. Other governing legal doctrines
Thesis Data Sharing Governed by Cascading Compliance Requirements

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3. Sponsor policy
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Cascading compliance requirements for thesis-related data

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Cascading compliance requirements for thesis-related data

1. Copyright Statutes
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3. Sponsor policy
4. Other contractual terms and conditions
5. Institute Intellectual Property Policy
6. Normative practices (Disciplinary or Laboratory)
B. IP Policy (Compliance Requirements) Constrain Legal Interoperability of Thesis Data

What is Legal Interoperability?

Legal Interoperability occurs among datasets when:

- Use conditions are clearly and readily determinable for each dataset
- Legal use conditions imposed on each dataset allow creation and use of combined / derivative products
- Users may legally access and use each dataset without need for case-by-case authorization

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Cascading compliance requirements for thesis-related data
CODATA/RDA Principles for Legal Interoperability of Research Data

The simplest cases of legal interoperability occur when datasets are affirmatively identified as having no legal restrictions.
How to Achieve Legal Interoperability of Research Data?

Adhere to Six Basic Principles:

1. Facilitate the lawful access to and reuse of research data
2. Determine the rights to and responsibilities for the data
3. Balance the legal interests
4. State the rights transparently and clearly
5. Promote the harmonization of rights in research data
6. Provide proper attribution and credit for data contributions
Research Question: Do University IP Policies Adhere to Legal Interoperability Principles for Thesis Data?

Study Design:

Content Analysis of IP Policies for 62 AAU Institutions

Progress to date: 27 analyzed in atlas.ti
Preliminary Results

Figure: No Negative Cards, geralt, https://pixabay.com/en/no-negative-cards-spiral-68481/ (CC0 Public Domain)

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D. Recommendations and Next Steps

1. Complete the study to compile thorough dataset
2. Share data and findings broadly
   - Publish in OA refereed publication with data publishing policy!
   - Share with University Administrators (who might mobilize through professional associations e.g., NACUA, AAU)
3. Use data to promote importance of legal interoperability for thesis data sharing to Graduate School, Faculty Advisors, Graduate Students
4. Devise model IP Policy language through professional associations e.g., NDLTD, USETDA, CODATA/RDA
References


