Predictable Popularity? Citation Trends of Science Dissertations

Tina P. Franks / The Ohio State University

WHAT
More than 53,000 citations from 609 civil engineering, computer science, mathematics and physics dissertations were examined to determine the popularity of resources cited by Ohio State University’s PhD students from 1998-2012.

WHY
- Does discipline influence selection of citation categories?
- Does electronic access affect category popularity?
- Is there a decline within the Books category?
- Is there an increase within the Websites category?
- Do faculty influence students to use specific categories over another?

HOW
- Dissertations retrieved from ProQuest’s Dissertations & Theses.
- ProQuest subjects determined discipline inclusion.
- Dissertations with K-16 pedagogical topics excluded.
- Each bibliographic reference was assigned to one citation category.

CITATION CATEGORIES

<table>
<thead>
<tr>
<th>Books</th>
<th>Conference Papers</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-Reviewed Journals</td>
<td>Preprints</td>
<td>Serials</td>
</tr>
<tr>
<td>Technical Reports</td>
<td>Theses</td>
<td>Websites</td>
</tr>
</tbody>
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CITATION CATEGORIES DISTRIBUTION: ALL DISCIPLINES (1998-2012)

CITATION CATEGORIES RANK MOVEMENT: ALL DISCIPLINES (1998-2012)

CITATION CATEGORIES: DISCIPLINE PREFERENCES (1998-2012)

WHAT
- The top 3 categories retained their ranking 15 years in a row!
- Researchers don’t stray from traditional citation categories.
- Rankings vary by disciplines.
- Although improved electronic access has increased availability, the Theses category dropped from 6th place (1998) to 8th place (2012).
- There are minimal shifts in popularity among the bottom tier categories.
- Physics preferred technical reports before conference papers, being the only discipline to differ in the top-three categories.
- Computer science comprised almost 50% of the total dissertations.
- Top 3 categories for each discipline accounted for 86% of the total citations.
- Civil engineering contributed only 58 dissertations which may reflect the lack of necessity for advanced degrees for positions outside of academia.
- Wikipedia was cited.

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