

## Discovering Invisible Colleges and Knowledge Maps in Dissertations and Theses

» Denise Bedford, Kent State, World Bank

**Abstract:** Citation analysis provides insights into communication and professional networks amongst scholars. There is a rich body of professional knowledge on this topic dating back several decades. In the last five years, social and communications network analysis, and knowledge mapping have used similar techniques to discover a) who is communicating with whom, b) what is the nature of the message, c) what knowledge domains and nodes exist within a network, and d) attributes of the actors or nodes. Theses and dissertations by nature provide a broad view of their respective knowledge domains. Applying more extensive network analysis and semantic analysis methods to theses and dissertations may provide insights into hubs and gaps in knowledge domains that are critical to economic development.

The purpose of this research and presentation is twofold: (1) to determine whether theses and dissertations can provide high level insights into where domain knowledge is broadly concentrated and where knowledge is scarce, and (2) to determine whether economic development organizations can leverage dissertations and theses to discover new knowledge hubs in countries of interest, and expand the knowledge base of economic development work.

**Methodology:** Sample sets of theses and dissertations from several domains and several countries provide a base from which to draw a map of the knowledge domain. Semantic analysis methods and technologies are used to extract institutions and nodes in the sample sets. Rule based concept extraction methods are used to identify people and institutions cited in theses and dissertations. Rule based categorization methods are used to classify the knowledge domains of the theses and dissertations and the work referenced in the citations. These extractions form the base of the knowledge maps.

## 6F 95? C I H'SESSION 3B

### COLLABORATIONS: REGIONAL APPROACHES

» Moderator: Susan Copeland, Robert Gordon University  
» Friday, June 12 11:15 a.m.–12:45 p.m.

## The DART-Europe E-theses Portal: Helping the discovery of Europe's open access doctoral e-theses

» Martin Moyle, UCL Library Services, University College London

**Objective:** The DART-Europe E-theses Portal has been developed by UCL (University College London), on behalf of the DART-Europe partnership and LIBER, to provide a central discovery service for European e-theses. The aim was to create an OAI-PMH based service which was low maintenance, but also user-friendly, and enriched where possible to help to meet the needs both of data contributors (which may be universities, academic consortia, or national libraries) and researchers.

**Methods:** Data is harvested daily using the open source PKP Harvester2 software. A number of standardization and enrichment routines are applied to create a normalized copy of a subset of that data, using which search, browse and results functions are delivered. The original harvested record remains intact, and from this record the user may follow links to the full text of the

thesis and download it to the desktop. These discovery services are delivered through a bespoke user interface.

**Results:** The Portal currently holds details of 100,000 doctoral-level, full text e-theses awarded by 180 different European institutions from 12 countries, and it continues to grow. Core search/browse features have been supplemented by search history, marked lists, download of records by email, and new content feeds. The service went into production early in 2009, and has begun to appear in academic library resource listings. Google Analytics has been implemented to provide quantitative measures of usage. New user-oriented features are being added incrementally.

**Conclusions:** The DART-Europe Portal shows that, despite its limitations, simple OAI Dublin Core can be employed to deliver a useful service which is more than the sum of its parts. The DART-Europe partners aimed to provide a consolidated European e-thesis discovery service for the benefit of researchers internationally, and the Portal goes a long way towards meeting that brief.

## ETD Initiatives in India: Identification of some indicators of success

» Tukaram Kumbar, DA-IICT, Gandhinagar, India

India has over 400 university level institutions. Most of these Institutions offer Doctoral programmes in different disciplines. Over 130 theses are accepted every week for award of Doctoral degree by all these universities put together.

A copy of each thesis in print format goes in to the collection of University library for preservation and future use. Systematic efforts have been made by various agencies at national level to achieve the bibliographic control of this valuable collection.

The Association of Indian University publishes the list of theses accepted by the universities in India as part of its weekly publication 'University News'. Consolidated lists of the same under broad disciplines are also published by this association. The Information and Library Network Centre (INFLIBNET) has created a bibliographic database having over 2,00,000 records. The DELNET, NASSDOC and Vidyandhi Project have also initiated work in this area and maintaining sizeable records providing bibliographic information.

During last few years, quite a good number of universities have started creating Electronic Theses and Dissertations database covering full text of theses submitted to their universities using open sources software such as DSpace and E-Prints. Some of them have formulated policies to accept the theses in e-form besides the print. The Vidyandhi: Digital Library & E-scholarship project has already put in over 600 theses in full text. INFLIBNET proposes to facilitate the universities to undertake the work of creating ETDs. To give an impetus and direction to the efforts in this area, the University Grants Commission came out with some regulations to be followed by universities for creating ETDs and sharing the information. All this indicates that, like many other developed and developing countries, there has been a strong desire in India to make this rich, valuable and unique information contained in the theses and dissertations available for furthering the scholarship.

What the author is attempting to do in this proposed paper is to critically look at each ETD project undertaken by the universities, R&D institutions as well as national level organizations in India using certain well established parameters and present the progress made along with their future plans. This paper will also present the issues and challenges faced by these institutions in creating the ETDs, particularly, the challenge of creating ETD in Indian languages. Paper would also present certain indicators which can be used to measure the success of these ETD efforts in the country.