Implementing an ETD policy in WIT Libraries



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INTRODUCTION

Waterford Institute of Technology is a universitylevel education institute in the southeast of Ireland. There are over 10,000 students, and 1,000 staff members. Of these, almost 200 students are engaged in postgraduate by research studies. The Institute is served by two libraries: the main Luke Wadding Library and a branch library on the institute's College Street campus.

ETDs are theses and dissertations produced, stored, archived and accessed in electronic format. They are typically comprised of text-based electronic files, possibly supplemented with images, audio and other multimedia file formats.

The benefits of providing access to ETDs are well documented,¹ and include:

- greater accessibility, including 24x7 remote access
- quicker availability of current research
- searchability
- multi-formatting, including multimedia
- cost-effectiveness: storage, circulation and interlibrary loans
- increasing the students' awareness of e-technology usage and e-publishing
- access to a greater audience
- enhancement and promotino of the research profile of the institute, and its library.

In conjunction with the institute's academic council, the library established an ETD policy to address the demand for the provision of research theses and dissertations by WIT students. The academic council is a representative group within the institute, whose main responsibility is to establish and maintain procedures for the assessment and validation of courses and awards.

In December 2006, the library drafted and presented to the academic council its policy for acquiring, storing and maintaining the etheses of all research-based PhD and Masters theses. The initial phase was to only include theses submitted for full requirement of the award of Masters or PhD degree. This policy was approved and added to the Institute's *Research strategies, guidelines and procedures handbook.* The library began accepting etheses from students submitting from September 2007.

FORMING AN ETHESIS POLICY: CONSIDERATIONS

From the outset, the library-coordinated institutional repository was considered the ideal host for storing and facilitating access to the ETDs submitted. This aligns with best practice elsewhere, and the presence of the fully functioning repository acted as a catalyst for the introduction of an ETD policy. Such a digital archive, provided as open-source software by ePrints,² serves its purpose very well. It allows for easy linking with the library catalogue and facilitates embargoes and other user-defined options, the importance of which will be discussed later.

The most appropriate standard format for the thesis in electronic format was given careful consideration. That the ETD would not replace the traditional hard-bound thesis was crucial. Indeed, the library continues to catalogue and provide access to the printed, bound copy of all theses. To this end, a file format that represents the exact formatting and layout of the printed volume was deemed most appropriate. The Adobe portable document format (PDF) was considered the most suitable file format for this purpose. While this does go against the call from some to break away from linear, 'e-book equivalents',3 the traditional print thesis acts as the backbone for the ETD, rather than the ETD acting as a stand-alone publication. The repository plus the ETD does, however, have the advantage of allowing us to supplement the main text item with multi-formatted support items, such as image, sound, movie and other multimedia-file types.

The submission of the thesis in electronic format is mandated by the postgraduate guidelines of the institute. The decision to seek mandatory submission of ETDs was taken to ensure that the library was able to provide viable and comprehensive access to the body of postgraduate research. Research suggests that voluntary submission of theses in electronic format will result in a much lower up-take than a mandated policy.⁴

The student is also asked to complete a deposit agreement form granting permission to provide access to the document to the wider worldwide research community. This agreement also seeks confirmation from the author that the ETD contains no copyright-restricted materials, and advises students of their own intellectual property rights (IPR). The issue of copyright and IPR remains one of the biggest concerns for staff and students when adopting an ETD policy, and the deposit-agreement form between the student and the library acts as a crucial part of the ETD policy.5 The deposit-agreement form also requires the signature of the research supervisor. This dual-signature process (by request of the academic council at WIT) has also been adopted elsewhere.6

OPEN V RESTRICTED ACCESS

Institutional repositories and ETDs often go hand-in-hand with the open-access initiative. In fact, ETDs have gained momentum because they provide access to a wealth of material previously considered to be very high in quality but restricted, hidden and inaccessible. Despite this, some have experienced resistance from students and academia in the move to make etheses available to the worldwide research community. Because academics are often concerned about the impact open access will have on their future publication opportunities,⁷ measures are needed to address the issues raised by students and staff on the issue of open access if we are to operate a successful ETD policy.

While some publishers have stated that the provision of an open-access ethesis will not hinder any possible future publication opportunities, there are the noted few who hold a different policy. In for example. The option to place an embargo on access, by agreement with the library, has been extended to students submitting ETDs. The default access policy for all etheses, however, is for immediate open access. When a student chooses to put an embargo in place, the abstract of the item is still available to all on open access.

WORKFLOW

Students submit their files to make up their ETD by e-mail to a dedicated proxy mail address, or by disc or other data-storage device. The submission of the electronic thesis is aligned with the submission of the final, corrected, hardbound thesis and the library alerts the registrar's office when a student has fulfilled the requirements of the electronic thesis-submission process.

All electronic-thesis files are added to the repository by dedicated library staff. As the current intake of ETDs is less than 50 per academic year, the library felt it was manageable to administer the uploading process centrally. This also saves the need to train students in the process of adding items to the repository. Future developments of the ETD project might warrant a change to this aspect of the policy. Outside of this, the library maintains authoritative control over subject and keyword fields, with our current approach.

All ETDs held on the digital repository are automatically assigned a permanent URL. This URL is ideal for adding into the 856 MARC record field for the printed volume. This process provides a connection between the bibliographic record for the hardcopy version and the ETD. Users searching the library catalogue for a thesis can navigate directly to the electronic full text of a thesis from its bibliographic record without needing to separately search the institutional repository, which is located at another web address (see Figure 1).

his article on ETDs and open access, Lowry suggests adding a predetermined embargo which restricts access to the full text of an ethesis for an agreed timeframe as a resolution to this important issue.⁸ Indeed, in WIT students have tradi-

Author Harnessing Information Models and Ontologies for Policy Conflict Analysis / [Steven Davy] Title Publication Waterford institute of Technology, 2008 Info Click on the following to: nnect to eth Location Call No Status Luke Wadding Library IN HOUSE PhDThes LIB USE ONLY Reviews: HEW: add a review; No reviews Bookmark: http://witcat.wit.ie/record=b1104807 Description 217p PhD Thesis No.51 Series Subject Information Model

tionally had options to embargo access to their hardbound thesis due to extenuating circumstances, such as the inclusion of sensitive data *Figure 1. The catalogue record contains a URL link to the ETD on the institutional repository.*

In most cases, the library receives the thesis in electronic format a few months in advance of the hardbound volume. The ETD is uploaded to the repository without delay. This also allows us to create a catalogue bibliographic record for the title in a more timely fashion, without having to wait for the hard copy. The URL is added to the record from the outset, and the item record is then updated when the hardcopy volume is received and processed. This system allows us to provide electronic access to the research while the bound version makes its way into the library and onto the shelves. The turnaround time involved in providing access to the ethesis is therefore much quicker.

LEARNING BY DOING - OUR EXPERIENCES

Quite a significant amount of time is spent liaising with students who are about to submit their thesis in electronic format. Working with the student, advising and ensuring that their file formats are suitable for inclusion to the archive, is an important aspect of the workflow. It is vital that students do not find themselves almost at the stage of completion only to realise that they also need to string together multiple files to make up an ETD. The fact that we set up a dedicated webpage outlining all the requirements of the submission process, providing the necessary documentation (including a set of frequently asked questions) and specifying a contact point for the student proved to be essential in putting the ETD policy into place.

The transparency of ETDs became obvious very quickly. With all items from the repository harvested to search engines on the web, including Google, requests from researchers and scholars worldwide are frequently received for access to etheses that have embargoes. As the library is the central contact point for all such access requests, each request is acted upon on its merits. The author is advised of the request and offered the opportunity to revise his/her embargo. In some cases, frequent calls for access will bring about a change of access permissions by request of the author. Contact with the ethesis author becomes more difficult over time, however, as students leave the institute. In the event that the library cannot advise the author of a request for access to his or her thesis, the embargoes are respected for their entire duration.

FUTURE DEVELOPMENTS

The integration of etheses to the library's collection has been very successful to date. Restricting the policy to postgraduate theses by pure research means that there is still a significant number of current dissertations submitted to the library that are available in hardcopy format only. The inclusion of taught Masters research, and indeed undergraduate dissertations, under the umbrella of the ETD policy is the next logical step for the project. Adaptations to the policy might be needed, however, to place the onus back on the student to create, submit and upload the ETD to the archive. This will also undoubtedly create a need for a fully fledged training programme to advise and aid students in the ETD process.

Digital-preservation issues are also worth considering. There is no doubt that hardcopy paperbased items appear to stand the test of time over electronic-file types. Considering the options, to adapt XML (extensible markup language), or some other archival method, into the ETD policy might be worthwhile. While the PDF format serves its function very well at present, changing technologies and compatibility with file formats could become an issue in the medium to longer term. As Yiotis points out, however, XML is not without its own disadvantages, and implementing the markup language will require significant resources and training.⁹ The need for a viable electronic archival standard is very apparent.

SUMMARY

This article describes the implementation of a policy in WIT for the acquisition, storage and provision of postgraduate electronic theses. Issues discussed include mandatory submission, ETD formats and access policies. This article also outlines the workflow involved in adding an ETD to the library's collection. Expanding the policy and issues over digital preservation are also discussed.

For more information on WIT libraries' ETD policy, please visit http://library.wit.ie/Research-Support/electronictheses/ or e-mail ethesis@wit. ie.

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