## ETD initiative of the University of the Free State: A Roadmap

Road mapping the ETD initiative of the Free State University

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#### Abstract

This paper examines the steps taken by the University of the Free State, library in an effort to implement ETD project. A university policy was revisited, Virginia Tech software was installed and an ETD database was established. To be assured of the direction to take a short survey was conducted to assess the faculty opinions of the project. As the University of the Free State Library form part of the Consortium as well the Forum for University Libraries in South Africa, this warrants the author to give a brief overview of the ETD initiative by other member Universities.

### Introduction

Academic libraries have always played a leading role in ensuring accessibility and dissemination of their Universities scholarly communication. Long time ago when Theses and Dissertations were only submitted in printed form, academic libraries were preserving them in specialised sections like Africana, Archives and Special collection section where researchers would easily access them. They were circulated to staff and students and also form part in the inter library lending scheme. On the other hand databases such as UMI, ASLIB, NAVTECH and UCTD were making T/D's bibliographic records for completed research papers available electronically.(SABINET) South African bibliographic network online which host the South African libraries national catalogue does also have access to the databases above. Currently SABINET is looking at a project to facilitate the establishment of a full text database of theses and dissertation. The advancement of technology in higher education learning has resulted in the emergence of computing tools that supports creation of library collections in electronic format<sup>1</sup> (Fox, 1999:1).

The ETD project therefore arose in the Free State University during an era when faculties were initiating the use of electronic media in teaching, learning and distance

education. The literature surveyed on benefits derived from ETD's draw the following conclusions:

- ETD's creates increased access for researchers to wider knowledge
- Serves as a powerful medium of expressing ideas
- Reduce photocopy costs incurred for post-graduate students
- Saves space for the library and graduate offices
- Prepare scholars for their professional practical exposure in electronic publishing
- Provides visibility and improved accessibility to the work of both scholars within and outside their country
- Promotes collaboration between research programmes at separate universities and polytechnics by making research output visible and accessible via a networked archive. <sup>2</sup>(Jewel: 2000, <sup>3</sup>Ubogu and Wilson: 1999).

It is quite obvious that research output constitutes one of the two elements most universities mission stands for. One could say,' learning and research' are the 'raison de`tre for universities existence; they are therefore the ' main reason' for us to be gathered here <sup>4</sup>(Zimmer: 2000).

The Universities as described by the above scholar to reassess or affirm their effectiveness, should play a leading role in "research". Research is the origin behind improving quality of human life and it generates the economic prosperity. Deducing from the above statements, one would say, Electronic Theses and Dissertations Networked Catalogue is a mechanism to improve sharing and administration of this important academic phenomenon.

Effective handling of electronic Theses and Dissertations automatically requires some collaboration between the faculties, library, computer service departments, administration and students. Academic libraries in most universities are always declared "centres of excellence" or

FOX, E.A., MCMILLAN, G.L., FORTON, J.L. (1999) The evolving genre of ETD's volume. Available URL. http://www.ndltd.org.pubs/genre.htm

<sup>2</sup> JEWELL, C. 2000. Campus Collaboration: The university of Waterloo, Electronic theses project. http://www.wuaterloo.co

Fox, E.A. MCMillan, Forton opcit
Ubogu, F.N. and Wilson ,D. 1997.Digital library initiative in a South African University in C.Davies and Ramsden eds. Electronic library and visual information researchproceedings of the 4th international ELVIR .London : ASLIB : 39 -48

<sup>4</sup> Zimmer

integral part of their institutions, which I think, is the reason why ETD projects in most countries and in most universities are centred in the libraries. There is also a supporting belief that the university funding or subsidy increase is influenced by the research output of that university. The publicity of the university research output to the world through (Electronic Theses and Dissertation) project automatically promotes and encourages visibility of each country's research output.

The implementation of the ETD project by the Virginia Tech through the establishment of the Networked Digital library of theses and dissertations is now becoming a universal phenomenon. According to <sup>5</sup>Fox (1999), the ETD project is an initiative aimed at promoting education and research to change the future of scholarly publishing to be technologically aligned. The gospel on Electronic theses and dissertations spread from Virginia Tech to the entire world.

## Electronic Theses and Dissertations: A South African perspective

The ETD project in most South African Universities was initiated by Rhodes University in 1998. The project was definitely received with enthusiasm and the gospel flowed through to other institutions by means of Library forums and meetings. Some institutions approached the SYSTEM through their Consortiums and others drove the SYSTEM individually.

The ETD implementation was delayed on the SEALS (South East Academic Library System) as the member institutions were busy with the installations of the new library SYSTEM (Innopac Library SYSTEM). Rhodes University at the same time progressed independently by registering its TD's on the NDLTD catalogue hence it is amongst the few institutions that have already fully implemented the project.

SEALS established its steering committee with members from all seven institutions. Funding was set aside from the Mellon Foundation however each institution was mandated to do an institutional IT audit to ensure project feasibility. This funding was earmarked for ETD necessary equipment and staff training to make it easy for all members to be on board. The ETD project requires students to submit to the library or directly on the database, theses or dissertations in electronic format. In some institutions of higher learning in South Africa, the standard submission of TD's is still printed bound copies.GAELIC members such as University of Pretoria, Rands Afrikaans ubiversity, University of South Africa and Witwatersrand University have on different levels implemented the ETD project .

The slight progress made by South African universities could have been facilitated by the justification shown in<sup>6</sup> (Ubogu: 2002) which reported that out of 37 institutions of higher learning in South Africa, 22 universities in the country were allowing students to submit digital files. The submission of T/D digital files in the library therefore made ETD project easy to adopt . The University of Pretoria and Rhodes University seem to be the only universities engaged in the ETD full implementation. South African institutions mostly know the ETD concept therefore its implementation by all is given a serious thought.

# Background to the University of the Free State

The University of the Free State is situated in Bloemfontein, which is in the Free State of South Africa. Free State province has only two institutions of higher learning, which are the UFS and Technikon Free State. University of the Free State is a dynamic university that exhaust its energies in an effort to excel in fulfilling its vision and mission. The university vision is " to be an excellent, equitable and innovative university. Being established in 1904 its mission in summary is, within financial sustainability to promote application and transmission of knowledge and create a dynamic learning environment that have the following :

- A sound academic culture
- Critical scientific reflection
- Relevant scientific education
- · Pure and applied research and
- Community service

The university of the Free State was traditionally an Afrikaans university catering for only Afrikaans speaking students. Teaching therefore was primarily in Afrikaans. The changes in the South African government since its rebirth in 1994 brought some changes in the operations of the university. It has established a new policy on the use of bilingualism in teaching and learning which has resulted to a multiracial, multicultural student population. The university of the Free State has enrolled in 2003, 18 170 student population and more than 50% of the student population are black students. Parallel medium ( the use of English and Afrikaans ) is used to present lectures to accommodate this multiculturalism. Annually it graduates approximately 3000 senior degrees namely honorary, masters and doctoral degrees. In 2002 out of 140 theses and dissertations submitted to the Library 90 of them

<sup>5</sup> Fox,E.A,McMillan,G.L. Forton,J.L. 1999. The evolving genre of ETD's volume. http://www.ndltd.org.pubs/genre.htm

<sup>6</sup> Ubogu,F.N. 2002. Spresding the ETD gospel: A Southern Africa perspective in applying new media to scholarship .Proceedings of the 3rd international symposium on ETD.Florida : University of Florida

were in CDROM format. In 2001 out 133 submitted T/ D's 66 of them were in digital files and in 2000 the out 66 submitted documents 13 were in digital files. Currently the Library have 4 855 collection of theses and dissertation titles. The above background made the Library to have less difficulties in identifying faculties to easily put on board for ETD project.

The University of the Free State Library and information services have three branch libraries, which are the Music Library, Medical library, and gwagwa campus library. It is also one of the academic libraries that is widely known by its state of art technology, an interactive well resourced website that is widely used to facilitate access to information. All Technical services like acquisition, cataloguing and collection development are centralised however they are done in the Main campus library. The main campus library which host the NDLTD project have seating facilities that could cater for approximately 1000 students .It also has the following facilities: individual and group study cubicles, seminar rooms, three spacious computer laboratories situated in different floors of the building and a high tech auditorium which is commonly used for Library presentations, conferences and classroom activities. .It is on these laboratories where library training for staff and students takes place. All library services are presented electronically namely circulation of documents, processing etc. Special emphasis is placed on user training and information provision. The Library education and training programme do take into consideration the student heterogeneous backgrounds. Apart from having book collection of more than 500 000 books, subscription to 3 000 journal titles, the library has a wide range of electronic databases and access to all various sorts of curriculum related information available worldwide.

# University of the Free State : ETD APPROACH

Policy: The UFS library approached the ETD initiative as part of the evolving virtual library supporting e learning, e-degrees and telematic teaching. To be aligned with the international networked digital theses and dissertations project, the university policy on Theses and Dissertations submission was revised.<sup>7</sup> The old one allowed submission of:

- Two printed bound copies to the faculty
- Two printed bound copies to the library and/or stiffy diskettes. The submission of an electronic version was not compulsory.

- In November 2002, the Senate approved amendment to the regulation as a result the new submission regulation allowed:
- Two printed bound copies (to the faculty)
- One printed bound copy with the same document produced in Microsoft with embedded fonts or PDF format on CD-Rom or on stiffy diskettes be submitted to the library. The file must be saved as a single file.
- The abstract must be in both English and Afrikaans
- The policy was made compulsory to all post-graduate students developing Theses and Dissertations.

**Pilot project**: was instituted, Virginia Tech software was installed, with the main aim to test the project with existing Theses and Dissertations submitted in required format. This trial resulted to the loading of 17 theses and dissertations most were from the faculty of Natural Sciences. These digital files are made available through the intranet on the URL: *http://lourie.uovs.ac.za*. This has also made the Library to easily identify faculties that supports the submission of electronic files. **Steering Committee** : While the policy was being communicated from the Executive management, Senate down to the faculty and Library board, the library requirements needed to implement the ETD project. The committee established was composed of the following:

- Project leader
- Library IT specialist
- Information Literacy Librarian
- Web developer / E-Resource Cataloguing Librarian
- Africana and Special Collections Librarian
- Technician from Computer Service department
- Faculty Administrator

Two meetings were held, the first meeting was to put everyone on the team on board on ETD project benefits and the other meeting was to look at necessary issues to be put in order namely: demonstration of the ETD project to Library staff and inclusion of the aspect to the Library guides.

The Steering Committee examined processes to be followed and practical guidelines on Theses and Dissertations submission to the library were revisited to include electronic version of T/D's as compulsory aspect. It was also realised that the project should form part of the new post-graduate student orientation and information literacy programme.

ETD project was aligned to the existing "Research Toolbox" training. Research toolbox is interactive software that guide students developing research documents. Linking the ETD project to this training we thought it will enable postgraduate students to understand the reason for amendment of the T/D's policy as well as the destiny of their research product. The Steer-

<sup>7</sup> University of the Free State :policy : http://www.uovs.ac.za/intranet

ing Committee's role was also made easy by the fact that most senior or post-graduate programmes at the university have to access web based information in their learning.

**Marketing Strategies :** Firstly, the project leader (author) was mandated to conduct a series of marketing initiatives:

- ETD demonstration to the entire library staff as well as to subject librarians was the first strategy taken. The project leader had an opportunity of attending the session presented by Edward Fox (Virginia Tech ETD project coordinator) for SEALS and at the same time the Virginia Tech software was already in place with documents to justify the project viability.
- Secondly, the ETD demonstration for Subject Librarians took place in February 2003. The other Subject Librarians had already been to orientation sessions with the first batch of post-graduate students. According to Subject Librarians, faculties were very eager to see the immediate progress on the project and they also promised to encourage their students to submit digital files. Faculties like Natural Sciences offered the library rights to mount their previous years Theses and dissertation on the NDLTD catalogue. An article about the Library ETD project and new requirements for students was developed for the University community publications, Library webpage and on the Library electronic newsletter.

**Testing Faculty Opinions** :The Project leader (author), after realising that the University management and the library supported implementing of the ETD project. It was necessary to consolidate the programme. The literature was consulted to review issues for necessary considerations before project implementation. The following issues were identified:

- Testing the knowledge of faculties on electronic publishing and implications of that on faculty staff and students
- Out of six faculties surveyed, five faculties supported and showed willingness in sharing their research output with the global communities through Internet publishing.
- These faculties believe there must be indication of further work developed (viz. Journal article) on Theses and Dissertations so as to save the authors marketing costs whilst the university on publishing them will gain visibility and credibility to other counter universities internationally.
- As a matter of fact the University, through Theses/ Dissertations publicity will gain visibility to the world and the student in turn will benefit by accessing the international information market. Having access to research completed in their studying fields automatically give ETD project an added bonus and credibility to students.
- The second question centred on the burning issue "copyright". The purpose was to assess how sensitive

the faculties are with the matter. The copyright resides with the University (which in simpler terms means the University can do anything with the work produced under its name). The faculty staff seem to be in full support of that law hence no further comments were made.

 The third point tested, was the faculties opinion of publishing abstract or full text on the Internet. All the six faculties supported the idea of publishing Theses and Dissertation abstracts or full text through Internet if the University allowed so. Out of discussion certain issues mentioned were elements that could directly or indirectly affect the full text availability online, namely:

Most abstracts of T/D's produced at the University of the Free State in English have their full text written in Afrikaans which makes it difficult to approve their availability internationally if reading them will have language barriers. The project team realised that for ETD implementation in the University of the Free State, the library must initially make abstracts available with full text having "restricted available on request. To be quite honest, each university has its own culture and culture always affects the organisational operations. The University of the Free State is one of the Universities that favours decentralised faculty operations.

The Subject Librarians attend faculty boards and each department has a Library liaison committee facilitated by the library and the department concerned. selling a new initiative therefore takes time to reach many constituents.

- The fourth issue investigated was " quality assurance", the steering committee felt, as the Library will be facilitating the project, digital files to be submitted to the library must be ensured that they abide with ETD project requirements. The faculty coordinators in this regard will assist in maintaining standards on the produced work and the Library will verify quality of the files.
- The last question was based on whether faculties have dedicated personnel that could be trained to facilitate with the library staff logistics in project implementation. Four faculties have adequate people; others will consider hiring (tutors) students registered on the programmes for this exercise.
- The administering of these questionnaires assisted the project leader to develop with a team, some interim plans to carry the ETD forward. To be quite honest considering the above issues from the faculties; the University of the Free State Library has no choice at this moment but to carry the project forward from its embryonic to maturity stage. We could say for now the future for ETD project will be in the Library, access to our T/D's abstracts by the international community will be made available and mechanisms to view fulltext will be considered for long term plans.

# University of the Free State: ETD Model to follow

**Current scenario:** The library decided to pilot the project by using retrospective T/D's in Virginia Tech (NDLTD) software. The electronic theses and dissertations are now available on the Internet: *http://lourie.uovs.ac.za*<sup>8</sup>. Before the end of 2003 the whole world will see the result of this project. The availability of abstracts internationally and full text through intranet will form part of our ETD initial plan till the university decides otherwise.

*Implementation plans*: The library will facilitate the project by taking the responsibility of loading the ETD's on the NDLTD Catalogue for students. The library intends to initially start the process this year immediately after the second graduation, which will take place in September 2003.

"Education" is said to be effective when learning take place from known to the unknown. In that case the library on the Research toolbox-training programme will include ETD database demonstration. The new guidelines for submission of theses and dissertations in the library have been developed and copies were distributed to masters and doctoral students and that process is still going on. Concurrently the library is currently loading the available electronic theses and dissertations version with intentions to avail internationally when the new policy has reached every statutory level in its communication.

Medium and Long-term Plans: The library department is fortunate in reporting to the Registrar (who was the previous director of the library). Both the computer service department and the library report to her and she has well versed interests on the acceleration of the use electronic media in learning. The University is currently constructing a state of Art laboratory next the library building. Both the library and the Computer Services department will share this laboratory. This centre is earmarked for an "ETD Centre". Training will be conducted in the library, self-help on the ETD mounting, with the assistance of a Librarian and computer centre staff will be done also in the centre. The planning phases undergone for future ETD implementation in the University of the Free State leaves the Library with the following commitments:

- The library will ensure NDLTD Catalogue maintenance and monitoring (It will automatically be placed somewhere visible to library users) preferably the webpage
- The Cataloguing section will ensure all Theses and Dissertations have necessary features like: (keywords and proper indexing)The library will ensure ETD project marketing by developing guides how to use the ETD database.

### **Lessons Learnt**

The software was compatible to the library server. The server was already running on the Unix software using the Linux language. The ETD software became an additional feature on the web page for post-graduate students e-learning and distance education e-degree programme

- I. The loading of the Virginia Tech Software also made it easy for the library to conduct proper demonstrations on the tested database.
- 2. The amendment to the University policy also created an opportunity for the Library to facilitate implementation and get involved in forums like this conference.
- 3. Issues like copyright clearance must be addressed and be clarified to faculty staff and students.
- 4. The University must clearly indicate its support of electronic publishing direction to avoid misinterpretation of the project by students.
- 5. Collaboration between the Library and the Computer Service department made the project able to get its future home in our universities viz. the voluntary offering of computer laboratory as an ETD centre with involvement of Library staff in training students.
- 6. Expertise must be developed within the Library division to ensure project sustainability and if that seem to be impossible, sharing of existing expertise within the country be considered.
- 7. The use of existing Virginia Tech training software also saved the library time as the software can be easily customised .
- The University is quite aware of the Language barriers therefore, knowing that translation services will be organised encouraged the library to carry on with the implementation processes.

## Conclusion

Theses and dissertations usage at the University of the Free State have always been on high level of demand to post-graduate students.Making them available on the Internet, will not only provide the students with easy access but will also alleviate pressure on staff in locating them time and again for library users. The ETD project will definitely be an enhancement in the library establishment of the virtual library viz. web OPAC and availability of reference databases (full text) online.To end what I see as the ideal solution in running the NDLTD project nationally and internationally would be:

• Ensuring that all universities and technikons (polytechnics) in the World contribute to the development of the NDLTD catalogue

<sup>8</sup> University of the Free State: http://www.uovs.ac.za/library.virtual library

- Each country establish a centre that could facilitate registration of institutions to the project and maintenance of the national ETD catalogue
- Expertise be developed in each country so as to sustain and maintain the ETD project

Virginia Tech is generous enough to provide the ETD Software free to interested institutions but it is quite important to consider the fact that, not all universities and technikons especially in South Africa possess servers that are compatible with the software. Some libraries are even dependent on their university servers to access online facilities of which space on the servers would be a problem. The issues mentioned above could hinder the progress of the ETD implementation in South Africa. Symposium like this at the end of the day should devise mechanisms of making the ETD project affordable and a realistic universal phenomenon be established bearing in mind each country's state of network connectivity.

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