How open is it?

Developing a revised framework for “open pragmatism” through the examination of an open courseware sample

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Background & previous work

- Copyright/Open Licensing Frameworks
- Accessibility/Usability Formatting
- Language
- Support Costs
- Assessment
- Digital Distribution
- File Format
- Cultural Considerations

McNally, M.B., & Christiansen, E.G. (2019). Open enough? Eight factors to consider when transitioning from closed to open resources and courses: A conceptual framework. *First Monday 24*(6). https://doi.org/10.5210/fm.v24i6.9180

Why develop a framework?

Conceptual framework is necessary for the following reasons

1. Better understand the state of OCW/OER
    a. What can we improve?
    b. What are we doing well?
2. Address the lingering concerns from educators
    a. Quality control
    b. Context and broader utility of these resources
3. Give educators a more robust ‘guide’ for developing OCW/OER or developing their own

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Literature review

Conceptions of Openness

- 50 shades of open (Pomerantz and Peek, 2016)
- 4 facet spectrum (social, technical, legal and financial) (Hodgkinson-Williams and Gary (2009)
- Expanding and contracting over time (Peter and Deimann, 2013)
- 11 approaches topology (Economides and Perifanou, 2018)
- Admission, free, OER, OEP (Cronin, 2018)

Frameworks for Openness

- ALMS framework (Hilton et al., 2010)
  - Access to editing tools
  - Level of expertise
  - Meaningfully editable
  - Source-file access
- Gurell (2012) creates ALMS scoring framework
- D-Index (Abeywardena et al., 2012)
  - Desirability index that quantifies level of access

Research questions

1. Are these factors robust enough to analyze (or assess) the level of openness in OCW?

2. Are certain factors impractical for measurement and do some factors require modification and/or expansion?

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Study design

1) Choose Repositories

TU Delft OpenCourseWare

MIT OPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

2) Random selection

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3) Evaluation

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Results

	Copyright/OL	Accessibility/Usability	Language	Support Costs	Assessment	Digital Distribution	File Format	Cultural Considerations
MIT OCW								
Public Transportation Systems	Mixed	Most Open	Closed	Closed	Mixed	Most Open	Closed	Mixed
Equity and Inclusion:	Mixed	Most Open	Closed	Closed	Mixed	Most Open	Closed	Closed
Introduction to Art History	Mixed	Most Open	Closed	Closed	Mixed	Most Open	Closed	Closed
Innovation Systems	Mixed	Most Open	Closed	Closed	Mixed	Most Open	Closed	Closed
Biological Chemistry II	Mixed	Most Open	Closed	Closed	Most Open	Most Open	Closed	Most Open
TU Delft OCW								
Public Hygiene and Epidemiology	Mixed	Closed	Mixed	Most Open	Closed	Most Open	Closed	Mixed
Hydrology of Catchments, Rivers and Deltas	Mixed	Closed	Closed	Mixed	Mixed	Most Open	Closed	Most Open
System Validation	Mixed	Closed	Closed	Closed	Mixed	Most Open	Closed	Most Open
Structured Electronic Design	Mixed	Closed	Closed	Closed	Mixed	Most Open	Closed	Most Open
Drinking Water Treatment 2	Mixed	Closed	Closed	Closed	Mixed	Most Open	Closed	Most Open

- Each of us independently evaluated the OCW sample
- We brought our results together, and did a final analysis to settle on the conclusions outlined by this study

Does the framework actually work?

Yes, but there are caveats

Some factors are too impractical or subjective

- Cultural considerations
- Usability

Some factors needed rewording

- Digital Distribution > Discoverability
- Accessibility/Usability > Accessibility
- Support Costs > Materials

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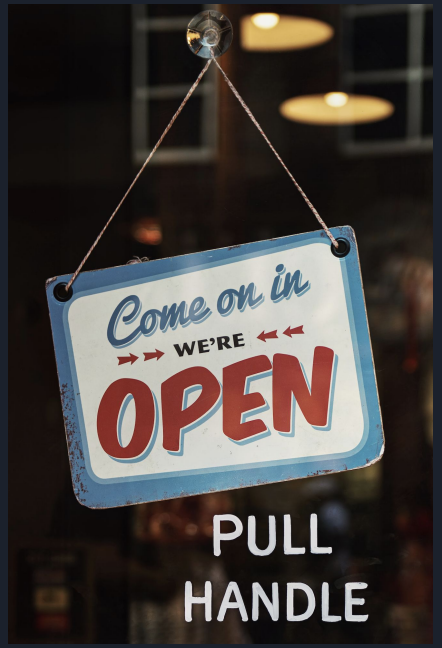
Results: Open factors

- **Copyright**
- **Accessibility**
- **Assessment**
- **Discoverability**
  (Digital Distribution)



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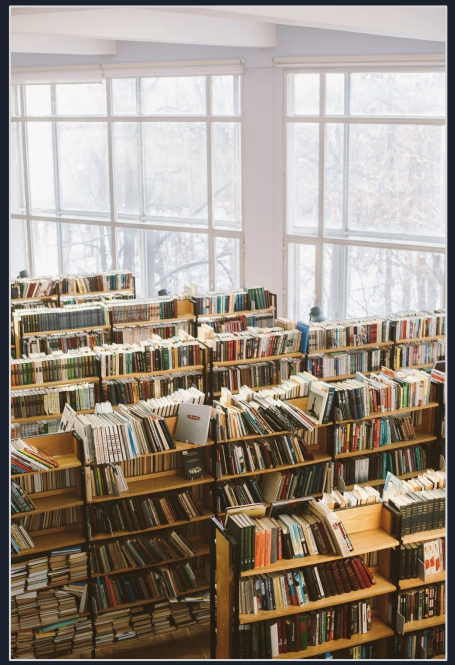
OASIS

MERLOT

OER COMMONS
OPEN EDUCATIONAL RESOURCES

Results: Closed factors

- **Materials (Support Costs)**
- **File Format**
- **Language & Cultural Considerations**



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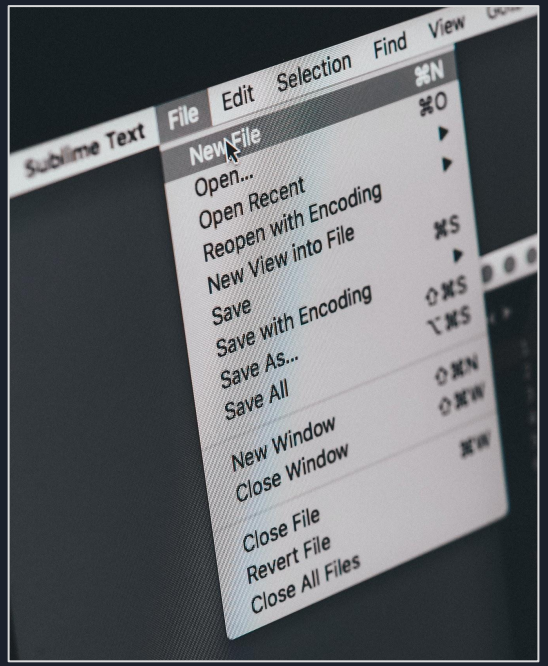

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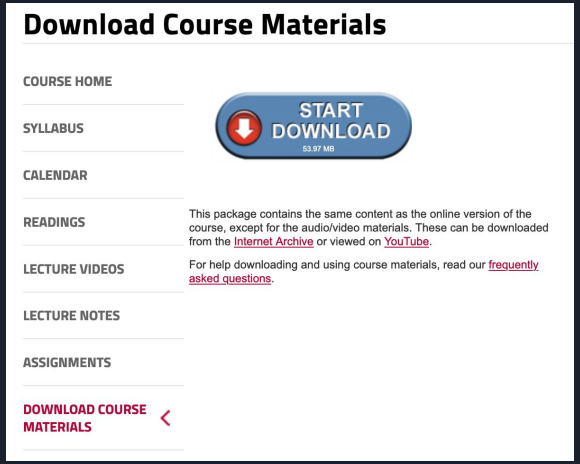
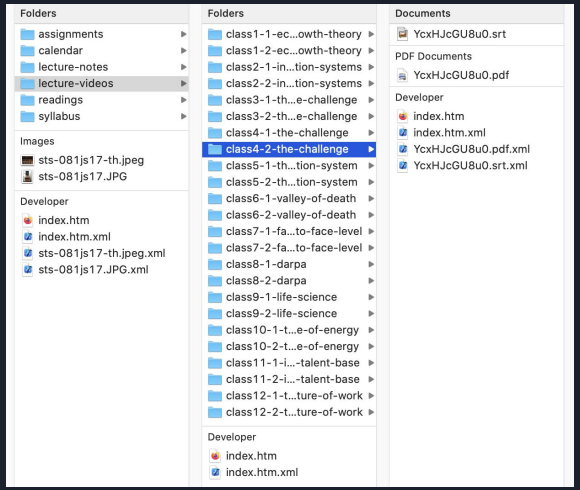
Lingering questions

- Openness of video or audio formats still an open question
  - Should File Format address just the *type* of format provided (MP4, MP3, MVK, MOV, AAC, etc.
  - *Or*, should it also take into account editability - i.e. availability of unedited footage or audio

- ‘Harvestability’ an additional factor or consideration?
  - MIT allowed ‘full’ download of the course content - *except* video files. Those must be downloaded individually, as only transcripts & closed captions are provided in archive.





Revised framework

We think there might be a broader trend within the factors

- Technical Factors
- Pedagogical Factors

	Closed	Mixed	Most Open
TECHNICAL FACTORS			
Copyright & Licensing	Copyright/all rights reserved	Less open Creative Commons (CC) Licence Terms (e.g. Non-Commercial or Share-Alike)	CC Attribution (CC-BY) Licence/Public Domain
File Format	A print resource, document image, PDF, or another non-editable format that cannot be altered without expensive software or by re-typing	The editable proprietary file format that could be adapted using open software (e.g. .docx file edited using LibreOffice)	Fully open file format (e.g. HTML or .odf) that could be edited using either open or proprietary software.
Discoverability	Closed/available only to insiders (e.g. via a learning management system)	Open but low discoverability (e.g. institutional repository)	Open and high discoverability (e.g. YouTube) or broadly available repository (e.g. Merlot, BC Campus, etc.)
PEDAGOGICAL FACTORS			
Language	Single language	Bi-lingual or includes guides/steps for translation	Multi-lingual or includes guides/steps for translation and is bilingual
Materials	Paid resources (Eg. Print and electronic textbooks)	Licensed library resources (Free to students but paid for by the institution)	Openly licensed resources (Open textbooks, open-access journal articles, and other open materials)
Assessment	No assessments made publicly available, using an open licensing framework and are not shared through an OER repository	Assessments are publicly available using an open license; learners can self-assess, but they are not meaningful (i.e. questions and assignment descriptions only)	Assessments made publicly available using an open license; meaningful self-assessment is possible (i.e. questions and answers provided)
Accessibility	Not formatted for accessibility	Some accessibility formatting (e.g. closed captioning)	Fully accessible (e.g. US HHS 508 or W3C)
Other considerations (non-measurable)	**Cultural considerations** ❏ Are there considerations for outside/culturally diverse users? ❏ Are the materials/content culturally specific? **Usability** ❏ Is the interface easy to navigate for users? ❏ Is the design responsive (for mobile devices)?		

Looking below the iceberg

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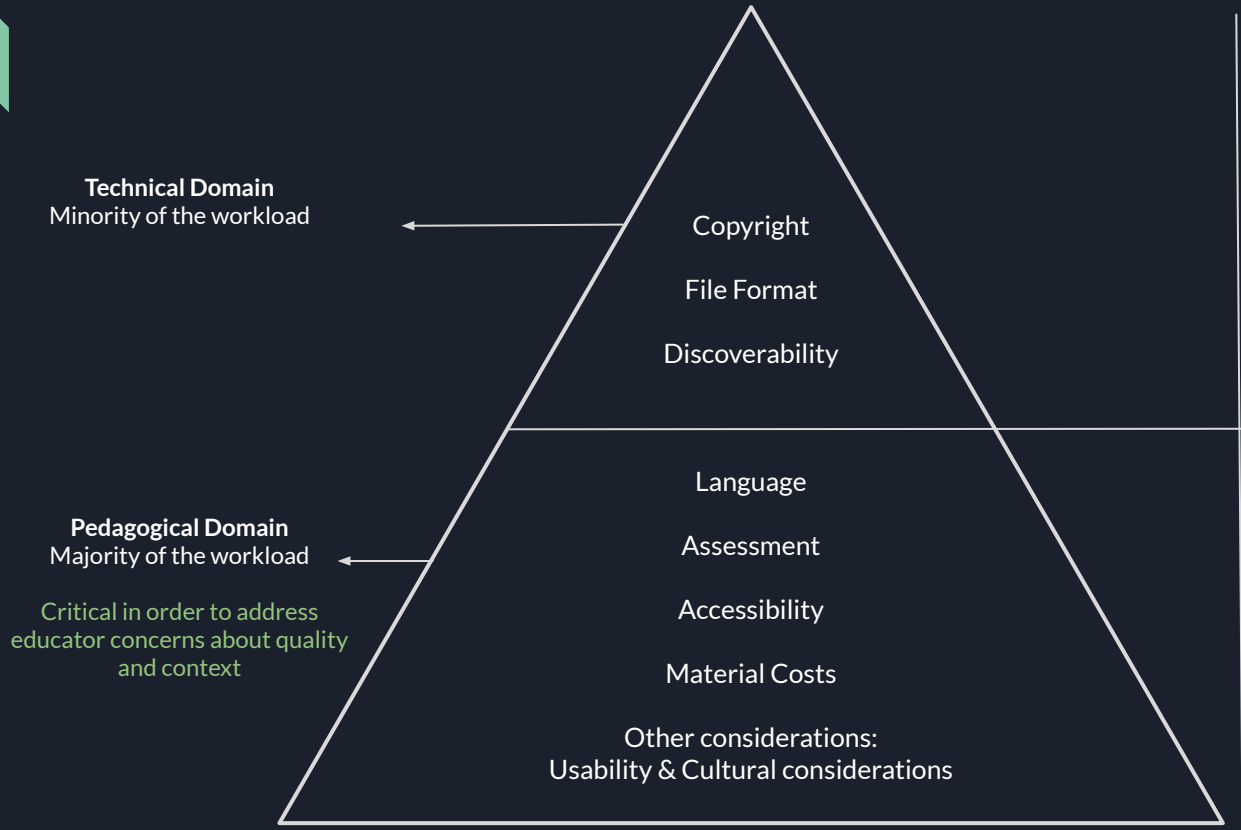
Two domains of openness



Educator challenges

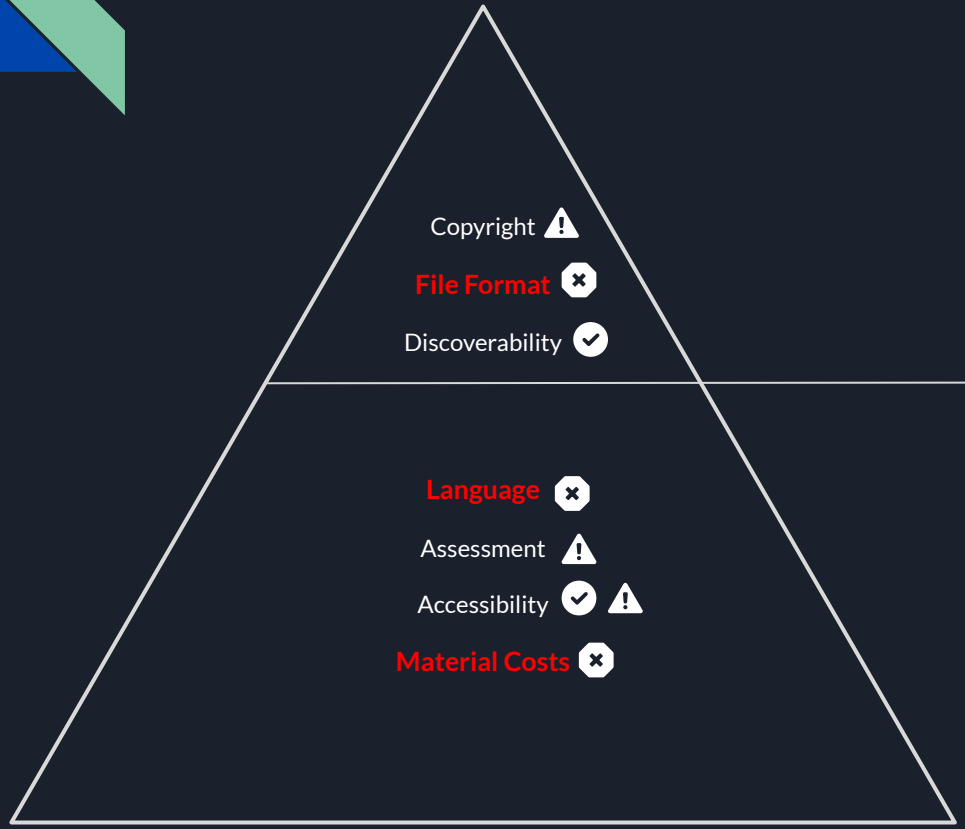
Willingness to share materials publicly

The skill/knowledge required to share

Educator challenges

Increased workload associated with developing ancillary materials and guidance to other educators, to contextualize the course pedagogically

Hypothesis: Factors that require the most attention



- File Format: Multiple editable file formats, as long as they're commonplace (eg. .docx, .xlsx, .pptx, .txt, etc.)
- Language: Can be addressed by little things
  - Eg. Glossary
- Materials: Use of open academic articles instead of paid textbooks/closed articles where possible

Future research

Comprehensive assessment of large OCW sample using revised framework

Further exploration of OCW harvestability

- Ability to download course once critical to geographic locations with limited bandwidth

Better understand how instructors locate and adapt OCW to their own context

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THANKS!

Any questions?

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