Update on Academic Analytics

University Senate March 21, 2017

Academic Analytics Database

- The Academic Analytics Database (AAD) has been produced since 2005
- It contains information on:
 - 220,000 faculty members, supporting
 - 9,700 PhD programs and
 - 11,000 academic departments, located at
 - 405 universities in the U.S.A. and abroad
- Data are mapped to a taxonomy of 172 disciplines

Data Types and Sources

Information about faculty researchers:

Names, academic titles, department/program affiliations

AAD collects research data and links it to faculty names:

Journal Articles

Journal Citations

Conference Proceedings

Books

Books

Federal Grants

Scholarly Awards

Metadata at Crossref

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British Library; Baker & Taylor

Federal agencies

Awarding agencies

Data Coverage: Full Data

Scholarly publication

- Books: 2004-present
- Journal Articles: 2004-present
- Citations: 2004-present
- Conference Proceedings: 2008-present

Funding of scholarly work

- Federal research grants: 2006-present
- Awards and honors for scholarship (~6,000 tracked)
 - 1998-present

Data Coverage: Annual Snapshots

- Snapshots emphasize recent scholarly activity
 - Articles, last four years
 - Citations, last five years
 - Books, last ten years
 - Federal Grants, last five years
 - Awards (period varies with award)
- Web portal based on these snapshots

Illustration: Coverage of 4 Articles

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Pre-dates start of AAD

Not included

2012 Article with DOI

Captured in current snapshot

Also included in Full Data

2008 Article

Outside current snapshot

Included in Full Data

2013 Article lacking DOI

Not captured

Not included

Data Limitations

Users should understand the limitations of AAD data

- Rarely reflects work done before 2004, and won't reflect the most recent year's work until next year
- Does not record articles or citations published in journals that do not send metadata to Crossref
- Does not assign tiers or ranks to journal titles
- Currently contains only provisional data on book chapters or book-to-book citations
- Contains no information on performances or exhibitions
- Captures only federal grants, assigned to PI

Data Use Considerations

Understanding these data limitations, users should

- Consult AAD mainly for perspective on recent activity
- Use other sources for information about the most recent year's activities
- Recall that AAD does not collect data on all valued forms of scholarly and creative activity
- Understand that even the data AAD does collect is likely to be an incomplete record of scholarly activity
- Recognize that even the best data cannot take the place of reasoned and expert judgment

Using AAD at the Institution Level

- How does Auburn's recent scholarly activity compare overall with that of other land-grant universities in our Carnegie classification?
- To what extent has Auburn's "market share" of federal grants improved since 2011?
- Where are some hubs of scholarly collaboration within Auburn's faculty? Who else nationally is publishing on those same topics?

Using AAD at the Program Level

- Which programs in our discipline are most like ours in terms of recent scholarly activity? Which could we emulate or recruit from?
- From what sources are peer departments in our discipline getting their federal funding?
- How do the composition and career patterns of our department's faculty align with those for our discipline?
- How many of our PhD graduates are employed at research-active universities? How are their own research careers developing?

Using AAD at the Person Level

- Which faculty members in our college might be competitive nominees for national awards?
- How similar is this faculty member's recent scholarly profile to those of others at the same career stage in our discipline?
- How would adding/losing this faculty member affect our department's scholarly profile relative to other departments in our field?