

## INDIAN ACADEMIA ON COPYRIGHT AND IPR ISSUES OF ELECTRONIC THESES AND DISSERTATIONS

J K Vijayakumar  
T A V Murthy  
M T M Khan

### Abstract

The idea of E- Theses and Dissertations (ETD) is coming up in International scenario, which can be easily located, readily accessible and delivered over the web. This paper analyzing the opinions of selected Ph D Researchers and Guides from selected Indian Universities on Copyright and IPR issues related to ETDs. On the basis of the output, the paper suggests that Universities can start collecting e-format of theses, creating a digital archive for easy access. But in terms of access, still only a minimum majority is favoring online global access to Indian research. This may be because of Copy Right Issues, Chances of Plagiarism and Poor Quality in Research, which may be solved through policy frameworks and enhancing standards through national agencies like UGC at national level.

### 0. INTRODUCTION

Digital libraries of electronic theses and dissertations (ETDs) offer an alternative to the waste of valuable academic scholarship in the form of Theses and Dissertations (TDs) and offer researchers and University Libraries in India opportunities to explore the possibilities electronic publishing trend in academic sector. The emergence of UGC Infonet, the aspiring and dream project of University Grants Commission, which also aims at Content Creation by Indian Academic Sector, will definitely boost this idea. (*Vijayakumar, Murthy and Khan, 2004*). Copyright issues related to university research output in the form of theses and dissertations, are discussed in great deal already with concerns of the researchers and academia. Theses and dissertations have long been regarded as the basis of university research. They represent the outcome of focused and extensive studies, involving intellectual labor over several years. Rapidly developing networking and digital library technologies are the reasons for ETDs (Electronic Theses and Dissertations) gaining momentum in university campuses worldwide. In recent years, many Indian universities have realized the importance of this new kind of digital resource and some local ETD programs have been carried out to increase availability of theses and dissertations. The adoption of electronic theses and dissertations in a university will require a number of alterations to the existing copyright agreements between the rights holders, usually the primary researcher, and those responsible for theses management, usually the university library. Before entering into any agreements it is critical to determine who actually owns the copyright to the work as there are a number of key stakeholders in the production of theses, including the author, host institution and perhaps the funding bodies (*Andrew, 2004*). Copyright of ETDs has to be discussed separately in Indian condition and this paper tries to describe the ETD as a new concept in University libraries, its implementation and the opinions of Indian Academia about their acceptance. The opinions collected through a national level sample survey conducted among selected Ph D Scholars and Research Guides of Indian Universities receives funding from UGC, are analyzed along with a description of copyright and IPR issues related to theses and dissertations.

## **1. ELECTRONIC THESES AND DISSERTATION**

There is some variation between countries in the use of terminology e.g. some universities refer to doctoral theses and some to doctoral dissertations. The term ETD accommodates these differences and is becoming used internationally. It may be an electronic version of a printed thesis where the old document that has been scanned and converted into PDF. Alternatively it could be a recently completed piece of work produced and archived in Word or produced in Word and converted into PDF in order to be made available on the Web. ETDs allow more adventurous students to express their research results in creative and flexible ways that would not be possible if they were limited to paper based output. 'Born digital' theses may include audio and visual material and may not even be in a traditional linear format.

## **2. IPR AND COPYRIGHT FOR ETDS**

Creating conditions that favor the production of useful ideas introduces one of the most complicated matters associated with ETDs—that of intellectual property protections for authors. Any piece of Information will survive only through high accessibility and continued use, where new generations of scholars must access and incorporate the work of others into their own. They have to continually reproduce and develop the ideas society needs. Improved access to TDs through ETDs can contribute greatly to the dissemination and preservation of university research, but at the same time, intellectual property protection for researchers is also very important. Copyright protects the labor, skill and judgment that someone - author, artist or some other creator - expends in the creation of an original piece of work, whether it be a literary work, a piece of music, a multimedia programme, a Web page, a painting, a photograph, a TV programme, or whatever (Oppenheim, 2004). The copyright issue involves two components: Protecting the information/work produced as part of the research program; and Granting license to University or to any ETD Programme to make the work available for use. This also includes obtaining permission to use parts of the work that have already been published in other sources (University of Pittsburgh ETD Website, 2004).

In the world of scholarly publishing, authors create and intellectual output, which will be marketed or distributed by the publishers and the libraries will collect, preserve, organise and disseminate the information. The networking world really creates concerns on Copyright of digital documents, which can be easily downloaded and reused. In exceptional circumstances, where the thesis research has been particularly innovative, and there is potential for commercial exploitation, it may be desirable for the author to apply for a patent. A patent application may be successful only if the invention has never been made public in any way before the date on which an application for a patent is filed. It also must involve an inventive step and be capable of industrial application. These issues concerns the ETD promoters worldwide to take the necessary steps to safe guard the copyright issues for the real scholarly works done by the research scholars.

## **3. LITERATURE SURVEY**

In a recent survey conducted in China by CALIS, they let students and their advisors to determine the online accessibility of their ETDs. The majority of students allowed their ETDs to be viewable online soon after submission, while the others elect to protect their ETDs for a certain period of time. For example, of the 2,340 ETDs submitted by students of Shanghai's Jiao Tong University in 2003, 69 percent of wanted their ETDs be accessible online immediately, 22 percent gave permission for their ETDs be viewable after one to three years, seven percent agreed to their work being made available after four to five years, and only 2 percent wanted their ETDs to be

protected for more than five years, or not to be accessed at all. The fact that most students give permission for their ETDs to be viewable online within five years of submission will greatly increase the use and accessibility of ETDs (Jin, 2004).

The Vidyanidhi Digital Library Project at Mysore University worked for developing a policy frameworks for creating an archive of theses and dissertations and identified most of the copyright issues related to scholarly communication apply equally to the world of theses and dissertations. It is argued that scholarly work should be freed from Copyright jargon, because the university researches usually supported by public funds and based on Collaboration. The Lack of formal publication practices result in the lost of scholarship and intellectual heritage. The tradition of a doctoral student defending the thesis in public implies that doctoral research works should be made publicly accessible (Urs, 2004).

Questions about intellectual property are often tied to concerns about whether electronic publication of a thesis or dissertation constitutes prior publication with respect to future efforts to publish student research as a book or a journal article. Much confusion surrounds these discussions, and because of Web technology and the publication opportunities it affords are so new, answers to questions that arise do not often appear simple or clear-cut. A survey of Faculty and students in Virginia Tech University reveals that though it is obviously still an unresolved issue, an ETD would not preclude book or journal publication of research should be encouraging to students and their faculty advisors who are working in an increasingly electronic environment (Seamans, 2003).

But, in another survey available at <http://lumiere.lib.vt.edu/surveys/results/>, 53 publishers were asked the following question “*According to the editorial policy governing the journal(s) identified, under which circumstances would a manuscript derived from a WEB-BASED dissertation be considered for publication?*” 25 publishers (47.1 percentage) welcomed this idea where 10 publishers (18.87%) suggested that it should be considered on an individual basis.

In a professional paradigm where the publication of original work is the coin of the realm, students and faculty advisors are naturally concerned about providing open access to dissertations that may or may not count as prior publication or that contain information considered sensitive in fields where competition for original credit is high. However, in a recent survey of journal editors and publishers, 82% said that an online thesis or dissertation widely available through a Web-based archive would not be considered prior publication according to their journals' existing policies; only 4% said that an online thesis or dissertation with access limited to campus or institution would be considered prior publication. Yet, 40% of graduate students who publish ETDs are advised by faculty to restrict access in order to protect their professional interests. Such restricted access threatens to undermine the very purpose for which the ETD Networks like NDLTD was created (Edminster and Moxley, 2002).

In this context it would be appropriate to take the opinion of Indian academia, where the idea of electronic theses are getting much attention day by day. In the context of great difficulties facing by us for getting access to Indian University research in the form of Ph D Theses, the scenario of developed countries where they are able to procure the theses documents through variety of modes, will have to treat as special case.

#### 4. RESEARCH METHODOLOGY

As part of the doctoral research work undertaken for proposing a model Electronic Theses and Dissertation for Indian Universities, a sample survey has been conducted at national level. The survey was focused on Ph D Research Scholars, Research Guides and Librarians of selected Indian Universities funded under UGC, and connected or getting connected to UGC Infonet Programme. Questionnaires were sent or distributed to the participants of INFLIBNET's E-Resources awareness programmes consisting of Research Scholars, Guides and Librarians, who are familiar with latest IT developments taking place in Information and Communication. Separate questionnaires are also sent to University Librarian, but we are not taking that data for this article.

In the separate Questionnaire sent to Researchers and Guides, there were few questions related to their willingness to provide online access to their Ph D Thesis and copyright problems, which are being described below.

#### 5. DATA ANALYSIS AND DISCUSSIONS

##### 5.1 Research Scholars

163 Ph D Research Scholars were participated in this survey covering 26 Universities across the country. There were Four Questions related to the scope of this article, ie. copyright practices of Doctoral Research, and their responses are analysed below.

Q. 9.	<i>Are you willing to provide an electronic format (soft copy) of your Ph D Thesis to your University?</i>	Yes	No
		140 (163) (85.89 %)	23 (163) (14.11%)
		<b>Group-A</b>	<b>Group-B</b>

Table – 1

Out of 163 Ph D Research Scholars, 140 said Yes (85.89 %) and only 23 (14.11%) are not ready to provide an electronic format of their Ph D Thesis to the University. We will identify them as Group-A (Ready to provide e-format to University) and Group-B (Not ready to provide e-format to University), as shown in the Table-1, for data analysis.

Q.10	<i>Do you support online full-text access to your Ph D Theses through a Digital Library?</i>	Yes	No
		135 (163) (82.82%)	28 (163) (17.18%)
		<b>Group-C</b>	<b>Group-D</b>

Table – 2

From Group A, 135 Scholars (82.82%) are said Yes and 28 Scholars (17.18%) including 5 from Group A and 23 from Group B, said No. Group C represents the Scholars ready to provide online access to their work and Group D represent those who are not willing.

Q. 11	<i>If Yes, what can be the access policy?</i>	On Library Intranet, for users coming to library	On Campus Intranet, for your University use only	On internet, for global access
	<b>From Group C</b>	22 (135) (16.30%) <b>Group E</b>	18 (135) (13.33%) <b>Group F</b>	99 (135) (73.33%) <b>Group G</b>

Table – 3

Out of Group C, 99 scholars are ready for providing global access to their work through Internet (Group G – 73.33%) and 18 Scholars are ready to provide access on Campus network for using inside the University (Group F – 13.33%) and other 22 scholars are ready to provide access only on Library Intranet (Group E – 16.33%).

Q.12	<i>If No, what are the reasons:</i>	Copy Right Problems	Chances of Plagiarism	Other Reasons
	<b>Out of Group B</b>	23 (23) 100%	10 (23) (43.48%)	Not relevant for this article
	<b>Out of Total Scholars</b>	23(163) (14.11%)	10 (163) (6.13%)	

Table – 4

All 23 Scholars from Group B, who are not ready to provide electronic format of their Ph D Thesis, identified “Copy Right Problem” as reason for their unwillingness. 10 Scholars from Group B also identified “Chances of Plagiarism” as another reason. Only 2 scholars responded that they are not interested for a wider access to their Thesis. Other responses are not relevant to the topic of this article, and it was very few responds or nil response for other reasons.

There is an observation from one scholar that electronic copies should only be in readable format with controlled access, and not to be downloaded or printed. Another Researcher urged upon some kind of restrictions to prevent the duplication (Plagiarism). But it is very clear that only 14.11 percentage of the total Researchers surveyed identified Copyright Problems as a threat for providing online access to full text theses, and only 6.13 % feared about Chances of Plagiarism in a online environment. Scholars from Group E and Group F, who are not ready to provide Global Access to their thesis, have to be surveyed again to understand the reasons of their unwillingness.

## 5.2 Research Guides

75 Ph D Research Guides were participated in this survey covering 25 Universities across the country. There were Four Questions related to the scope of this article, ie. copyright practices of Doctoral Research, and their responses are analysed below.

Q. 9.	<i>Do you support in obtaining an electronic format (soft copy) of Ph D Theses of your scholars, by the University?</i>	Yes	No
		68 (75) (90.67%) <b>Group-1</b>	7 (75) (9.33%) <b>Group-2</b>

Table – 5

Out of 75 Ph D Research Guides, 68 said Yes (90.67%) and only 7 (9.33%) are not supporting the idea of obtaining an electronic copy of their Researcher’s theses by the University. We will

identify them as Group-1 (Supporting the provision of e-format to University) and Group-2 (Not supporting the provision of e-format to University), as shown in the Table-5, for data analysis.

Q.10	<i>Do you support online full-text access of them through a Digital Library?</i>	Yes	No
		65 (75) (86.67%) <b>Group - 3</b>	10 (75) (13.33%) <b>Group - 4</b>

Table – 6

From Group 1, 65 Guides (86.67%) are said Yes and 10 Scholars (13.33 %) including 3 from Group 1 and 7 from Group 2, said No. Group 3 represents the Scholars ready to provide online access to their work and Group 4 represent those who are not willing, in the Table – 6.

Q. 11	<i>If Yes, what can be the access policy?</i>	On Library Intranet, for users coming to library	On Campus Intranet, for your University use only	On internet, for global access
		8 (65) (12.31%) <b>Group -5</b>	12 (65) (18.46%) <b>Group-6</b>	45 (65) (69.23%) <b>Group-7</b>

Table – 7

Out of Group 3, 45 Guides support the global access to their Researcher’s work through Internet (Group 7 - 69.23%) and 12 Guides support access on Campus network for using inside the University (Group 6 - 18.46%) and other 8 Guides support access only on Library Intranet (Group 5 – 12.31%).

Q.12	<i>If No, what are the reasons:</i>	Copy Right Problems	Chances of Plagiarism	Others
	<i>Out of Group 2</i>	8 (10) (80%)	10 (10) (100%)	Not relevant
	<i>Out of Total Scholars</i>	8(75) (10.67%)	10(75) (13.33%)	

Table – 8

All 10 Guides from Group 2, who are not ready to provide electronic format of their Ph D Thesis, identified Chances of Plagiarism as reason to their unwillingness. 8 Guides from Group 2 also identified as Copy Right problem as another reason. Other responses are not relevant to the topic of this article, and it was very few responds or nil response for other reasons.

There is a suggestion from three Guides to provide only title and abstract/synopsis to avoid Plagiarism. Another Guide suggested that full Text could be made available only after two years of award, to give sufficient time to the scholar for publishing papers or book. Quality, Standard and Plagiarism were the concerns of few Guides. Only 10.67 percentage of the total Guides surveyed identified Copyright Problems as a threat for providing online access to full text theses, and only 13.33 % feared about Chances of Plagiarism in a online environment. Guides from Group 5 and Group 6, who are not supporting Global Access to the theses literature, have to be surveyed again to understand the reasons of their unwillingness.

## 6. FINDINGS AND SUGGESTIONS

An attempt has been made to go into the nitty-gritty's of copyright and IPR issues relating to Electronic Thesis and Digitization in Indian context. Even though Majority of participants in the survey expressed their willingness to provide electronic format of their Doctoral Theses, a considerable number of them expressed apprehensions to provide Global online Access (Groups 5,6,E and F). This indicates that the hosting of Indian intellectual content in electronic form for the Global access is still an issue among a considerable academic fraternity. Enough protections on copyright, digital management rights, repositories' rights and responsibilities, digital preservation, access and distribution, Metadata, legal responsibilities etc need to be thoroughly worked out for protecting the scholar's contributions. It was also felt that efforts are needed to improve the quality of content on par with international standards with uniform pattern so that retrieval, establishment of open archives and other related technologies could be plotted for the benefit of worldwide ETD efforts. It is therefore essential that bodies like UGC should evolve a regulatory policy mechanism in maintaining standards, quality, proper submission and publication practices for Doctoral research both in print and online environment.

## 7. CONCLUSION

Mean while, our universities and librarians must take up the challenge to preserve and make available the key intellectual product of their institutions to the world, and the Internet presents a wonderful opportunity for us to do so. It is a fact that many of our Universities do not have full Internet access, but it should not deter us from collecting electronic files along with print copies of theses and dissertations produced in their institutions. It will give an opportunity for popularizing the idea of Digital Library and E-Publishing in particular in respective Universities (Vijayakumar, Murthy and Khan, 2004). INFLIBNET has already hosted an online database of Theses containing around 1.6 lakhs of bibliographic records of Ph Ds submitted to Indian Universities. Full text of existing theses collection can also be made available by converting them in to digital form. Metadata can be centralized in a common database at the coordinator institution site where, ETDs will be accessed through a single-web gateway, ie, INFLIBNET under UGC-Infonet (Murthy, Cholin and Vijayakumar, 2004). The authors hope that the issues and fear will go away in due course of time, and India will definitely contribute to the ongoing ETD efforts at International level.

## 8. REFERENCES

1. Andrew, Theo (2004). Intellectual Property and Electronic Theses. <http://www.jisclegal.ac.uk/publications/ethesesandrew.htm>, 22 September 2004
2. Edminster, Jude and Moxley, Joe (2002). Graduate Education and the Evolving genre of Electronic Theses and Dissertations, *Computers and Composition*, 19 (1), April 2002, Pp 89-104.)
3. <http://lumiere.lib.vt.edu/surveys/results/>
4. Jin, Yi (2004). The development of the China Networked Digital Library of Theses and Dissertations, *Online Information Review*, 28 (5), 2004, Pp. 367-370
5. Murthy, TAV, Vijayakumar, JK and Cholin, VS. UGC-INFLIBNET initiatives in e-journal consortia and digital library of doctoral theses for Indian universities. Paper accepted for *National Conference on Digital Library and e-Theses (NCDLET 2005)* held during January 7-8, 2005 at Jadavpur University, Kolkata.

6. Oppenheim, Charles (2004). Recent Changes to Copyright Law and the implications for FE and HE, <http://www.jisclegal.ac.uk/publications/copyrightcoppenheim.htm>, June 2004.
7. Seamans, Nancy H. Electronic theses and dissertations as prior publications: what the editors say, *Library Hi Tech*, 21 (1), 2003, Pp. 56-61
8. University of Pittsburgh ETD Website (2004)  
<http://www.pitt.edu/AFShome/g/r/graduate/public/html/etd/copyright.html>
9. Urs, Shalini (2004). Copyright, academic research and libraries: balancing the rights of stakeholders in the digital age, *Program: electronic library and information systems*, 38 (3), 2004, pp. 201-207
10. Vijayakumar, JK, Murthy, TAV and Khan, MTM (2004). Accessing Indian University Research Literature: importance of ETDs in the verge of UGC-Infonet. In Chandra, Harish; Pichappan, P and Kundra, Ramesh; ed. *Conference Papers of the 22<sup>nd</sup> Annual Convention and Conference of SIS (SIS-2004), Chennai, India. 22-23 January 2004: 53-57.*
11. Vijayakumar, JK, Murthy, TAV and Khan, MTM (2004). Electronic Theses and Dissertations for Indian Universities: A Framework. In Murthy, TAV and others, ed. *Conference papers of 2<sup>nd</sup> PLANNER-2004, Imphal, India, 4-5 December, 2004: 65-70.*

Published in Murthy, TAV and others, ed. *Conference papers of International CALIBER-2005, Kochi, 2-4, February 2005. Ahmedabad: INFLIBNET Centre, 2005, Pp 697-704*  
© INFLIBNET Centre, Ahmedabad