# Open Access Journal Incubator at University of Lethbridge Library

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Theme

Developing library-based publishing systems through an incubator program

**Highlighted Service** 

Open Access journal management & hosting

Software/Platforms Utilized

Digital Commons by bepress, Open Journal Systems, & Drupal

Resources

Shared workflow checklists of technical considerations & discoverability





he University of Lethbridge Library entered into collaboration with English faculty member and digital humanities scholar Dr. Daniel Paul O'Donnell and the School of Graduate Studies in order to establish a journal incubator to publish open access journals. As part of the library's broader initiative to become a campus collegium for the management of scholarly research lifecycles, the library's Research Support Services group has been working with Dr. O'Donnell over several months in order to identify ways in which the library can be involved with the journal incubator. The Research Support Services group consists of librarians Sandra Cowan, Rhys Stevens, Marinus Swanepoel, Maxine Tedesco, and Associate University Librarian Wendy Merkley. As a small university library, this is

an opportunity to integrate stakeholders and resources across campus in order to successfully implement a library-based publishing model.

The journal incubator came to the library with a stable of three peer-reviewed open access journals: *Digital Medievalist, Digital Studies/Le champ numérique*, and *The Canadian Journal of Netherlandic Studies*. Library administration agreed to provide an office in the library for journal incubator operations. Office space is shared by the graduate student editors of the three journals. The School of Graduate Studies supports students in this work because it recognizes the value of the journal incubator in providing transferable and marketable skills to the students, and so it provides funding through special research assistantships of \$7,000 per year in addition to the graduate students' standard graduate teaching assistantships. Currently, the journal incubator is sustained by this funding for graduate student staffing, along with in-kind contributions on the part of Dr. O'Donnell, faculty board members and editors, and the library. The group is beginning to pursue grant funding in order to develop, document, and share standard processes for open access journal publication as well as—more ambitiously—broader scholarly research lifecycles.

The journals have already been in publication for several years, and one of them has recently transitioned from print to digital. Each journal has a different format, and different software and processes are used in their production. The idea was to bring them together to streamline and standardize processes. The journal incubator project has several goals, which include to:

- Streamline production and business models.
- Reduce duplication of resources and effort in journal production on campus.
- Establish a process or "package" that can be offered to scholars interested in starting up new open access journals.
- Increase the research profile of the university by attracting and producing quality scholarly journals, and by acquiring external funding to facilitate the project.
- Increase the impact of the journals being published.
- Provide graduate students with an opportunity to develop professional skills and experience in publishing and editing.
- Leverage the expertise of librarians in order to enhance the scholarly publishing process.
- Enhance the library's role in scholarly research and publication.

Journal incubator operations have been housed in the library for about a year, but it took some time to define the role of librarians in the project, because editing, production, and communications were being handled by the graduate student editors. After some discussion of the journal incubator processes, lacunae were identified. It became clear that there were several areas in which librarians had expertise to offer, such as:

- Metadata standardization
- Discoverability: indexing, cataloguing, aggregators, search engine optimization, and social media
- Researching and recommending standards in publishing format and software
- Impact and bibliometrics
- Archiving standards, procedures, and space
- Intellectual property standards and recommendations

#### Metadata Standardization

There are a few different opportunities for metadata creation and standardization, primarily in website encoding and in cataloguing for inclusion in the library catalogue, from which the records will be uploaded into OCLC's WorldCat. Journal- and article-level metadata should be optimized for discoverability by search engines, and to ensure the option of indexing in key databases. For example, the Directory of Open Access Journals (DOAJ) requires metadata to be in XML. Different indexes may have different standards and requirements, so it is important to target the most important ones for each journal.

# Discoverability

Metadata is necessary for discoverability; if the design and metadata are good, the journal's content should start showing up in search engines such as Google Scholar within a few weeks as Google's crawlers locate it. Databases and aggregators require application for inclusion, and most of the major ones require the journal to have published a certain number of years and/or articles and to measure up to other criteria before being considered for inclusion. The library can catalogue the journals and include them in our local catalogue, which will periodically be uploaded into OCLC's WorldCat for international exposure. The library can also help publicize the journal incubator through our social media venues, currently including Facebook and Twitter.

# Publishing Format and Software Standards

Librarians are well positioned to research different publishing systems available, such as Open Journal Systems (OJS), bepress Digital Commons, or a homegrown system, and make recommendations for selecting one as the standard for the journal incubator, which is currently producing each journal on a different and idiosyncratic system. Likewise, librarians are able to research output formats, whether HTML, XML, PDF or EPUB, and make recommendations about which ones are better for long-term sustainability, accessibility, indexing, and discoverability.

#### Impact and Bibliometrics

Impact factors are important in the reputation and professional recognition of both the journals and the contributors. Typically quantified by citation statistics which are calculated to inform impact factors (for journals), and h-index (for authors), these are important data in the scholarly world. Getting into Google Scholar, and—once the journal has established a track record of publication longevity and quality—applying to be included in databases such as JSTOR and Web of Science are critical to the measurement of citation impact.

#### Archiving Standards, Procedures, and Space

The library has expertise in digital collections and archiving, and we are looking into ways that we can share both the expertise and resources with the journal incubator. We are investigating the potential use of LOCKSS and Archive-it for archiving the journals, and we are learning about how to create permanent Web locations and access points—whether through a persistent URL or a digital object identifier (DOI)—in order to manage permanent access to the journals. Once a journal is indexed by the DOAJ, it will be included in the DOAJ e-Depot archives, an archiving project that the DOAJ is piloting with the National Library of the Netherlands for the long-term digital preservation of scholarly journals. Finally, we have recognized the need for more stable backup procedures and locations for the journals, and are discussing options such as a dedicated backup server and developing easier and more consistent backup processes in order to address this.

### **Intellectual Property**

Researching and recommending standard licensing agreements to balance open access and intellectual property rights between the journals and the contributors, as well as between the journals and different databases, through Creative Commons or other licensing is an important task. Librarians can work with the University Copyright Officer to make recommendations.

Although we are a much smaller university with fewer resources, we have looked to the University of Michigan Library's MPublishing program as an inspiration for our journal incubator project. Ultimately, we hope to include all aspects of the scholarly research lifecycle: from institutional and data repositories, to text encoding, to aggregator inclusion and intellectual property rights recommendations.

Each of the librarians involved has taken on one or more of the above areas with the goal of researching and recommending best practices in each area. By researching, recommending, and implementing best practices in many of the above areas, the library can make a substantial contribution to the journal incubator apart from simply housing its operations in-house. The collaboration is an opportunity to professionalize the journal incubator, and to expand the publication process to support further nascent scholarly journals. There is an additional benefit in increasing the professional skills and knowledge of the librarians involved in the project,

while better positioning the library in the context of scholarly communication, open access, and the scholarly research lifecycle.

The obstacles that we have encountered up to this point have much to do with the usual librarianly problem of having many diverse tasks to accomplish, and not quite enough people or time to work on everything that we would like to accomplish. None of the librarians have yet been able to devote significant amounts of time to the journal incubator research, given the myriad of other duties we are engaged in, and so we are moving forward slowly—but surely.

Something as simple as a preliminary workflow checklist has already helped the journal incubator by placing journal publication within a larger context that considers factors such as archiving and discoverability (see Appendix 1). Another simple solution was to include all of the existing journals in our library catalogue, which we quickly realized was missing two out of the three. We have begun investigation of a regional LOCKSS network as a possible archive for the journals, and we have begun to learn more about the criteria that indexes and aggregators use for journal inclusion, with the goal of getting all three journals into DOAJ first.

The group recently completed a grant application that may provide us with funding to develop a series of academic community colloquia and workshops around scholarly communications lifecycles, of which the journal incubator and the research issues that we have identified around it would be a significant part. From there, we intend to apply for more sustainable funding that would allow us to expand the journal incubator and to devote more librarian time to the endeavor. We are also considering hiring a library science graduate student intern for short periods of time to assist with the project. In the meantime, the incubator continues production of peer-reviewed, open access journals; the graduate student editors continue to learn valuable skills in editing, communications, project management, and document encoding; and the library continues to support the journal incubator as a library-based publishing initiative, as the librarians involved carve out time to contribute the project.

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# Appendix 1: ULeth Open Access Journal Incubator Workflow Considerations

#### **Technical Considerations:**

- 1. Decide on software/format
  - Options include Open Journal Systems (OJS), bepress Digital Commons, Drupal, homegrown system, XML, HTML, PDF, etc.
  - Consider search engine optimization (SEO) and accessibility issues
  - Consider workflow and version control
- 2. Ensure server space(s)
- 3. Establish domain name

#### **Journal Review and Publication:**

- 1. Request an ISSN for journal
- 2. Staffing:
  - Editorial board
  - Editorial staff (grad students)
  - Peer reviewers
- 3. Solicit articles
- 4. Review and publication process
- 5. Creative Commons licensing
- 6. Distribution

# Discoverability and Impact:

- 1. Journal and article standardized metadata
- 2. Search engine optimization (SEO) (eg. keywords, metadata)
- 3. Ensure SEO specifications to be included in Google Scholar (provides citation data)
- 4. Catalogue and include in local library catalogue and WorldCat upload
- 5. Apply for inclusion in Directory of Open Access Journals (DOAJ)
- 6. Apply for inclusion in Ulrichsweb Global Serials Directory

- 7. Apply for inclusion/indexing in major databases relevant to journal's discipline, such as:
  - JSTOR, EBSCO
  - ISI Thomson Web of Science (provides citation data and impact factors)
  - European Reference Index for the Humanities (ERIH) (Humanities)
  - Scopus (Sciences)

## **Digital Preservation:**

- 1. Ensure back-up routines
- 2. Encourage authors to deposit articles in institutional repository
- 3. Investigate use of Archive-it for archiving
- 4. Investigate use of LOCKSS system for archiving
- 5. DOAJ e-Depot archives (pilot project)