



# FROM PAPER TO PIXELS: CHALLENGES AND SOLUTIONS ON THE WAY TO ETDS

Bronwen Sprout, Digital Initiatives Librarian, UBC Library

Max Read, Communications and Thesis Coordinator, UBC Faculty of Graduate Studies

## Project Aims

- to develop an online system for submission of the final versions of UBC theses and dissertations
- to create an online repository so theses can be immediately available electronically

## Workflow

The University of British Columbia has campuses in Vancouver (UBCV) and in the Okanagan (UBCO). ETDS from both campuses are included in cIRcle. However, they go through a separate workflow: through the College of Graduate Studies at UBCO and through the Faculty of Graduate Studies at UBCV. Once they have been accepted by their respective thesis section, their metadata is edited by the same team of cataloguers.

Once in cIRcle, UBCO ETDS are pulled into a separate collection (Okanagan Campus) as well as added to the main ETD collection. Campus information is noted in the metadata.

The chart below shows the steps from submission of an ETD to end of Library processing.

## Issues Arising

### Creative Arts:

- students and faculty were concerned that online publication would negate the possibility of commercial publication or distribution

### Embargos:

- number of requests for embargos increased; some students and faculty assumed that journals would not publish material that was already online
- needed to develop a method of embargoing ETDS

### Technical Support:

- no central location where students could receive technical support for PDF creation and ETD submission

### Multimedia:

- in theory, multimedia (supporting) files could be embedded in the PDF; however, at present Library and Archives Canada can only harvest ETDS as single file PDFs with no multimedia components

## Archiving

The ETD program, with UBC theses stored in the repositories of UBC and Library and Archives Canada, meant that the advantage of putting theses in the ProQuest database was reduced.

The UBC Library is participating in a LOCKSS (Lots Of Copies Keep Stuff Safe) initiative (the COPPUL Private LOCKSS Network) and we expect our ETD collection to be archived by the Network. Once adopted, UBC's ETDS will be stored on many servers across Canada.

Because electronic submission is not yet mandatory, a few theses are still submitted on paper. These are scanned, an OCRd PDF file is created, and the files are submitted to cIRcle by Faculty of Graduate Studies staff. Thus all UBC theses are available online shortly after submission, whether submitted as ETDS or on paper.

## Retrospective Digitization

The UBC Library is digitizing its entire collection of theses in-house.

- The Library has approx. 33,500 graduate theses (almost 5 million pages), dating back to the 1920s
- 1,000 theses from 1993 were digitized in a 2008 pilot project

We are now digitizing all theses of which there are two copies; one is unbound and scanned on a sheet-fed scanner.

- Theses from 1992 – 2007 have been completed; currently digitizing theses from 1974 to 1991.
- Now have more than 18,000 retrospective titles in cIRcle
- PDF copies are secured so that text and images may not be cut and pasted into new electronic documents.
- If authors contact us with concerns about their thesis being digitized and included in cIRcle, the thesis is immediately removed.

## Solutions

### Creative Arts:

- developed a Thesis Licence form specifically for Creative Arts; student agreed to have metadata in cIRcle, but the "creative work" itself would be available only on CD-ROM at the UBC library
- however, cIRcle is a repository, not a catalogue, so Creative Arts theses are in limbo pending review of UBC policy re. publication responsibility, and of what constitutes a thesis

### Embargos:

- contacted journal publishers on behalf of students and confirmed their policies re. publication based on online theses; most publishers had no concerns
- initially developed a workaround to hold embargoed theses in a thesis reviewer's personal DSpace task space
- have now upgraded to DSpace 1.5 which has embargo capacity

### Technical Support:

- partnered with the existing Chapman Learning Commons, which now provides technical help with PDF creation and ETD submission

### Multimedia:

- for a thesis which contained multimedia, a text ETD was submitted to cIRcle until after the Library and Archives Canada harvest, and then the multimedia ETD was uploaded to cIRcle
- plan to develop a system for connecting accompanying materials to an ETD

## Future Developments

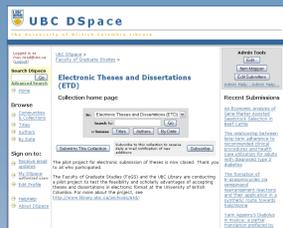
Items on our "to do" list include:

- streamline the processes of collecting committee approvals of theses, and distributing receipts once a thesis has been accepted
- formalize and expand on our preservation plan
- develop system for connecting accompanying materials to an ETD

## Acknowledgements

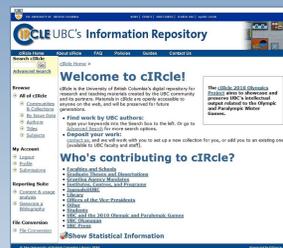
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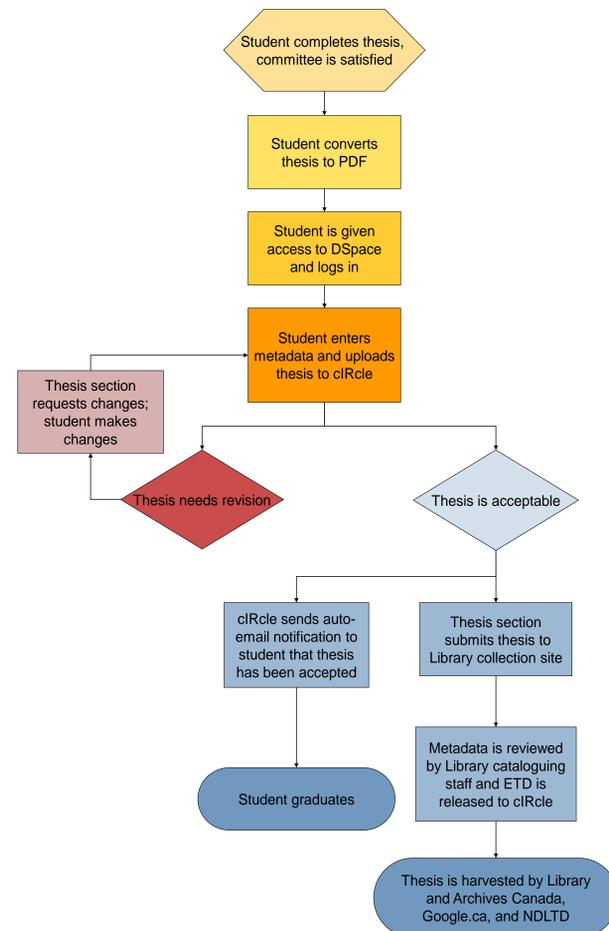


From the pilot project in DSpace...

...to cIRcle...



...and more exposure for our graduate research!



## Project Timeline

2006: Started development of institutional repository (cIRcle) in the Library, using DSpace software

2007: Ran a pilot project of 32 ETD submissions to test the DSpace system

2008: Electronic submission of theses was made an option for all students; immediately about 50% of theses were submitted electronically

2009: Upgraded DSpace; added embargo capability. 65% of theses were submitted electronically

2010: Now working towards mandatory ETD submission; so far this year, 96% of theses have been submitted electronically.