TCI
Taiwan Citation Index in Humanities & Social Sciences

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National Central Library

PNC 2014
Museum Computing: An Approach to Bridging Cultures, Communities and Sciences
October 21-23, 2014
Outline

1. TCI Initiative
2. Collections
3. System
4. Services
5. Innovations
TCI Initiative
A Collaborative Project

TCI Advisory Committee

MOST—DHSS.gov
- Search & Evaluation
- Requirements and
- Support

STPI.org
- THCI & TSSCI Merged
- Skills and Techniques

NCL.edu
- TCI Database & Website
- Content and Services

Task Force

TCI HSS
Taiwan Citation Index - Humanities and Social Sciences
Source Records (Authored Literature)

- In 18 subject areas, approx. 260,000 records
- NCL PerioPath & PerioGuide
  - Full bibliographic records
  - Good quality
- NCL NDLTD-Taiwan
  - Full bibliographic records
  - Inclusive of abstracts, TOC, and Reference lists
- Selective import of NCL LAC records
  - matched against TCI highly cited books
Basic Concept (1)

• Cites
  - I (source) cite your publication(s)

• Cited
  - You(citation) were cited by me

• Co-citation analyses
  - S/He(source) and I(source) have cited the publications by You(citation)
  - The more similar citations S/He(source) and I(source) have, means that two works treat a related subject matter.
Basic Concept (2)

- Citations occurred in the reference list of an article (source literature)
  - different citation format (e.g. APA), limited fields, high error rates

- Citations could be in any subject areas and languages

- The number of citations is greater than source
  - Estimation: 1 article ≈ 30 citations

- Citation entries are found duplicated and variant by nature
  - An important literature is often cited by others
TCI Initiative – Phase One

Convert data
- THCI, TSSCI, STPI, PerioPath, NDLTD-Taiwan, PerioGuide, selected book records

Develop TCI database & Website

Accommodate MOST annual periodicals evaluation

Probing new bibliometric indexes

<table>
<thead>
<tr>
<th>Item Year</th>
<th>Source Records (1032 titles)</th>
<th>Citations Entry Plan</th>
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</thead>
<tbody>
<tr>
<td>2009 ↓</td>
<td>2010 ↑</td>
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<tr>
<td>2012</td>
<td>14,000</td>
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<td>Total</td>
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<td>1,120,000</td>
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</table>
TCI Homepage
TCI Collections

Source Records

➤ 1032 Core Journals
  • Including THCI & TSSCI (approx. 500 titles)
  • New journals: peer-reviewed, timely-published, and more than 3 articles per issue → TCI Advisory Committee

➤ Books & Book Chapters
  • 18 HSS Disciplines x 300 titles each (just launched)
  • Language & Linguistics as a pilot (300 titles)

➤ Doctoral Dissertations
  • 12000 Titles (future)
  • 2011 as a pilot (entered in 2013)

Citation Records

➤ 4 Million Records
  • 2 million from merged THCI & TSSCI
  • 2 million from this TCI phase at the end of 2015
Main Purposes: Search & Evaluation

➤ An integrated database for search

- Source records with their citation practices
- Citation practices in Chinese literature by Taiwan scholars

➤ A basis for bibliometric analyses

- Objective analysis based on citation analyses
- Evaluations
  - Individuals -- academic merit review, tenure, and promotion decisions
  - Publishers -- periodicals impact factors and scholarly use
  - Academic institutions -- productivity, impact and influence
Building Citations from Its Source

Citation parsed for editing

<table>
<thead>
<tr>
<th>序號</th>
<th>作者</th>
<th>年分</th>
<th>題名</th>
<th>出處</th>
<th>出版地</th>
<th>出版者</th>
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<td>Giugni, Marco G</td>
<td>1998</td>
<td>It Worth the Effort? The Outcomes and Consequences of Social Movements</td>
<td>Annual Review of Sociology</td>
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<td>98</td>
<td>371-393</td>
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<tr>
<td>4</td>
<td>王甫昌。</td>
<td>2003</td>
<td>《當代台灣社會的族群想像》</td>
<td>台北：群學。</td>
<td></td>
<td></td>
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<td>左宮顯。</td>
<td>2012</td>
<td>〈山地服務現象的反思與現形—以耕莘青年山地學習工作團為例〉</td>
<td>世新大學社會發展研究所碩士論文。</td>
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</table>
Search-Apply & Collapse

2013.2  TSSCI & THCI converted into the TCI
- Approx. 238,000 groups of duplicates in a separate pool waiting for process
- No “Times Cited”

2013.5-6
- Batch comparison and grouping (approx. 10,000 groups)
- “Times Cited” generated

Design approach: It must be on-the-fly
- 2013.6 – Search-Apply and Collapse during data entry
- First month approx. 3,000 groups/25,000 duplicates
- Since 2013.8, about 7,000 groups/40,000 duplicates each month
Search & Browse

Main Functions

Search Tabs

Search Box

Narrow By

Popular Search Terms
Pin-Ying Search ➔ Tu Shu Guan
Citation Search

Citation search functions
### Citation Search - Results

#### Query Results

**Search Strategy:** "數位典藏" (29) **Search Results:** 334 items

**Searching Results:**

- **Selected Results:**

  1. **Title:** "數位典藏" & "數位科技" 結合--數位典藏成果與應用
     - **Authors:** 吳紹榮, 林雪華
     - **Publication:** 數位典藏月刊
     - **Date:** 2013
     - **Volume/Issue:** 359, 92-100
     - **Types:** Journals
     - **Times Cited:** 1

  2. **Title:** "數位典藏" & "數位科技" 結合--數位典藏成果與應用
     - **Authors:** 史耀華, 林雪華
     - **Publication:** 數位典藏月刊
     - **Date:** 2012
     - **Volume/Issue:** 359, 92-100
     - **Types:** Journals
     - **Times Cited:** 1

  3. **Title:** "數位典藏" & "數位科技" 結合--數位典藏成果與應用
     - **Authors:** 王曉華, 蔡雅惠, 郭怡文, 趙日影
     - **Publication:** 數位典藏月刊
     - **Date:** 2012
     - **Volume/Issue:** 359, 92-100
     - **Types:** Journals
     - **Times Cited:** 1
Browsing

Title change history, and a link to the PerioGuide

By Title

By Volume/Issue
Browsing - Volume/Issue
**Source Record - Search Results**

- **Times Cited**: No. of times cited by *Journal Article*, *Doctoral Dissertation*, *Book*, and *Book Chapter*
- **Exclude Self Citation**: No. of times cited *exclude Author Self Citation*
- **Co-citation analyses**: Other source records that cite similar citations
Source Record - Search Results

Social Network functions

Related journal articles, theses, books, and other literature from data mining

Source Title, Author, Keyword click to search again
Source Record - Search Results

Link to the record in TCI

APIs to other NCL database
Data Mining & Citation Analyses

Results analyzed for faceted search

Limit by Times Cited

Citation analysis, faceted search, and visualization results
Use data mining and citation analysis for post-classification, automatic grouping, related terms, and visualization of term relations to maximize the use of search results.
Impact Factors & Altmetrics (updated weekly)

<table>
<thead>
<tr>
<th>序號</th>
<th>期刊刊名</th>
<th>篇數</th>
<th>被引用數</th>
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<tbody>
<tr>
<td>1</td>
<td>中央研究院歷史語言研究所集刊</td>
<td>14</td>
<td>133</td>
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<tr>
<td>2</td>
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<td>61</td>
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<td>3</td>
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<tr>
<td>4</td>
<td>新史學</td>
<td>28</td>
<td>81</td>
</tr>
<tr>
<td>5</td>
<td>中央研究院近代史研究所集刊</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>6</td>
<td>臺大歷史學報</td>
<td>11</td>
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</tbody>
</table>

- 5年影響係數
- 立即引用率
- 排除自我引用
- 影響係數
- 自我引用率
- 被引用率
- 引用率
- 半年期引用率
- 長期引用率
- 國科會期刊評比

(最後更新時間：2014年7月27日)
In A Nutshell

- Inclusive of Taiwan's scholarly DBs
  - TSSCI
  - THCI
  - STPI
  - PerioPath
  - NDLTD-Taiwan
  - PerioGuide

- Over 3 million citations and growing
  - Citation Entries
  - Auto Parsing
  - Apply & Merge

- Involving academic community in developing new HSS indexes
  - Citation Practices
  - IF & Altmetrics

- Providing services for individuals, publishers and institutions
  - Researcher
    1. Analyzing school of thoughts
    2. Detecting emerging research fronts
  - Academic Administrators
    1. Providing bibliometric data
    2. Support R&D policy development
  - Journal Researchers & Administrators
    1. Exploring new evaluation indexes
    2. A basis for periodicals evaluation

- TCI HSS
  - Taiwan Citation Index - Humanities and Social Sciences

- Periodicals
- Dissertations
- Books