

OPEN ACCESS ARCHIVES OF DOCTORAL DISSERTATIONS IN THE MAHATMA GANDHI UNIVERSITY: A STUDY OF THE FEASIBLE ACCESS BY THE RESEARCH SCHOLARS

Jasimudeen S and Maghesh Rajan M

Mahatma Gandhi University Library, Kottayam

Abstract

The remote access of full text resources is easier now days as a result of increased sophistication and availability of technology. Conversion of documents to digital form is a major milestone in the direction of making communication more transparent and flexible. Theses and dissertations are supposed to be an untapped and under-utilised asset. The emergence of ETDs and studies on their use and access reveal the fact that the user community needs the digital versions of documents for their immediate research needs. The purpose of this paper is to provide an overview of Electronic Theses and Dissertations (ETDs) initiative of Mahatma Gandhi University, Kottayam, Kerala. The general pattern of information source access by the scholars was given an importance for the study. A pattern of descriptive survey design was adopted to support the study and a questionnaire was used to collect data. More than 125 respondents were selected in random from major braches of subjects indented for the study.

KEYWORDS: Electronic Thesis and Dissertation (ETDs), On-line Access, Deep indexing, E-Initiatives, Archives, Unicode, MGU theses, Nitya D'Arch

INTRODUCTION:

Availability of documents in the e-format version is a major phenomenon of the information explosion era. All are aware about e-mail, e-journal, e-book, e-learning etc. ETDs (Electronic Theses and Dissertations) are yet another member joined to the large e-family recently. "An ETD is a document that explains the research or scholarship of a researcher/student. It is expressed in a form simultaneously suitable for machine archives and worldwide retrieval. The ETD is similar to its paper predecessor. It has figures, tables, footnotes, and references. It has a title page with the authors' name, the official name of the university, the degree sought, and the names of the committee members. It documents the author's years of academic commitment. It describes why the work was done, how the research relates to previous work as recorded in the literature, the research methods used, the results, and the interpretation and discussion of the results, and a summary with conclusions. The ETD is different; however, it provides a technologically advanced medium for expressing your

ideas”.¹ The explosion of new computer technology helped to incorporate features such as sound, video, graphics, and hypertext links or search tools in the documents produced. The ETD (Electronic Thesis/Dissertation) initiative is an effort to help scholars create works of scholarship that are interactive, visually appealing, and readily accessible to a large audience of interested readers across the globe.

Mahatma Gandhi University Online Theses Archive

About 1200 theses have been digitized and uploaded in the Mahatma Gandhi University Online Theses Digital Library. Mahatma Gandhi University Online Theses Digital Library is first of its kind by any Indian University to apply a special archiving package for hosting in the web the entire knowledge it generated through doctoral research Programmes. The package Nitya D' Arch used for developing and hosting the collection has multilingual search facility, multilingual online keyboard and it satisfies UNICODE standards. Presently it covers English, Malayalam, Hindi, Tamil and Kannada. The specificity in search and retrieval offered by Online Nitya for MGU theses archive is not available in any other digital archives developed or used in India at present. Its metadata can be made OAI-PMH (Open Access initiative - Protocol for Metadata Harvest). For the special work of the University, the archive has been selected to be the best online resource by “Intute consortium” of European Union for education and research in the fourth place and has also bagged the Best Kerala state E-governance Award of 2009.² The MGU Dissertation archive is live in Internet without any failure 24 hrs 365 days a year since its launching by Dr. APJ Abdul Kalam at www.mgutheses.org for free access worldwide.

Objectives of the study

- To explain the Searching Interface of the MGU Digital Archive.
- To analyse and study the current updating process.
- To observe and evolve the higher use of soft copy than the hard copy, if any.
- To understand and study the effective download/ print option facility ensured.
- To provide WIFI facility for the effective access at any time.
- To analyse the infrastructure facility for the both hard copy stack and soft copy lab.

LITERATURE REVIEW

An attempt has been made in this paper to review briefly the important studies in the area of Digital Archiving and Electronic Theses and Dissertations (ETDs) Initiatives.

BROWN (2010)³ summarises existing research into the attitudes of graduate students and their supervisors towards electronic theses and dissertations (ETDs). Research was identified from Germany, India, Italy, South Africa, the UK and the US. BROWN AND KATHY (2010)⁴ discuss some case studies which form part of the 'Influencing the Deposit of Electronic Theses in UK HE' project, commissioned by the JISC and led by UCL.

COLES AND KATHERINE (2010)⁵ explain what was involved in the transition from ETD-db to EPrints for thesis collection and how the Caltech Library took advantage of the flexibility of the EPrints platform to meet our requirements. It also suggests ways that other institutions may be able to adopt and build on what they have done, and why EPrints may be a good electronic thesis repository solution for other institutions.

HOROVÁ AND RADIM (2010)⁶ report on the issues at the Academy of Performing Arts in Prague (AMU) to switch over to an Open Source system, Dspace. Metadata based on the Dublin Core Standard was extended to include the relation element qualifiers. The modules for editing and displaying were modified to permit searching and viewing of the related documents. Video and audio players were integrated into the system to make the related multimedia files available directly from the primary record page. A handle server, which generates persistent identifiers, was implemented. The automatic transfer of metadata from the AMU Study information system, KOS, into the repository was enabled, along with automated OAI-PMH harvesting into the national registry.

KOULOURIS AND ANGELOS (2010)⁷ describe the e-submission tool, its procedures and evaluates its use at National Technical University of Athens. The paper shows that the tool helped NTUA users in submitting their e-theses, and the IR staff in organizing efficiently the service workflow and the data integration into the DSpace system. The process weaknesses rectifications will enhance the service and allow its broadness to all NTUA departments. This tool implementation may start a debate to the DSpace community in using proxies between DSpace platform and the end user, as an alternative.

A RAMIREZ AND GAIL (2010) 8 share view about Information privacy is an important consideration when transitioning university collections from paper to electronic access. The student privacy regulations have rarely been addressed in the literature for online electronic theses and dissertations (ETDs). The Family Educational Rights and Privacy Act (FERPA) and its relevance to student work are discussed.

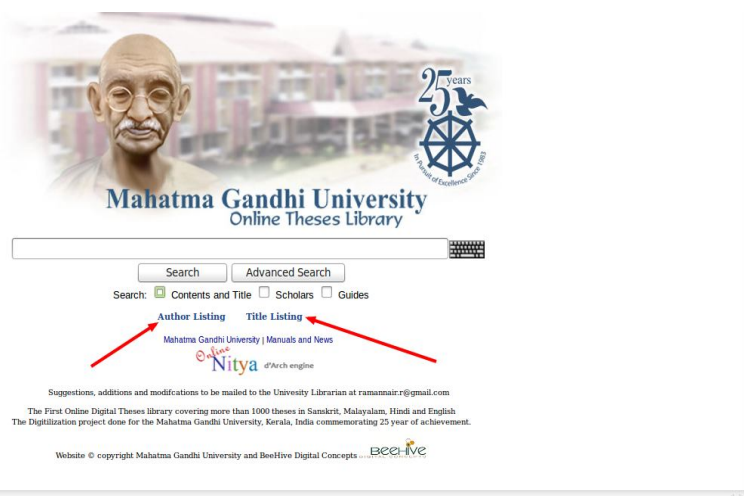
RATANYA (2010)⁹ presents a brief introduction of the importance of ETD as materials for open access. This is with emphasis on the Kenya Information Preservation Society (KIPS) project which has, since 1993, been digitizing theses from a number of participating institutions across the country. The paper relies heavily on literature derived from existing documentation, online searches and website exploration, and the KIPS's union list of theses and dissertations CD-ROM. A number of contracted employees (scanning and input) were also interviewed in order to provide statistics about the contributing institutions.

SEARCH INTERFACE OF MGU ON LINE DIGITAL ARCHIVES

The user interface of MGU Online Theses Digital Archive is very simple and is similar to Google Search Engine. Subject keywords are to be entered in the search box given in the home page. Then we have to click the “search “button.” Author listing” and “title listing” in alphabetical order can also be had from the hyper links in the homepage itself.

Figure 1

MGU Archive home page



When the “search “button is clicked a list of relevant theses is displayed. All the titles of the retrieved theses having the search term in title, as well as highly relevant to search topic are

first displayed. After that in continuation all the sections in other theses related to the query are listed. The list of theses generated by a query can be printed for future reference if essential.

Figure 2
List of relevant theses

Query: polymer chemistry 1-15 of 95 Results

CATEGORY	TITLE / SECTIONS	SCHOLAR	BRANCH OF STUDY	YEAR
TITLE	Physico-Chemical Studies on Host-Guest Phenomena in Crosslinked Copolymers	Mary Joseph	Chemistry	2006
TITLE	Biochemical and Pharmacological Investigations on Indigenous drugs and Principles	Baby Lala C.	Chemistry	1997
TITLE	Efficient Solid Phase Synthesis of Hydrophobic Peptides and Cysteine Containing Cyclic Peptides of a High Capacity Tegra-crosslinked Polystyrene Support	Sindhu Jacob	Chemistry	1999
TITLE	Macromolecular Characteristics in the Design of Metal Ion Specific polymers	Bini George	Chemistry	1998
TITLE	Solid Phase Synthesis of Partial Sequences of Rubber Elongation Factor Protein on Hexamethyl Diacrylate-Crosslinked Polystyrene Support	Subha V Neir	Chemistry	1999
TITLE	Synthesis, Characterisation and Catalytic Activity of polymer-Supported Metal Complexes	Jincy Jose	Chemistry	2007
TITLE	Synthesis, Characterisation and Catalytic Activity of Acrylic Acid Based polymer Metal Complexes	Magi John	Chemistry	2008
TITLE	Macromolecular Characteristics on the Binding of Rose Bengal by Crosslinked polymers	Gigimol M G	Chemistry	2000

From this list user can chose the required title or theses or the section of any theses. For this the user has to click at the concerned item in the list .This opens the concerned full text and the user can go to the full text of the thesis or concerned section.

Figure 3
Navigating through full text

HOME Search & Results Full Text Thesis Details

Full Screen

MACROMOLECULAR CHARACTERISTICS IN THE DESIGN OF METAL ION SPECIFIC POLYMERS

This is submitted to the
Mahatma Gandhi University, Kottayam
in partial fulfillment of the requirements for the award of the degree of

Doctor of Philosophy

CONTENTS

ACKNOWLEDGEMENT

List of Abbreviations

I INTRODUCTION AND OBJECTIVES

A. Copper specific Polymers by surface templating synthesis

B. Metal ion specific films of metal ion-adsorbed Polymers on membranes

Organization of the Thesis

II MOLECULAR IMPRINTING: NEW POSSIBILITIES FOR THE DEVELOPMENT OF METAL ION SPECIFIC POLYMERS

II. 1. Molecular Imprinting: Basic Principle

II. 2. Molecular Imprinting in Synthetic Polymers

II. 3. Factors Influencing the Specificity and Selectivity Characteristics of Imprinted Polymers

3(a) Rigidity of the Polymer support

Once the full text is opened, user can navigate through entire thesis back and forth .Book marks provided on the right side of the screen help the user to go to the relevant chapters instantly if needed. At present downloading of the theses or printing of full theses or selected pages are not permitted. Only one selected page can be printed at a time.

ADVANCED SEARCH

Searches can be made specific to categories like TITLE or SCHOLAR or GUIDE.”Advanced Search option” permits the user to build complex Boolean queries in single steps. Specifying “Marx’ and “education” in the title field will retrieve theses having both these words in the title.

Figure 4
Advanced search

The screenshot shows a web browser window displaying the 'Advanced Search' page of the Mahatma Gandhi University Online Theses Library. The page features a search form with the following elements:

- Conjunction:** A dropdown menu set to 'AND'.
- Search Fields:** Three dropdown menus, all set to 'Title'.
- Search Contents:** Three empty text input fields.
- Search of Study:** A dropdown menu set to 'All'.
- Keywords:** A text input field.
- Circle of Research:** A dropdown menu set to 'All'.
- Results/page:** A dropdown menu set to '20'.
- sort items by:** A dropdown menu set to 'Year'.
- in order:** A dropdown menu set to 'descending'.
- Theses from year:** A dropdown menu set to 'none'.
- to year:** A dropdown menu set to 'none'.
- Go:** A button to execute the search.

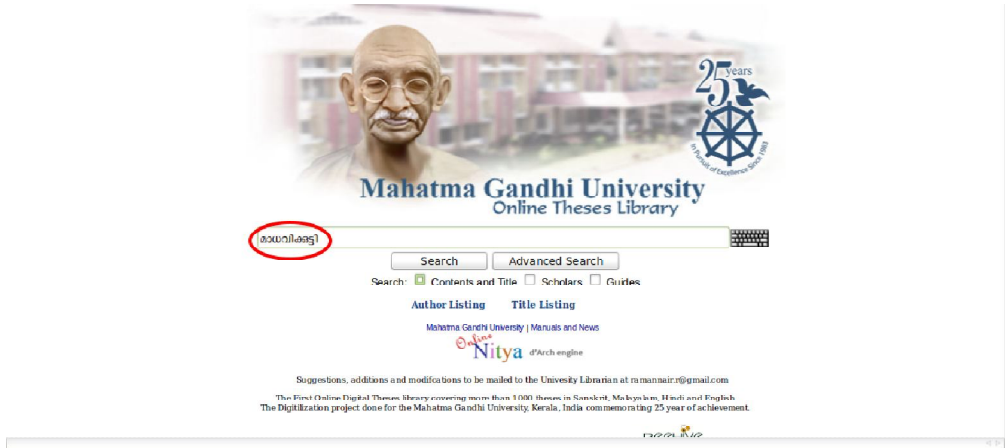
The browser's address bar shows the URL 'http://www.mgutheses.org/'. The page title is 'Mahatma Gandhi University Online Theses Library'. The browser's taskbar at the bottom shows the system date and time as 'Tue Mar 22, 5:09 PM'.

MULTILINGUAL SEARCH FACILITY

MALAYALAM

Mahatma Gandhi University Online Theses Digital Library has multilingual ,search capability (I.e. for searching malayalam, Tamil, Kannada, Telungu, Hindi, other Indian scripts,a nd English).

Figure 5
Malayalam searching

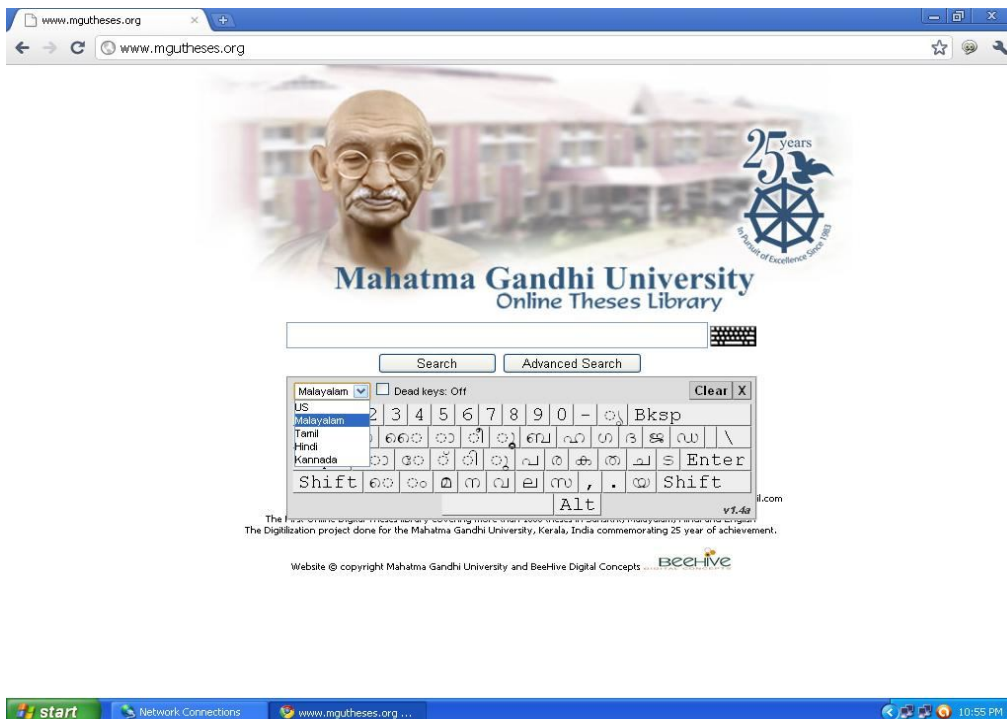


If the user is not very familiar with the Malayalam or any key board user, the user can click on the keyboard symbol on the right side of the search box and get the Malayalam online keyboard in the screen. By clicking on the letters, user can type the query in the search box.

MULTILINGUAL SEARCH FACILITY

HINDI,TAMIL,KANNADA

Figure 6
Multilingual search key board



By clicking on the TAB at the left side of the key board ,user can get the list of Indian language keyboards that are active and select Hindi or other languages in the same way in which Malayalam was selected .Event though Tamil and Kannada theses are not available in the collection ,facilitates for those scripts also activated by default and those language theses can also be uploaded and searched through concerned language provision in the archive.

METHODOLOGY FOR USER SURVEY

To achieve the objectives of the study under taken in this paper, the survey research method was adopted to collect the data from the population of 125 research scholars. . Out of the population of 152 part time and full time research scholars, 125 scholars were issued the questionnaire, of them 110 scholars were promptly returned so that the response rate of the study was 88 %. The scholars were issued the questionnaire by the authors during the time of their information search and some of them were issued in person.

DATA ANALYSIS

The majority of the respondents are the research scholars in the University, of them 88% of persons replied to the questionnaire which let us to reach an inference that the study on the use of e-thesis is inevitable. Almost 91% of respondents are aware of the e- archive of the University by the Orientation programme of the Library and remaining 19 respondents by on-line.

More than 86% of the respondents are using the Internet service to access the e- thesis every day and remaining of 15 persons use this service in between 2-5 times per week. Out of 110 respondents, 55% of the population spent the time for searching the subjects of their study and related areas. Almost 27% of the respondent's search is based on Keywords of their research, 4.5% of them spent for the model and pattern of the thesis and remaining 13.5% is using this source for comparing their findings.

More than 95% of respondents put their regrets that the e-thesis is not available in open access for downloading and the remaining 5 scholars replied that many theses of the university are available for downloading from Shodh Ganga E-thesis archive hosted by

INFLIBNET

As the e-thesis work is a continuous process in general, the currency and update of e-thesis is still pending since 2008, reported by 93.63% respondents. Whereas the infrastructure of the stacking of the hard copies and the soft copy Lab are so isolated where 90% of the respondents showed their reluctance in referring the hard copy due to the distance of stack, the remaining 15 scholars do not like to refer the hard copy. Out of 110 scholars, 80% of the respondents like to refer the hard copy than the soft one due to the easiness of reading and the remaining 20% are placed their opinion to provide LED monitors to avoid the rays of the computers. Almost 90% of the respondents based on the search by deep indexing and remaining 10% are generally using the Key terms. The Book marking navigation process is supported by 91% of the respondents. Almost 96% of respondents placed their opinion on providing WIFI facility to access the e-thesis from anywhere in the campus.

CONCLUSION

As the emergence of e-thesis archive is so inevitable and very useful documents so far accessible on line and it is a necessity that the higher educational institutions should have to maintain and develop such archives of their own so the documents can be preserved in such a way for the future and easy access for effective use in present. The University libraries have to undertake the Orientation programme to announce their resources and effective way to use them. The search strategies and methods should be inculcated to the scholars in a periodical interval as like the use of online journals. The e-thesis archives should be made open access so that the scholar can access the document from anywhere and necessary download and print option should also be given so that the search purpose will be satisfied. The research is the way to the creation of new knowledge and innovations, so that process of the on line e-thesis should be encouraged.

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