

Access and Use of Academic Analytics: University Guidelines

University of Missouri

2017-2018 Academic Year

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This document outlines the University of Missouri’s policies for using Academic Analytics data. It addresses the following key questions:

1. What Academic Analytics data should be shared?
2. Who will be provided access to the Academic Analytics data?

The document is organized in the following manner:

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2. Guiding principles
3. Criteria for faculty lists and validating faculty lists
4. Access to Academic Analytics data
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Description

Academic Analytics (AA) assembles scholarly output data at the faculty member level, combines these data by PhD program (e.g., Biological Sciences, History, etc.), and compares individual PhD programs with other PhD programs in the same discipline. These comparisons can also be reviewed at the department level (MU academic units that offer a master’s degree exclusively or MU academic units that offer the master’s and PhD can be compared to other academic units in the discipline at other universities). According to Academic Analytics, the data are scrubbed, checked, and validated for each faculty member, a time-consuming but critical step in the process. Institutions can then better understand the strengths and weaknesses of their academic programs in contrast to similar academic programs across the country. These are powerful data that have been talked about for years in higher education circles, but never been available until the past decade.

In addition to academic program level data, AA also provides scholarly output data per individual faculty member. What this means is that individuals who have access—the provost, deans, academic chairs, others—can look at the individual outputs of each faculty member side-by-side, comparing one faculty member to another in the same department. This level of detail requires careful consideration of who has access to specific data.

Guiding Principles

In general, MU's use and control of AA data are based on the following guiding principles:

1. AA data are used for multiple purposes at MU, with a special emphasis on the program assessment process, which is based on principles of continuous improvement. Other uses of AA data include, but are not limited to, campus-wide planning, assessment of faculty research productivity, comparison of MU's academic programs to other programs in the same discipline, and identification of faculty eligible for national awards.
2. Whether using AA data for planning and/or evaluation, AA data should never be the sole source of evidence and must be used in the context of other reliable sources of data and evidence.
3. Because Academic Analytics data are one source of information, programs are strongly encouraged to provide information from other sources appropriate to their disciplines, during the program assessment process.
4. Access to Academic Analytics data requires individual training and user agreement to follow AA identified restrictions for use. Academic Analytics typically asks participants to participate in a webinar and sign an agreement. At that time they are provided a password.
5. In terms of providing access to the Academic Analytics data, the answer to the following question plays a significant role in determining this access: "does the individual have a managerial right to know?" In other words, does the individual maintain a level of authority over the unit that would enable him or her to initiate improvements within the program? For example, a dean has a managerial right over all of the departments and programs in his or her school/college, while a department chair has the managerial right over only the programs in his or her department.
6. The MU Institutional Research & Quality Improvement office, as well as Academic Analytics, is committed to working with academic chairs to provide accurate data.
7. When possible, recipients of Academic Analytics data will be given an opportunity to review and respond to their unit's data early in the process.

Criteria for Faculty Lists and Validation Process

Academic Analytics outlines specific guidelines when determining which faculty to include and when linking faculty to the appropriate academic program. In consideration of these guidelines, the following criteria and process are used to identify faculty members at the University of Missouri:

1. Include all tenured or tenure-track faculty. Assign based on tenure home.
2. Include all ranked faculty with research titles (e.g., assistant research professor, etc.). Assign based on administrative home.
3. Include department chairs.
4. Exclude all senior administrators, deans, associate deans, and assistant deans.
5. If a faculty member is joint-funded between/among more than one academic department, the faculty member will be included in each department. Burden of proof is

being “joint funded” in the financial records system (faculty member’s salary is being paid by both departments).

Typical issues and actions taken:

- 1) The department has faculty members with a research title that do not engage in research. Action: The title of the faculty member must be updated through a Personnel Action Form in order to remove them from the list. Changing the PAF is the responsibility of the department chair.
- 2) The primary department or unit of a faculty member is not accurate. Action: In consultation with the Office of the Provost, the Vice Provost for Institutional Research & Quality Improvement works with the department chair to correct the inaccuracy.
- 3) Department chairs want to add specific division administrators (deans, associate deans, etc.) to the Academic Analytics list. High profile and productive researchers who are serving administrative roles can be asked to be included. Action: In consultation with the Office of the Provost, the Vice Provost for Institutional Research & Quality Improvement works with the department chair to add the administrator to the AA department list.

As new issues arise around the inclusion of faculty and the placement of faculty in departments, appropriate actions will be determined by the Vice Provost for Institutional Research and Quality Improvement, in consultation with the Office of the Provost. Input from deans and chairs will be sought and reviewed, and the resulting actions will be communicated to all involved individuals.

Faculty List Validation Process

The following steps occur when Institutional Research and Quality Improvement receives the annual request from Academic Analytics to update the faculty list:

1. A list of faculty is generated by the Office of Institutional Research and Quality Improvement based upon the criteria identified in section “Criteria for Faculty Lists and Validation Process” on p. 2.
2. The list of faculty for each PhD Program and academic department is provided to the corresponding chair. The chairs have approximately three weeks to validate their lists. If changes to the list are necessary, the chair works directly with the Institutional Research & Quality Improvement office to make the necessary changes. All changes must meet the guidelines put forth by Academic Analytics and the provost.
3. After the three week window, the list of faculty is submitted to Academic Analytics.

Access Guidelines

Different levels of access have been determined:

Level I: Based on recommendations from the provost, specific members of the chancellor's and provost's staff may have access to all campus program data.

Level II: All deans. Associate/assistant deans based on approval from respective dean. Access is granted to all academic programs *in their school/college*.

Level III: All department chairs. Chairs have access to their academic program, but not to other academic programs.

Academic Analytics provides web interface access and can credential the user to see as little (a single program) or as much (all of the academic programs) as approved.

Required Training for Access

Academic Analytics requires that before access is provided to an individual, that individual must complete a WebEx training presentation. Additional training opportunities will be available on campus through MU IR&QI as well as occasional campus visits by Academic Analytics.

Academic Program Assessment Process

Setting Parameters in the Academic Analytics Portal

In the Academic Program Assessment process, IR&QI creates a data packet that includes several charts and diagrams from the Academic Analytics portal. This analysis is based upon the pre-set parameters established and agreed upon by Academic Analytics and MU. These pre-set parameters include, for example, established weights for each research output; specific criteria that determines which faculty are included or excluded; the period of time used to capture scholarly outputs; and a pre-set comparison group. The data packet analysis uses these pre-set parameters to ensure that during the Academic Program Assessment, all parties are: 1) looking at the same analysis; and 2) that analysis is based on agreed upon parameters that have been vetted by Academic Analytics, MU, and national faculty in the discipline.

Having said this, however, we *should not discourage a department or program from using the full capabilities and flexibility of the portal*. That is, the portal is dynamic and allows a chair or dean to change the faculty composition, expand the time span to count scholarly outputs (e.g., change from a 5-year window to a 10-year window, etc.), add faculty that mirror potential hires (e.g., add a quintile 1 faculty member and see where and how the department improves, etc.), or calculate a department's relative research productivity by only considering the top 10 or 20 journals in the field. Put another way, the dynamic features of the Academic Analytics portal can be used as an effective department planning tool in its own right, as well as being used to supplement the more formal Academic Program Assessment process.

Updated Versions of Annual Data

Department chairs preparing program assessment reports have two options when using Academic Analytics data. In option 1, the chair can reference the tables and charts included in the PDF data packet that IR&QI prepares for each department going through academic program assessment process. These data packets are typically created in January of each year. However, in cases where the chairperson does not prepare the program assessment report for several months after the data packets are created, he or she may want to prepare AA tables and charts based on the most recent version of AA data.

In option 2, the chairperson can use the most recent version of AA data in his or her report as long as it is in the same calendar year (e.g., AAD2015.01.334; ADD2015.06.428; etc.). Using the Academic Analytics web portal, updated tables and charts can be created by the chair using the most recent version of the AA data. These updated AA tables and charts are then used in the program assessment report.

In nearly all cases, even different versions from the same year should produce very similar results. However, if there are major differences between the data packet results and more recent AA results gleaned from the web portal, these major differences should be noted in the program assessment report. When citing Academic Analytics data, please reference the version (e.g., AAD2015.01.334; ADD2015.06.428; etc.) on the table, chart, or in the document.

Disciplinary Peer Groups

Academic Analytics has developed a system whereby users can select a peer group of disciplinary programs from specific institutions. This can be extremely useful if a department desires to compare itself to only AAU institutions or a set of aspiration programs. Department chairs can create peer groups or even aspiration groups to help them with department planning and benchmarking. When creating data packets for the program assessment process, however, IR&QI uses the full set of peer programs included in the AA database.

Disciplinary weights for the Faculty Scholarly Productivity Index

To calculate a Faculty Scholarly Productivity Index, weights are pre-assigned by Academic Analytics. Academic Analytics determines these weights based largely on the National Research Council's results from 2010. Although a user who is granted access to the Academic Analytics' web interface can adjust the weights and compute a different FSPI, these new index values will not be considered for program assessment processes. In other words, only current, established weights provided by Academic Analytics will be used to calculate the faculty scholarly productivity index (FSPI).

This document will be reviewed and updated annually each summer. For questions or comments, please contact Mardy T. Eimers, Vice Provost for Institutional Research & Quality Improvement, eimersm@missouri.edu or 573-882-4077.