Electronic Theses and Dissertations at The University of the West Indies

Introduction

This document provides recommendations for an Electronic Theses and Dissertation (ETD) System for The University of the West Indies (UWI). An ETD System offers a number of benefits for a regional university like the UWI. The paper includes a background to the ETD pilot project, and highlights some of the benefits the introduction of such a system would bring to the institution. It also identifies particular issues for consideration before implementation of a university wide ETD system, as well as recommendations and resolutions which must be ratified by UWI's management in order for the ETD system to be fully operational.

Background

Early discussions about ETDs began at the Mona Campus where a proposal was made to the School for Graduate Studies and Research at that campus for it to be a part of the Networked Digital Library of Theses and Dissertations (NDLTD). By September 2002, an ETD project was introduced and "immediately received the unanimous support of the Academic Board, Graduate Studies and the Campus Principal" (Bandara 3). An instance of the DSpace software was established at that campus to store the electronic theses. It was the intention that this would be a UWI wide project, but this goal was never realised.

During the same period, the Main Library at the St. Augustine Campus embarked on a project to scan the printed abstracts of the UWI Theses. A backend database and web interface were developed to provide access to the digital version of the abstracts. By 2008, after discussions with Graduate Studies, it was agreed that a small pilot project would be undertaken to begin the acquisition of the full text of the theses in electronic format and that the Alma Jordan Library (formerly the Main Library) would manage the project. Students were asked to submit a Portable Document Format (PDF) version on CDs along with three (3) print copies of their theses to the Campus bindery. In 2012, a retrospective digitization of the print theses from the Alma Jordan Library's West Indiana and Special Collections Division began. In the same year, the Mona Campus also began accepting electronic theses along with the print copies. To date, however, the Cave Hill and the Open Campuses are still accepting only print theses.

The electronic versions of the theses are currently being housed in a repository built using DSpace technology. The repository has been branded as UWISpace. All campuses have access the repository which is meant to capture, preserve and make accessible the intellectual output of the entire university, including the theses produced. There are two collections in UWISpace - an abstract collection with content available to the entire world, and a collection of full-text theses which is available through IP authentication to staff and students on the St. Augustine Campus at this time. A number of lessons have also been learnt from this project and now that tertiary institutions worldwide are moving in the direction of implementing systems for managing the

submission, archiving and access of their dissertations and other research output in digital formats, it is timely for all the campuses of The UWI to collaborate and work towards the deployment of a platform with similar goals.

Electronic Theses and Dissertations Defined

An ETD system may be described as "those theses and dissertations submitted, archived, or accessed primarily in electronic formats. This definition includes traditional word-processed (or typewritten and scanned) documents made available in Print Document Format (PDF), as well as less-traditional hypertext and multimedia formats published electronically on CD-ROM or on the World Wide Web" (Weisser and Walker). An ETD can also be described as an electronic document explaining the research of a graduate student. Ideally these documents are searchable and some are available over the internet or stored in digital repositories of the parent institutions. Virginia Tech is credited as being one of the early adopters of this mode of delivery since the introduction of ETDs at that institution began as early as 1997. This system is now used by a number of universities all over the world. Some universities use open source platforms such as Eprints or DSpace or proprietary systems like Digital Commons' bepress and Ex Libris' DigiTool.

The literature identifies some real benefits of implementing an ETD service for universities. The benefits can be categorised into a number of broad areas:

1. Visibility

   One obvious benefit is that it effectively publicizes the research output of the university, given that each thesis represents years of research, and not all researchers are fortunate to publish their findings in journals or monographs. For a regional institution like the UWI, access to a repository of its ETDs would improve the profile of graduate research on the four campuses and may create greater avenues for cross-faculty collaboration and greater exchange of information.

2. Retrievability

   It affords researchers 24/7 access to the theses and dissertations produced by graduates of the University. A central repository of electronic theses can improve the information flow and the sharing of resources among the four campuses, and ultimately minimize the waiting time for documents to be sent from one campus to another. For example, the four UWI Campuses can save on time and money when hardcopies do not have to be obtained through inter-library loan.

3. Flexibility & Creativity
   The introduction of an ETD service could provide new opportunities for the integration of digital multimedia content into the theses produced. This would augur well for those disciplines where images, video and audio could add value to the final thesis product.

4. Cost-effectiveness
   Students are currently required to submit a minimum of five (5) soft bound copies of their theses for examination, savings could be realized if an electronic version is accepted as a viable alternative. In addition, the costs associated with processing a hard copy thesis, storage and conservation can be significantly reduced for the University.

Electronic Theses and Dissertations System Implementation
The implementation of an ETD system at The University of the West Indies requires the involvement of a number of groups within the institution. It requires collaboration and cooperation of such entities as the University Libraries, departments of Graduate Studies, the Faculties, the Campus IT departments, and the students. To successfully develop an ETD submission programme, it is critical in the final analysis that high level support from university administration is forthcoming.

In order to implement an ETD System, the UWI would need to address a number of issues in the initial phase of development. These include:
1. Determination as to whether the submission of the ETD will be mandatory or optional;

2. The review and update of all associated policies and procedures for Graduate Studies and the Campus Libraries;

3. The provision of internal regulations that are guided by existing Copyright and Intellectual Property Laws;

4. Deciding whether the submission process for the ETD service will be completely automated.

UWI Campus Libraries Responsibilities

The Campus Libraries will have a critical role to play with respect to the provision of access, and the curation of the ETD collection. In addition, the Libraries will continue to advise faculty and graduate students on the particular faculty style guides for bibliographic referencing and citation. The latter will in fact become embedded into the information literacy programmes produced by the Libraries.

The Libraries, specifically the Alma Jordan Library at the St. Augustine Campus, will provide the technical infrastructure for the storage and access of the ETDs via the UWISpace

Institutional Repository. This platform will facilitate long term preservation of the digital objects and promote discovery of the theses through the associated metadata that the Libraries will produce. The existing full text theses collection in UWISpace and those from Mona's DSpace collection will form the basis of The UWI's Electronic Theses Collection.

Copyright and Access Rights

Each student will be required to sign a declaration form (***See Appendix I***). This form will include a clause granting the full text access to researchers, academic institutions and will give the University Libraries permission to take the necessary steps to preserve the digital format. In cases where the student wishes to withhold access or place an embargo on a thesis while an application for patent is in process, the student will so indicate on the form at the time of submission to the University.

Office of Graduate Studies and Research Responsibilities

The OGSR will be responsible for developing the ETD guidelines document for the students and faculty as well as ensuring that the technical infrastructure is in place to support the submission and approval processes for the ETDs (***See Appendix II***)

Recommendations

The following recommendations are proposed to facilitate the introduction of an ETD system at the UWI:

- The establishment of a cross-functional team consisting of representatives from Graduate Studies, the IT departments, the University Libraries, senior administrators of the University and representatives from the Guild of Students. ***To be convened by October 14th 2013.***

- The finalization of a Project Implementation Plan which outlines the activities to be undertaken in order to deploy the ETD system across all the UWI campuses. Elements of the project plan will include:

  a) the identification of policies, procedures, and workflows that should be developed for the creation, submission, approval, archiving and access of electronic theses.

  b) the design of the technical infrastructure, i.e. the hardware and application requirements that will support the submission process and the archiving of the ETDs

  c) the distribution of project tasks among the defined stakeholders. ***To completed by December 16, 2013)***

- The creation of an ETD web site to promote awareness and ensure that adequate guidance is provided to students and supervisors. This requirement can be facilitated via the GRIP Portal, and will include references to the relevant standards such as the Thesis Guide, bibliographic styles, citations, etc. –*Web site to be completed and launched by May 31st 2014*.

- The formulation of an orientation and training programme in partnership with Marketing and Communications for faculty and post-graduate students on the submission of ETDs. *This should begin as soon possible after the acceptance and approval of the ETD proposal.*

- The establishment of a workflow for the submission, review, approval, storage and access of the theses by *December 31st 2013*.

Matters for Approval

The Board for Graduate Studies and Research is asked to approve the following*:*

a. That all <u>final versions</u> of post graduate theses and dissertations will, as of August 1, 2014, be submitted in digital format to the Office of Graduate Studies on each campus

b. That the <u>original, signed, non-digitised version of the Declaration Form</u> will be kept on file in the Office of Graduate Studies on each campus

c. That the Office of Graduate Studies on each Campus will forward the electronic version of the thesis/dissertation to the Campus Library with a copy of the signed Declaration Form and any information regarding application for embargo on the thesis/dissertation

d. That such an electronic thesis/dissertation will become part of the University's digital repository UWISpace and will be maintained by the University Libraries.

e. Access to ETDs in UWISpace will be given as follows:

- Access to full document with permission to print – only permitted to UWI librarians

- Read only access to full document with electronically signed user copyright declaration – all current UWI staff and students

- External Researchers – Read only access to the abstract.

Works Cited

Bandara, Swarna. "Implementing Electronic Theses and Dissertations Project: University of the West Indies (UWI), Mona Campus". *Congress on Health and Information Libraries*. Nd. Web. 5 July 2013.

Weisser, Christian and Janice Walker. "Excerpted: Electronic Theses and Dissertations: Digitizing Scholarship for Its Own Sake." *Journal of Electronic Publishing 3.2*(1997): n.pag.Web.15 May 2013.

Jewell, Christine. "Electronic Theses and Dissertation System: Business Plan." U of Waterloo Library Planning and Priorities Group. 1999. Web. 5 May 2013.

September 20, 2013

Appendix I

THE UNIVERSITY OF THE WEST INDIES
UNIVERSITY LIBRARIES
UWISpace ELECTRONIC THESIS DEPOSIT AGREEMENT

<u>To be completed by candidate</u>

NAME IN FULL (BLOCK CAPITAL)

TITLE OF THESIS/RESEARCH PAPER/PROJECT:

FACULTY:

DEPARTMENT:

DEGREEE FOR WHICH THESIS/RESEARCH PAPER/PROJECT IS PRESENTED:

DATE OF AWARD OF DEGREE: _____

UNIVERSITY LIBRARIES
UWISpace ELECTRONIC THESIS DEPOSIT AGREEMENT

A thesis/research /project which is accepted by The University for the Award of a Higher Degree is placed in an *open access institutional repository*. The copyright of the thesis/research paper/project is retained by the author.

I AGREE AS FOLLOWS:

(*Please tick the paragraphs that apply*)

Electronic Access

☐ a. I declare that the Thesis is original and that I am the author and owner of the copyright of the Thesis. I grant The University of the West Indies permission to make available the Thesis in digitized format through the University of the West Indies' institutional repository UWISpace and the University Libraries for the purposes of non-commercial research, private study, criticism, review and news reporting, illustration for teaching, and/ or other educational purposes in electronic or print form. Rights granted to The University of West Indies and the University Libraries through this Agreement are non-exclusive. I remain free to publish the Thesis elsewhere in its present version or future versions.

☐ b. I grant the University of the West Indies Libraries permission to make this Thesis available to other academic institutions through interlibrary loan.

☐ c.   I give The University of the West Indies Libraries permission to take the necessary steps to preserve my thesis.

☐ d.   I declare that this authorization does not, to the best of my knowledge, infringe the rights of any third party**.**

Note: A candidate may apply to ………………… at the time of submitting the thesis/research paper/project for deposit in the Libraries or thereafter, for the following:-

☐ **e.** **I wish to personally retain for three (3) years the sole right to grant permission to copy my work for distribution.**

☐ **f.** **I have applied for patent therefore I wish to have my thesis/research paper/project and its abstract withheld from access for a period of one year. I am aware that if I need this period to be extended I would need to apply to the relevant committee for an extension for a period not exceeding three (3) years overall.**

Signed :_____   **Dated:_____**

<center>**Appendix II**</center>

<center>**<u>Electronic Theses Submission, Approval, and Archiving Workflow</u>**</center>

This workflow is meant to be initiated by the student post-examination, after the library and the Office for Graduate Studies and Research (OGSR) have signed off on the thesis. The OGSR will communicate with the student informing that the completed thesis can be uploaded.

1.   The OGSR receives notification from the respective campus library and examiner that the thesis meets manuscript and content requirements. The student would then be given permission by OGSR's staff to upload their thesis to the UWI Dissertation Submission website. This site will be established by the Campus IT department on behalf of the OGSR and it would be part of the GRIP portal.

2.   At the point of upload to the UWI Dissertation Submission site, the student will first complete the Electronic Deposit Form indicating agreement for the UWI to make the thesis available electronically for research purposes. The student would then provide brief metadata including: name, title, contact information, department, supervisor and up to 6 keywords. The student will also have the option to petition that there should be an embargo on the thesis, pending patent or publication within a stipulated time frame.

3.   Once the student has completed the metadata, the student will upload the thesis along with supporting files. The system will be designed to automatically encrypt the files upon submission. Once the documents are successfully uploaded, the student will receive a notification at the same time, indicating such. An e-mail announcement is also automatically sent to the staff of OGSR indicating the thesis has been submitted.

4.   OGSR verifies the thesis has been uploaded, an email alert is sent to the Acquisitions Department of the respective Campus Library, allowing authorized personnel from that department to download a copy of the document and the student created metadata from the respective site on the GRIP portal. The Acquisitions Department will then create a short Dublin Core record and upload the document into the Theses Collection located within the UWISpace Institutional Repository.

5.   The Cataloguing Department from each Campus Library will be able to access an UWISpace report online that lists the theses submitted to the repository over a specified period. The Cataloguers can then access the electronic thesis in UWISpace to create a full MARC record complete with the URL in the 856 field for the Aleph Catalogue.

6.   The UWISpace Administrators will modify the metadata associated with the thesis, using the MARC record as a guide to add subject descriptors to the Dublin Core record in the repository.

7.   The UWISpace Administrators, will alert the student, the University Libraries, and the Offices for Graduate Studies when the thesis is available online.

The workflow is shown in the diagrams below.

ETD Workflow

Start

OGSR receives signoff on thesis from Board of Examinations and the Library and grants student access to the UWI Dissertation Submission web site

Student logs on to the UWI Dissertation Submission web site and completes Electronic Deposit Form

Student enters basic metadata and indicates if there should be an embargo on the thesis

Student uploads the thesis and supporting documents

Thesis and supporting documents

Application encrypts the uploaded files and sends a confirmation email to student with file hash

Application sends OGSR staff an email announcement

Thesis Enbargoed? — Yes → End

No

Thesis to be added to Library's collection? — No → End

Yes

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