RSpace: A Responsive Institutional Repository That Supports University Research

Presented by:

Tony Tin, Director, Library and Information Services
Mary Horman, Digital Archivist
The Digital Preservation Crisis

“Information is being produced in greater quantities and with greater frequency than at any time in history. Electronic media, especially the Internet, make it possible for almost anyone to become a "publisher." How will society preserve this information and make it available to future generations? How will libraries and other repositories classify this information so that their patrons can find it with the same ease that they can locate a book on a shelf?

The ease with which electronic information can be created and "published" makes much of what is available today, gone tomorrow. Thus there is an urgent need to preserve this information before it is forever lost.”

The Scholarly Communication Crisis

“Our current system for communicating research uses a print-based model in the digital age. Even though research is largely produced with public dollars by researchers who share it freely, the results are hidden behind technical, legal, and financial barriers. These artificial barriers are maintained by legacy publishers and restrict access to a small fraction of users, locking out most of the world’s population and preventing the use of new research techniques.”

Meeting the Challenges: Building an IR

“A set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members.”

Clifford Lynch, ARL Bimonthly Report, No. 226
Growth of Institutional Repositories (IR)

Growth of the OpenDOAR Database
Worldwide, Institutional Repositories

Cumulative Number of Repositories

Date Added

OpenDOAR 23-Jan-2017

OpenDOAR - 23-Jan-2017
Characteristics

- Web-based database (repository) of scholarly material
- Institutionally defined (as opposed to a subject-based repository)
- Cumulative and perpetual (a collection of record)
- Open access and interoperable (e.g. using OAI-compliant software)
- Part of the process of scholarly communication (collects, stores and disseminates research information)
Potential Use

- Scholarly communication
- E-Publishing/E-Portfolio
- Curriculum development
- Collection management
- Long-term preservation
- Knowledge management
- **Support open access, open source and open standard**
Benefits

- Increased visibility
- Increased discoverability
- Increased research impact
- Publishers may allow archiving in IR but not in subject repositories
- Long term preservation
- A persistent unbreakable link
• Renison is an affiliated college with the University of Waterloo
• Over 36,000 students in undergraduate and graduate programs with 2,000 faculty
• Canada’s most innovative university for 23 years; operating the world's largest cooperative education program with 19,000 co-op students
• Renison focuses on arts and social sciences, especially English as a second language, East Asian Studies and languages, Social Work and Social Development Studies
Starting from **AUSpace 2005**

http://auspace.athabascau.ca/

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**Background**

- AUSpace was established in 2004 as an institutionally supported repository of scholarly work.
- AUSpace captures, describes, distributes, and preserves items that are deposited.
- The purpose of AUSpace is to address the "crisis in scholarly publishing" by preserving Athabasca University's scholarly materials. AUSpace is also a useful tool for sharing and promoting research.
- The repository is based on DSpace – Open Source software developed by MIT and Hewlett Packard.
- AUSpace is OAI (Open Archives Initiative) compliant, meaning that items deposited in AUSpace are easily searched and shared with other repositories and search engines.

**Open Access**

- One of the goals of AUSpace is to encourage Open Access and support Athabasca University’s Open Access Research Policy.
- AUSpace supports this policy by making research freely accessible to the public.
- AUSpace and the Open Access Policy increase access to ideas and research, distribute research to a wider audience, give researchers more control over their work, and lower the production costs of scholarly work.
- The Athabasca University Open Access Research Policy requests that faculty and staff deposit an electronic copy of their work in AUSpace.

**Statistics**

- DSpace is used by over 700 institutions and organizations in more than 50 countries.
- AUSpace stores more than 1,400 items.
- Almost 18,000 item views per month = 200,000+ per year.
- Over 900 items with 10+ views per month on average.
- Articles that are openly accessible are 3x more likely to be cited (Eysenbach, 2006).

To RSpace 2016
http://rspace.uwaterloo.ca

- Goal: to preserve and disseminate Renison scholarly materials
- Objectives:
  - Promotes institution
  - Make research more widely available
  - Opportunity for library to connect with faculty and staff
  - Integrates with library services
  - Promotes open access
What is Open Access?

- Must satisfy two conditions
  - Free to access and free of most license and copyright restrictions
  - Tri-Agency (CIHR, NSERC & SSHRC) Open Access Policy requires research to be published openly
Technologies: DSpace

- IR platform developed by MIT and Hewlett-Packard
- Open-source Java permits customization and collaboration with other institutions
- Implemented by 1690 academic institutions
- DuraSpace Foundation:
  - Cambridge, Columbia, Cornell, MIT, Edinburgh, Calgary, Toronto, and Waterloo
Core Features

- Digital content
- Community-driven & focused
- Durable & permanent
- Support open and restricted access
- Open URI/DOI linking
- RSS feed
More Features

- Statistics
- Dynamic content management
- Export collection
- Unicode
- Google indexing
- Interoperable with other repositories using OAI-PMH
Information Model

- Community
- Collection
- Item
- Bundle
- Bitstream
- Dublin Core Record
- Bitstream Format
RSpace does…

- **Captures**
  - Digital research material in any formats directly from creators

- **Describes**
  - Descriptive, technical, rights metadata
  - Assigns persistent identifiers

- **Distributes**
  - Searches metadata
  - Delivers via Web, with necessary access control

- **Preserves**
  - Large-scale, stable, managed long-term storage
How to Submit

Demo
Philosophy of RSpace: 3D

- Designed for unique needs of university college
- Developed with faculty input
- Deployed to work best for the college’s needs
Meeting Challenges with Solutions

- IT support
- Staff training about
  IR, open access
- Metadata consistency
- IR population
- Copyright and
  licensing
IT Support

- Hire computer science students to assist with Dspace implementation

- Look to the knowledge already available from the CARL/ABRC repository community and Dspace community
Staff Training

- Train student staff in basics of open access, digital preservation and scholarly communication
- Create series of manuals for various aspects of the RSpace workflows
- Add editing steps into submission workflow, so library staff can double check student work
- Solicit student concerns about workflow
Metadata Consistency

- Write down instructions for metadata consistency in a clear easy to use manner

- Edit workflow metadata to allow staff to edit student metadata before accepting item
Editing Workflow Metadata
IR Population

- Communicate directly with faculty about needs and concerns
- Hire students to solicit and submit articles on behalf of faculty
- Accept more content types
Copyright and licensing

- Hire students to submit items, work with staff to make sure licenses and copyright rules are obeyed
- Connect with copyright experts on campus and at Renison to get accurate answers about copyright
- Train students how to use Sherpa/Romeo
Possible RSpace Content

- E-Portfolios
- Research data
- Foreign language materials
- Working/conference Papers
- Renison Archives
- Lunch and Learn Materials
- Rension Research Grant Report
- Student Projects (SDS Senior Honours thesis)

- Images (visual, scientific, etc.)
- Audio/Video files
- Library materials
- Learning Objects
- Digitized library Collections
- Many more...
Success of RSpace

- In operation for 4 months
- Interested several schools and faculty in RSpace, especially for
  - Self archiving
  - E-portfolio
  - Knowledge management
  - Learning objects
  - Open access support
- Currently houses 100+ items
Beyond Preservation: Support of Teaching and Learning

East Meets West Garden

Title: East Meets West Garden
Author: Lam, Larry; Byrant, Susan
Abstract: Susan Bryant and Larry Lam discussed the origin and development of the East Meets West Garden at Renison University College. See YouTube Video and Dropbox powerpoint.
URI: https://youtu.be/2g4erI1XbUp
http://hdl.handle.net/20.500.11895/216
https://www.dropbox.com/s/1bx17r0japg/tips/1%20East%20West%20Garden.pdf?dl=0
Date: 2017-01-02

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This item appears in the following Collection(s)
- VoiceThread Project
Final Remarks

Dr. Daniel Bratton.
Culture and Language Studies
Thank You!

Questions?

Tony Tin  tony.tin@uwaterloo.ca
Mary Horman  mhorman@uwaterloo.ca
Website:  http://rspace.uwaterloo.ca
Some References

- **DSpace Federation:**
  [www.dspace.org](http://www.dspace.org)

- **Rspace**
  [http://rspace.uwaterloo.ca](http://rspace.uwaterloo.ca)

- **Tri-Agency Open Access Policy on Publications**
  [http://www.cihr-irsc.gc.ca/e/32005.html](http://www.cihr-irsc.gc.ca/e/32005.html)

- **Morrison, H. and Waller, A. (2004)**
  [http://ir.lib.sfu.ca/handle/1892/97](http://ir.lib.sfu.ca/handle/1892/97)