A quick snapshot of how the College of Engineering and Computer Science has been using Academic Analytics

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Strategic Plan
Moving Forward

• All Ph.D. programs in top 50
• Half of Ph.D. programs in top 25

• We have been using the Academic Analytics database to measure attainment of these goals.
Overview of Academic Analytics from Glauser’s point of view
Academic Analytics

• Tool for assessment of research productivity
• Data gathered for individual faculty members, then aggregated to programs, departments.
• Population: Ph.D. granting institutions in the United States.
• AAU Universities seem to be driving this...
Academic Analytics – Basic Data

- Books (LCCN or British Library)
- Journal Publications (journal list similar to Web of Science, Scopus)
- Refereed Conference Proceedings (AA decides what is “refereed”)
- Citations
- Federal Funding (federal sources only; all $$ credited to 1st PI)
- Honorific Awards (national/international awards; fairly high bar at present)
Elements of the Faculty Scholarly Productivity Index (FSPI)

1. Books metrics:
   - Percentage of faculty who have authored a book
   - Books published \textit{per faculty member}

2. Journal publication metrics:
   - Percentage of faculty who have authored a journal article
   - Journal articles published \textit{per faculty member}

3. Conference proceedings metrics:
   - Percentage of faculty who have authored a conference proceeding
   - Conference proceedings published \textit{per faculty member}

4. Citations metrics:
   - Percentage of faculty with at least one published journal article cited at least once
   - Citations \textit{per faculty member}
   - Citations per journal article

5. Federal funding metrics:
   - Percentage of faculty who have won new and competitive federal research funding
   - Grants \textit{per faculty member}
   - Grant dollars won \textit{per faculty member}
   - Dollars per grant

6. Honorific awards metrics:
   - Percentage of faculty who have won an honorific award
   - Honorific awards \textit{per faculty member}
A Few Details

• Faculty roster set for year “N” (e.g., 2015)
• Journal articles counted for rostered faculty for years N-4 to N-1 (2011-2014)
• Citations counted only for articles published in years N-5 to N-1 and cited in years N-5 to N-1 (2010-2014)
• FSPI is a weighted index (discipline specific):

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A Few Details (cont.)

• For each faculty member Academic Analytics provides a quintile distribution comparison to those in your discipline across all other Ph.D. granting programs within the US.

• Positive steps moving forward... Propose that each professor be aware of where they stand now in the quintile distribution... then explore with department chair and the dean’s office an approach/plan to help each faculty member move up or sustain current level.

• Remember, data gathered for individual faculty members, then aggregated to programs, departments.
My calibration of the AA database

- I was Research Dean for 5 plus years before starting to use AA and knew my faculty really well...
- My own assessment of our faculty only differed for 2 colleagues... AA ranked them lower...
- Both of these faculty receive most of their funding from Industry and/or New York State... not tracked in AA
- What I did in this case was come up with an “effective” AA funding profile for these two faculty
- Important for SU since we are growing our industrial funding and we receive significant $$ from NYS