

# Unlocking Scholarly Access: ETDs, Institutional Repositories and Creators: Highlights of ETD 2006, the 9th International Symposium on Electronic Theses and Dissertations

*Sharon Reeves, John Hagen and Christine Jewell*

## Introduction

By all accounts ETD 2006, the 9th International Symposium on Electronic Theses and Dissertations, was a resounding success. Delegates were treated to a well integrated program organized under the overarching theme of Unlocking Scholarly Access: ETDs, Institutional Repositories and Creators.

Université Laval hosted the symposium, which took place in beautiful Quebec City, Canada from June 7-10, 2006. It was the ninth in a series of symposia held under the auspices of the Networked Digital Library of Electronic Theses and Dissertations (NDLTD), an international non-profit charitable organization dedicated to promoting electronic theses and dissertations. Earlier symposia have been held in Sydney, Australia, in Berlin, Germany and in various locations in the USA.

This is the first time that the conference has been held in Canada and it attracted a large number of participants from Canadian universities. In all 176 delegates attended, 60 of whom were from Canada. Representatives from 24 other countries were present at the symposium. Through the generosity of the Open Society Institute and the Institut francophone des nouvelles technologies de l'information et de la formation INTIF, as well as the NDLTD, 18 delegates received travel grants enabling them to attend from Africa, India, South America and Eastern Europe.

Owing to the large number of francophone participants simultaneous translation was a new feature introduced at ETD 2006. Delegates

included librarians, graduate school faculty and administrators and information technology staff, along with a small number of vendors.

The conference was organized around four tracks: open access, open source, intellectual property and institutional repositories. Four keynote speakers addressed delegates in plenary sessions. A total of 33 speakers made presentations in 11 parallel sessions, which flowed seamlessly from one topic to another. Conference delegates also had the opportunity to tour Université Laval and Quebec City and to enjoy a boat cruise on the St Lawrence River.

## Conference activities

Prior to the official opening of the symposium, John Hagen (West Virginia University) convened a tutorial for newcomers. The successful implementation of electronic thesis and dissertation programs on campus can at first seem to be a daunting task. This session for "rookies" covered such things as free resources available from the NDLTD and elsewhere, campus issues impacting on ETD implementation and strategies on how to deal with them, various models of ETD programs using home-grown, open source or commercial systems and different approaches of various consortia in building ETD programs.

ETD 2006 featured a number of presentations on various technical aspects and solutions with respect to ETDs. Martin Sévigny (AJLSM) and Jean Claude Ducasse (Université Lyon) held a workshop on Cyberdocs, a platform for publishing complex

documents in XML format on the web. The workshop covered the installation and configuration process as well as the production workflow of ETDs through the Cyberthèses and SDX platforms. Jean-Claude Ducasse presented more information about Cyberthèses in a parallel session on open source.

A concern not just for electronic theses and dissertations but for all genres of digitized material is that of long-term preservation. An interesting session on electronic archiving featured different solutions from three presenters. Thomas Wollschlaeger (German National Library) spoke about kopal, a joint project to establish a technology platform for a long-term preservation repository. ETDs were the first collection included in the pilot project due to their overall consistency, well established metadata format and stable URN referencing system. A second solution for digital archiving was presented by Charles Thomas (Florida State University). The Florida Center for Library Automation at Florida State has developed DAITSS, a preservation repository software that provides for format normalization and migration. While the system does not provide real-time access it can be integrated with search systems. DAITSS will become available as Open Source software in 2006. Kamini Santhanagopalan (Virginia Tech) presented on a joint project between six institutional members of the NDLTD located in Brazil, Germany, South Africa and the USA. The project is intended to demonstrate the functionality of the LOCKSS open source software, developed at Stanford University, and OAI-PMH for

international preservation of ETDs. The software supports replication, distribution and reliable preservation of content. This joint project is implementing and testing the first worldwide LOCKSS service prototype for preservation of and access to ETDs.

Other technology oriented presentations included discussions of various online submission systems, such as Digitool (Ex Libris) and BePress (ProQuest), descriptions of different metadata standards used for ETDs, the development of a metadata application profile for Canadian universities participating in the Canadian Association of Research Libraries' institutional repositories project, the challenge of building bridging infrastructure between institutional repositories and the preservation of research data, and the NDLTD wiki. Frida Sandgren and Eva Müller (Uppsala University) gave an interesting talk on a tool designed at the University Libraries' Electronic Publishing Centre which incorporates a flexible workflow to facilitate the management of electronic theses and enables the publishing process to run more smoothly. The framework includes the DIWA system (digital workflow) and the DiVA system (the institutional repository that works with DIWA). It is an open source platform, both extensible and interoperable, using JAVA, XML, ESP and SOA.

Given the theme of the conference, "Unlocking scholarly access," various other sessions covered open access, copyright, new information needs for ETDs and various national initiatives such as the Theses Canada Portal, which provides access to over 47,000 ETDs, and the EThOS project in the UK, which aims to create a service through which ETDs can be deposited in a central repository at the British Library.

A number of interesting posters were presented at the symposium. Topics included the integration of Lithuanian ETD into the National Digital Library, a doctoral research study on institutional repositories as information infrastructure for research, ETDs in Poland, Argentina and South Africa and the DiVA publishing system, a collaborative project of various Scandinavian universities.

The presentation of the annual awards was a significant event. The Innovative ETD Award recognizes student efforts to transform the genre of the print dissertation through the use of innovative software to create cutting edge ETDs. This year's winners were Tim Broadwater (West Virginia University), Howard Camp (Kansas State University), Evan Dorn (California Institute of Technology) and Christopher Spaw (Kansas State University). Delegates were treated to clips from the award winning ETDs, each of which demonstrated the potential of different multimedia enhancements. Awards for ETD Leadership were given to Angela McCutcheon, Director of the ETD Program at Ohio University, and Sharon Reeves, Manager of Theses Canada at Library and Archives Canada.

### Conference highlights

All four keynote presentations were absolutely stellar. Peter Suber's opening keynote address on open access and Jean-Claude Guédon's closing plenary address on ETDs and institutional repositories in an open access environment really tied the whole conference together. To set the stage, in his opening address Peter Suber (Earlham College) defined open access literature as digital, online, free of charge and free of most permission barriers, such as copyright and licensing restrictions. He made a strong case that ETDs are one of the genres most suited to open access, noting that theses and dissertations undergo rigorous review and might even be the most useful resources for a researcher, yet ironically dissertations can be the least accessible. He went on to advocate that universities mandate open access for ETDs and to suggest solutions for issues identified by various stakeholders.

In the parallel session on Open Access that took place later the same day, a team from the University of Waterloo described its university's recent decision to require students to submit ETDs. Waterloo implemented the first ETD submission program in Canada in 1999. Over the past seven years faculty have become more comfortable with the idea of electronic publishing as scholarly information in

electronic format has become ubiquitous and at the same time students have become increasingly enthusiastic about ETDs. The presenters identified key factors in the preparation for required electronic submission as communication with all stakeholders and promotion of the benefits of open access, along with adequate instructional and software support. The University of Waterloo is the first Canadian university to mandate electronic submission of theses and dissertations.

In the second plenary session keynote speaker Art Rhyno (University of Windsor) spoke about two different software development styles – the "cathedral" model used by commercial software developers versus the "bazaar" model of open source. He went on to discuss the latest trends in open source software and systems, such as Open Office, Flickr, and Linux, and their impact on access to information.

Marcus Bornfreund's speech in the third plenary session tied in well with Peter Suber's opening remarks concerning the removal of permission barriers. He is co-director of Creative Commons Canada and is known for his lead role in the development of the Canadian translation of the Creative Commons license suite. Bornfreund pointed out that creativity builds on the past and went on to indicate that the default position for Canadian copyright is "all rights reserved". Users by default have no rights and creativity is restricted. With a Creative Commons license the creator retains copyright but allows alternatives to the "all rights reserved" default.

In a thoughtful and amusing closing keynote address Jean-Claude Guédon (Université de Montréal) neatly tied together the conference themes of open access, ETDs and institutional repositories (IR). He talked about examples of the open access movement, such as open access journals, ETDs and self-archiving in institutional repositories. Guédon went on to point out that faculty at many institutions have the option to deposit their work in an IR but are resistant to do so because they do not recognize the benefits. Some feel that their work does not receive a high enough profile in a mixed content institutional repository. Guédon recommended putting all peer reviewed

papers and articles in one section of the repository and ETDs in another. He suggested that ETDs could be a test bed for faculty submissions, i.e. if ETDs are better used and cited than faculty research then faculty will realize the impact and value of institutional repositories and make contributions.

A significant highlight of the conference was the launch of Archimède 2.0, the open source platform developed by the Université Laval Library to manage, disseminate and archive digitized documents. It was developed to address the needs of francophone students and to index metadata and full text from various document formats. Université Laval's ETDs are deposited in Archimède.

Three distinguished speakers took part in an exciting panel discussion on intellectual property rights on the second day of the symposium. Eva Müller, director of the Electronic Publishing Centre at the Uppsala University Library, Sweden, Jim Neal, vice president for Information Services and University Librarian at Columbia University and Marcus Bornfreund, co-director of Creative Commons Canada and founder of law-share.net, had a lively debate on such questions as the relevance of intellectual property in learning institutions, various license models and on what constitutes plagiarism.

For representatives from Canadian universities a conference highlight was an information sharing session hosted by Sharon Reeves, manager of Theses Canada at Library and Archives Canada (LAC). The well attended session allowed people to introduce themselves and to identify the status of ETD initiatives at their institutions, along with any problems they were experiencing. Mathieu Fortin, responsible for e-theses systems development at Library and Archives Canada, gave a short presentation on the technical requirements that universities need to comply with so that LAC can harvest their ETDs and metadata. The session, which lasted well beyond its allotted hour, allowed people to start developing a network of support in Canada.

## **NDLTD activities**

The NDLTD, established as a volunteer organization in 1996, is celebrating its 10th anniversary this year. Over the last 10 years the organization has worked tirelessly to improve access to graduate level research by supporting and encouraging the development of ETD initiatives at institutions around the world. Membership currently stands at 233 individual institutions and consortia. Key benefits for NDLTD members are support for harvesting into the Union Catalog, eligibility for NDLTD awards, eligibility to serve on NDLTD Committees and the Board of Directors, conference registration fee discounts on selected events, discounts on exhibits and displays at the annual conference and access to member address information when shared.

Presentations at ETD 2006 highlighted two current research projects related to the NDLTD. Seonho Kim (Virginia Tech) is currently engaged in a study to determine how well the contents of collections in the Union Catalog match the demands in different scholarly areas of subject specialization. This study is expected to result in a deeper understanding of the NDLTD community. Ed Fox (Virginia Tech) presented on a joint project of the Virginia Tech Department of Computer Science and the University of North Carolina at Chapel Hill School of Information and Library Science to develop a curriculum for digital libraries. The curriculum is expected to be of use to graduate students as they create ETDs by keeping them up-to-date with current theory and practice. It should also support universities by allowing them to draw on the syllabi, various modules and smaller units of study that will be developed over the course of the project.

## **Conclusion**

Theses and dissertations in print have often contained cutting edge, comprehensive research on very specialized subjects but have been traditionally difficult to locate and to access. There is no question as to the benefit of making graduate level research, in the form of electronic theses and dissertations, accessible to

researchers and scholars all over the world. It is also clear that current research builds on that which was done earlier. In order to advance knowledge in science, medicine, art and humanities researchers must be able to determine what has been done in the past. ETDs make this much easier.

The open access movement is inextricably linked to the development of electronic publishing on the Internet and the technological platforms and software that support it. The conference program tied all aspects of open access together, including an overview of the movement itself and its importance, its technological underpinnings and other related issues such as copyright.

ETD 2006 provided a venue for people with little or no experience with ETDs to meet with more experienced people in order to share information and to develop personal networks of colleagues from all over the world. The range and quality of the presentations ensured that the needs and interests of all delegates were met. Symposium proceedings should be available on the conference web site in late fall 2006.

The theme of ETD 2007 is Added Values to E-theses. It will be held at Uppsala University in Sweden, June 13-16, 2007. More information can be found on the conference web site at <http://epc.uu.se/etd2007>.

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**Sharon Reeves** ([sharon.reeves@lac-bac.gc.ca](mailto:sharon.reeves@lac-bac.gc.ca)) is Manager of Theses Canada at Library and Archives Canada in Gatineau, Québec, Canada.

**John Hagen** ([John.Hagen@mail.wvu.edu](mailto:John.Hagen@mail.wvu.edu)) is manager of the Electronic

Institutional Document Repository (eIDR) Programs and coordinator of the Electronic Thesis and Dissertation (ETD) Program at the West Virginia University (WVU) Libraries, Morgantown, West Virginia.

**Christine Jewell** ([cjewell@library.uwaterloo.ca](mailto:cjewell@library.uwaterloo.ca)) is a Librarian at the University of Waterloo, Waterloo, Ontario, Canada.