The Electronic Theses & Dissertations (ETD) Repository and Open Access Development – in Taiwan

臺灣博碩士電子論文收藏和全文授權公開取用的發展

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Terminology:

An **ETD**:  
-- is an electronic or digital copy of a thesis or dissertation.

An **IR** (institutional repository):  
-- is a digital space for collecting, preserving and disseminating the intellectual output of an institution.  
Many universities include dissertations and theses in their institutional repositories.

**OAI-PMH** (the Open Archive Initiative - Protocol for Metadata Harvesting)  
詮釋資料擷取開放檔案計畫協定
Theses & Dissertation (TD) – an important primary source

• TD, especially dissertations, constitute an important scholarly information and intellectual output of an institution

• Collectively, the TD output (quality + quantity) is an important indicator of a nation’s intellectual output & strength

• As such, there has been initiatives in several countries and at international level, to have a sufficient mechanism for its bibliographic control through printed indexes or online databases
Taiwan Theses & Dissertations (TD): repository status

**Up to 1979**
- National Chengchi University, Center of Social & Information (政大社資中心, Ministry of Education designated management agency)

**1979 -1994**: Under the Degree Conferral Act rev. (學位授予法 rev.)
- Three depository agencies: National Central Library, National Education Archive, Chengzhi University Center of Social & Information

**1994 +**: The Degree Conferral Act rev. (學位授予法 rev.)
- Paper TD → National Central Library (National Library)
- ETD: no submission regulations

**2018**: The DCA new revision, 11/28/2018
- NCL: the national designated repository agency for TD: paper and electronic versions.
National Central Library’s (NCL) ETD IR - development

1994 - 2018

1994-

- NCL began building the national database for theses and dissertation.
- Each higher ed. Institution also building its own system, or collaborating with commercial vendor(s) on TD repository.

1997

- The Taiwan National Thesis and Dissertation database (union catalog, abstracts and indexes) live online

2000-

- Began adding full-text ETD and advocating TD authors to grant OPEN ACCESS

2010-

- Joined NDLTD (Networked Digital Library of Theses and Dissertations)
NCL ETD repository - development

**Access:**

1994 - current

1) Borrowing *(in person/Inter-Library Loan)*

2) Find authorized Open Access TD:
   - NDLTD (in Taiwan) *(臺灣博碩士論文知識加值系統)*

Not-OA TD:

- Individual institutions, by request
- Commercial purchase
Under the Degree Conferral Act 2018 rev., depository required; open access encouraged

- Both print and e-version
- Advocate/promote OA to TD authors via the TD submission form

ETD depository and OA access authorization:

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposit</th>
<th>OA authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>69.33%</td>
<td>52.5%</td>
</tr>
<tr>
<td>2017</td>
<td>83.27%</td>
<td>66.05%</td>
</tr>
<tr>
<td>2010-17</td>
<td>77.61%</td>
<td>60.63%</td>
</tr>
</tbody>
</table>

(Source: Taiwan National Library Knowledge Service Division, 1.29.2018)
Reasons behind TD not open/deposit:

- Contents are classified (涉及機密)
- Applying for patents (專利申請)
- Delay open (延後公開)
- Never open (永不公開):
  - i.e. those touch on national security, commercial secrets will never open, nor submit for depository, including questionable theses (Plagiarism)

(Source: Taiwan National Library Knowledge Service Division, 1.29.2018)
Networked Digital Library of Theses and Dissertations (NDLTD)

- An international organization supporting the Open Access movement dedicated to promoting the adoption, creation, use, dissemination, and preservation of electronic theses and dissertations (ETDs)
- Global ETD Search: http://search.ndltd.org/

Open Access Theses and Dissertation (OATD)

- OATD.org aims to be the best possible resource for finding open access graduate theses and dissertations published around the world. Live in 2013, the OATD server is run by the Wake Forest University Library systems administrator as one of several AWS it operates. Contact: Thomas Dowling <dowlintp@wfu.edu>
- OATD replies on the OAI-PMH (the Open Archive Initiative Protocol for Metadata Harvesting) standard to harvest records from TD repositories.
- OATD records are harvested, in general, every 2-weeks; re-harvesting on a particular site upon request, perform annual data clean up.
Sample testing between the NDLTD & OATD systems

Metadata Records:
- NDLTD: 5,949,790
- OATD: 4,991,491

Search terms: 意識形態、人物、宗教、當代

Test results:

<table>
<thead>
<tr>
<th></th>
<th>NDLTD</th>
<th>OATD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searched theses</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Full-text</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>No access</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Failure rate</td>
<td>35%</td>
<td>10%</td>
</tr>
</tbody>
</table>

- There are no thesis or dissertation from Mainland China on both NDLTD and OATD;
- Data sources are mostly from Hong Kong, Taiwan, Australia (HK open access rate is above 95%);
- NDLTD showed more results than OATD. But not all results are 100% full-text. Some are abstracts while some are intranet use only;
- OATD has better open-access rate.
Appendix:

-- A brief study between the commercial CETD database & the NCL NDLTD database

台灣中文電子學位論文服務 (Subscription)

Taiwan Chinese Electronic Theses & Dissertations Service (CETD)
Coverage: 2004 to present-

- Provides full text access to Chinese language doctoral dissertations and master theses from 46 major universities in Taiwan.
- Subjects, keywords, and abstracts are in both Chinese and English.
- Subscription database. The database covers 113,993 citations and 78,357 full-text theses and dissertations.
- Publisher: Airiti Inc. (華藝數位)

臺灣博碩士論文知識加值系統 (Open Access)

National Digital Library of Theses and Dissertations in Taiwan (NDLTD)

- NCL began collecting and indexing dissertations and theses in 1979.
- 1997 moved to web version.
- 1998+ abstract searching
- 2000+ full text retrieval
- Open Access. Publisher: National Central Library (NCL)
- [http://www.ndltd.org/about](http://www.ndltd.org/about)
Dissertations & Theses Sources

**Airiti CETD: all subjects**
- Theses in all disciplines (Taiwan & overseas): 4,073,978
- Overseas Cooperation (Iran, Australia, Hong Kong): 21,489 (0.52%)

**NCL NDLTD (臺灣博碩士網): all subjects**
- Theses in all disciplines from Taiwan: 516,298
- 48 Public Universities: 349,103 (67.6%)
- 98 Private Universities: 167,195 (32.4%)

(Last updated 3/4/2020)
<table>
<thead>
<tr>
<th>Public Universities</th>
<th>Number of Authorized Full-Texts in Humanities and Social Sciences</th>
<th>CETD</th>
<th>NDLTD</th>
</tr>
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<tbody>
<tr>
<td><strong>CETD</strong></td>
<td>Top 8 full-text Public University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Taiwan University</td>
<td>國立臺灣大學</td>
<td>17718</td>
<td>2498</td>
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<tr>
<td>National Cheng Kung University</td>
<td>國立成功大學</td>
<td>15419</td>
<td>8459</td>
</tr>
<tr>
<td>National Taiwan Normal University</td>
<td>國立臺灣師範大學</td>
<td>12827</td>
<td>15719</td>
</tr>
<tr>
<td>National Chengchi University</td>
<td>國立政治大學</td>
<td>10608</td>
<td>3874</td>
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<tr>
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<td>11582</td>
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<td>國立臺北大學</td>
<td>4545</td>
<td>6708</td>
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<tr>
<td><strong>NDLTD</strong></td>
<td>Top 8 full-text Public University</td>
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<td></td>
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<tr>
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<td>63</td>
<td>6963</td>
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<tr>
<td>National Tsing Hua University</td>
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</table>
## Private Universities

Number of Authorized Full-Texts in Humanities and Social Sciences

### CETD

<table>
<thead>
<tr>
<th>Private Universities</th>
<th>Taiwan Private Universities</th>
<th>CETD</th>
<th>NDLTD</th>
<th>Value System</th>
</tr>
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<tbody>
<tr>
<td>Tamkang University</td>
<td>淡江大學</td>
<td>12824</td>
<td>1171</td>
<td></td>
</tr>
<tr>
<td>Chung Yuan Christian University</td>
<td>中原大學</td>
<td>6995</td>
<td>無授權</td>
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</tr>
<tr>
<td>Yuan ze University</td>
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<td>4875</td>
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<tr>
<td>Chang Jung Christian University</td>
<td>長榮大學</td>
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<td>無授權</td>
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<tr>
<td>Kaohsiung Medical University</td>
<td>高雄醫學大學</td>
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<tr>
<td>Taipei Medical University</td>
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<td>無授權</td>
<td></td>
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<tr>
<td>I-Shou University</td>
<td>義守大學</td>
<td>1133</td>
<td>1267</td>
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### NDLTD

<table>
<thead>
<tr>
<th>Private Universities</th>
<th>Taiwan Private Universities</th>
<th>CETD</th>
<th>NDLTD</th>
<th>Value System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feng Chia University</td>
<td>逢甲大學</td>
<td>901</td>
<td>5166</td>
<td></td>
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<tr>
<td>Tunghai University</td>
<td>東海大學</td>
<td>4</td>
<td>4869</td>
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<tr>
<td>Fu Jen Catholic University</td>
<td>輔仁大學</td>
<td>3</td>
<td>3433</td>
<td></td>
</tr>
<tr>
<td>Chinese Culture University</td>
<td>中國文化大學</td>
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<td></td>
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<tr>
<td>Chaoyang University of Technology</td>
<td>朝陽科技大學</td>
<td>無授權</td>
<td>2954</td>
<td></td>
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<td>Soochow University</td>
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<tr>
<td>Chung Hua University</td>
<td>中華大學</td>
<td>無授權</td>
<td>2652</td>
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<tr>
<td>Southern Taiwan University of Science and Technology</td>
<td>南臺科技大學</td>
<td>無授權</td>
<td>2349</td>
<td></td>
</tr>
</tbody>
</table>
Sample testing on Humanities & Social Science theses between CETD & NDLTD

Total searched: 30 theses by keywords

**CETD**:
- 18 theses have full-text access and are downloadable;
- 12 theses do not have results.

**NCL NDLTD (臺灣博碩士網)**:
- 21 theses have full-text and are downloadable;
- 7 theses are for local use only;
- 2 theses do not have results.
• NDLTD has 48 public universities, while CETD has 25 public universities with authorized full-texts.
• NDLTD has more TDs from science-and technology-focused universities.
• Private universities have fewer authorized full-texts.
• NDLTD's top eight private universities have more authorized full-text thesis than CETD.
• The largest increase in CETD’s TDs from 2009-2017 is in the area of management. It accounts for 49% of the overall increase in the databases.
• The number of CETD's full-texts decreased after 2017.
• The largest increase in CETD’s humanities thesis is arts, which accounts for 31% of the overall increase.
• Arts is followed by Chinese literature (15.8%), anthropology & ethnology (12.5%).
• The growth rate of Social Science thesis is 3.4 times greater than humanities thesis.
Data Source

• Data source from CETD & NDLTD's official sites.

• CETD Humanities & Social Sciences Disciplines includes:
  文學、設計、社會科學、教育、法律、藝術、管理、建築及都市規劃、傳播、醫藥衛生、社會及行為科學.

• NDLTD Humanities & Social Sciences Disciplines includes:
  人文、設計、教育、法律、藝術、民生、傳播、社會服務、醫藥衛生、商業及管理、建築及都市規劃、社會及行為科學.

(Data compiled by: Lily Kirkhoff, Meiyi Long)
THANK YOU!