The centrality of the library in the academy enables it to act as a primary catalyst for change in the scholarly communication domain. Libraries understand the culture of scholarship and are strategically well positioned to approach publishing from a service perspective. A great deal of scholarship, particularly in the humanities, now goes unpublished because conventional publishing models make it unprofitable to publish this material. But academic libraries, by providing innovative publishing models and by strategic partnerships, can rectify these inequities by offering models and services that address digital publishing needs inside the academy.

1. **Objective**

The Library (QUL) is committed to promoting the dissemination of Queen’s scholarly information to a global audience. As part of this commitment to support and foster scholarly communication at Queen’s University, QUL will work with Queen’s scholars who want to establish new electronic journals and bring existing journals to the web. Using Open Journal Systems (OJS) software, an open source application developed by the Public Knowledge Project (PKP) now based at Simon Fraser University, journal creators will be able to publish their journals online relatively quickly and easily after some initial training.

While QUL is not a publisher, QUL will provide the storage, software, application expertise and training required for Queen’s scholars to host their journals online.

**OJS can help QUL be a “change agent” in scholarly communication**

2. **Environment**

Queen’s University scholars presently publish journals in a variety of forms: e.g. wholly in print or via a web site hosted locally or externally. Scholars may be looking to make their journals available electronically, managed more effectively, or to broaden visibility. Some e-journals lose their existing hosts or the editor may wish to move the journal to a local host. Queen’s scholars wishing to start a new journal will be looking for a platform that is readily accessible, with all of the features they require to manage their journal.

3. **Background**

In 2006, as part of QUL’s mandate to support and foster scholarly communication at Queen’s University, the QUL decided to assess the utility and possible service implications in offering an electronic journal publishing facility for the Queen’s community. A thorough review of the literature showed that OJS was the system that clearly offered the most complete range of features for managing a scholarly journal. It was freely available as open source software, well-supported by Simon Fraser University and had an established base of journal installations around the world.

In fall 2006, the software was installed on a server in the QUL. In 2007, the Dean of the Faculty of Education at Queen’s expressed a need to transfer a print-only peer-reviewed journal, which she had founded, to electronic form. She agreed to work with QUL to transfer the journal to electronic form with OJS. The transfer was completed in early 2007 and the first full electronic issue was produced in fall 2007. The journal, *Historical Studies in Education/Revue d'histoire de l'éducation* (HSE), was an excellent test case to pilot OJS since it used virtually all of the programs many

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features. The journal is refereed, subscription-based (with a wide range of subscribers). It has a number of sections, with various editors performing different editorial roles, including a paid managing editor. As a bilingual publication, HSE required all the interface screens and functions to appear in English and French. In addition, the Dean wanted to load the past issues into the system. This was successfully accomplished using technical support staff at the Faculty of Education who had to convert and load the metadata in XML form.

OJS was able to meet the needs of HSE so successfully, that the Faculty of Education is launching a new open-access journal in OJS.

4. **Library’s OJS Role: how QUL will help our community put their journals online**

QUL offers to:

1. provide the server space to host the journal
2. set up the journal using OJS software. The publishers will be given complete access to control the look and content of their journal.
3. train the publisher and editors in the use of OJS software. The goal is that eventually they will be self sufficient and will be able to publish their issues independently.
4. be available to help with any questions or provide technical assistance they may need.
5. work with publishers of existing journals to assess resource requirements and feasibility of loading previous issues into the system.

5. **Governance:** OJS @ Queen’s is a QUL service. Advice and input from the Queen’s community in support of this service is provided by the Senate Library Committee.

6. **Accessibly**

   All PKP software, including OJS has been designed to meet current accessibly standards.

7. **Technology Considerations & Production Platform**

   OJS can be mounted on a wide range of servers and utilizes common, standard system software, both open source and commercial.

   Recommended server configurations for OJS are:
   - **PHP** support (4.2.x or later)
   - **MySQL** (3.23.23 or later) or **PostgreSQL** (7.1 or later)
   - **Apache** (1.3.2x or later) or **Apache 2** (2.0.4x or later)
     - or **Microsoft IIS 6** (PHP 5.x required)
   - **Linux, BSD, Solaris, Mac OS X, Windows** operating systems
See the Staffing Requirements section for technical support requirements.

8. Proposed Operations

- Queries about setting up a journal should come to the OJS administrator. Only an OJS administrator can set up the new journal title and assign a Journal Manager, a five-minute task.

- QUL will establish a service agreement with the journal publisher or editor outlining QUL’s responsibilities in supporting the journal on OJS.

- The Journal Manager then assumes the duties necessary to establish the journal including assigning editors, reviewer, etc.

- PKP provides an excellent step-by-step OJS guide. Some journal managers/publishers, who are not totally comfortable with technology, will require a workshop and a contact to answer questions.

- A journal may wish to customize its display and or add back issues. Such customization may require additional technical resources.

See the Staffing Requirements section for operational support requirements.

9. Archiving

The Library will explore the possible application of off-sight dark archiving initiatives that help to ensure preservation of born-digital scholarly materials, in addition to normal scheduled backup of the data files on the server.

10. Staffing Requirements

Management: OJS will be administered by the Library Assessment & IT Projects Coordinator (“OJS Administrator”) who will act as primary contact for establishment of new journals and to organize any necessary training in conjunction with other members of the QUL staff.

Training: OJS Administrator will fill initial training requests and train future trainers. OJS Administrator will assess training workload needs and discuss additional resource needs with the Library Senior Administrative Team.

Promotion of OJS Service: OJS Administrator and liaison librarians.

Technical Support:

1. Application Software: The Library Web Systems Assistant will be responsible for routine maintenance of the OJS software:
OJS @ Queen’s
Open Journal System (OJS) – Business Case

- Since its installation in 2006, OJS has required the installation of two patches and one upgrade in March 2008. Other than that, the system requires no technical support to maintain the application software operations.

2. **Server:** QUL will work with ITS to incorporate the maintenance of the OJS server into the suite of server maintenance services supplied by ITS to QUL.

- System software updates and patches will have to be installed as needed; routine maintenance and backups will have to be scheduled.

3. **Customized Display & Data migration:** Journal displays can be customized by loading an appropriate XML style sheet. Preparing the style sheet requires the relevant XML expertise as does preparing the metadata to load back issues. Journals wanting custom display and back issue services will have to supply their own technical expertise. If there is sufficient demand, QUL may consider establishing such customization services on a cost-recovery basis.

4. **Domain Name:** QUL will explore with ITS any request by a client to have a unique domain name for their journal.

11. **Hardware**

A relatively small production server is required to operate the software with scalability if the system outgrows the internal disk space. See Section 15 for further information.

The OJS service will be able to proceed in its present location on the QUL Web Server, on limited basis. File space for new journals and space for loading back issues, in the case of established journals, may have to be limited depending on the number of journals using the service pending future funding.

12. **Consortial Support:** Queen’s will monitor and provide input to the continued development of OJS by the Ontario branch of Synergies, a consortium founded on a national grant to build electronic scholarly publishing and dissemination support for Canadian social science and humanities: [http://www.synergiescanada.org/01_en.html](http://www.synergiescanada.org/01_en.html). The Ontario Synergies project aims, among other goals, to continuing developing OJS to better meet the needs of academic libraries and to make academic journals, based at Ontario universities, accessible through the Ontario Scholars Portal program. Queen’s is providing ongoing input to Synergies’ development work based on our experience with OJS.

**SSHRC Funding To Aid Open Access Research Journals**[^2]: In 2007, SSHRC provided one-time total funding of up to $25,000 for the scholarly community to:

- assist journals offering barrier-free access to peer-reviewed scholarship in the social sciences and humanities;

[^2]: [http://www.shrca.ca/web/apply/program_descriptions/open_access_journals_e.asp](http://www.shrca.ca/web/apply/program_descriptions/open_access_journals_e.asp)
• increase readership, both nationally and internationally, for research journals that publish original scholarship in the social sciences and humanities;
• allow SSHRC to test a new funding model and approach to adjudicating grant applications from research journals, in preparation for the revised research journals support program, which will be launched in 2008-09.

If SSHRC renews this program in some form, QUL may be able to take advantage of the funding to support the migration of existing journals published at Queen’s.

13. Benefits
• Exposure & Access
  o Empower the Queen’s Community to publish research online and reach a wider audience
• Preservation
  o Support continued access and archiving of Canadian journals
  o Journals are often fragmented across vendor sites
  o Vendors may cease to exist
• Why Open Journal Systems?
  o Loaded with features
  o Designed to assist with every stage of the refereed publishing process including peer-review
  o OJS manages subscriptions
  o Articles indexed rapidly by Google Scholar; plan to make full text of journals accessible through Ontario Scholars Portal.
  o Author, title and issue indices automatically created
  o OJS offers full text of journal articles indexed automatically for powerful searching
  o Open Source
  o Large international user community: as of March 2007, over 900 titles in 10 languages published

14. Evaluation and Ongoing Review

OJS service would be evaluated through annual reviews by the governing bodies via feedback collected from users and staff throughout the year.

15. Future Directions

a. Staffing:

  Total salary costs for the OJS Administrator and technical support within the Library are estimated at $35,000 per year.

b. Server:
OJS @ Queen’s
Open Journal System (OJS) – Business Case

The optimum long-term option would be a dedicated OJS server (see cost estimates below provided by Gail Ferland, ITServices). As an interim solution, OJS can operate in its present shared location on the QUL web server.

**Server:** $15,000-$20,000 for a new Sun Solaris server.
Ongoing maintenance costs would be $1200/year if ITServices was to house, maintain, and administer the server. (Install, configure, and maintain the server operating system, with patches and virus detection. Provide power conditioning, cooling, humidity control, fire protection, and physical security protection. Backup. Provide emergency and after hours service for server level failures.)

**Storage costs:** $3,000-$6,000 to accommodate additional storage space as required (fibre-channel cards for server to connect to Queen’s SAN) + $4,500 per year for maintenance.