The Formula for Monographic Acquisitions Fund Allocations

The Criteria

- Department name.
- Fund code.
- Average cost of a book. From acquisitions data from Voyager.
- Slips sent. Used to estimate publishing output by discipline. Calculated from GOBI Approval Activity Report, adding both YBP and L&C Slips Sent by LC Class and then translating to fund code by hand. ("GOBI Appr FY10 by LC Class.xlsx")
- Faculty. Number of faculty (raw) from Wesleyan's Institutional Research Office.
- Classes. Number of classes per department (assigned by instructor's department). From Wesleyan's Institutional Research Office.
- Student enrollment. Number of enrollments by department. From Wesleyan's Institutional Research Office.
- Theses. Number of honors recipients (and the major that they pursued the work in) from 2006
 2010. From Registrar's Office, Susan Krajewski.
- Circulation. Books circulated broken down by LC and translated to fund code. From Voyager. ("ccirc data 20100817.xlsx" and Circ, Circ2 tabs)

Regression Analysis

- In order to ascertain if the existing fund allocations are related to any of the criteria, a regression analysis was undertaken.
- A correlation analysis was performed on the criteria first to get an idea of how they are related to one another. Certain funds were excluded from this analysis due to missing data. (See "Corr Results" tab.)
- Many regression analyses were performed on different combinations of criteria. (See all "Regr" tabs.)
- Manolis Kaparakis was enlisted to interpret the results. A regression was chosen based on high
 R and R squared values, appropriate P-value and t Stat values, and relevance of criteria: Average
 cost of a book, slips sent, theses and circulation ("Regr2 -class-enroll-fac")
- A formula draft is thus proposed. It uses the criteria mentioned above. Each of the criteria is
 weighted by a percentage value as suggested by the regression. The suggested allocation
 amounts were then adjusted to account for the existence of any endowed funds in appropriate
 subject areas.

Ad hoc changes / Kludges

- Theses/honors recipients data was the best source of by-department data available, but there were still places where it needed to be adjusted to reflect the breakdown of funds more closely:
 - o Art History and Studio Art were combined for martf.
 - East Asian Studies was assigned to masif.

- o Neuroscience and Behavior was split between mbiof and mpsyf.
- College of Letters was split in fourths between mclaf, mengf, mhisf and mphif.
- o College of Social Studies was split in fourths between mecof, mgovf, mhisf and mphif.
- Math-Economics Program was split between mecof and mmatf.
- o American Studies was assigned to mhisf.
- o Italian Studies was assigned to mromf.
- o Iberian Studies was assigned to mspaf.
- Dance and Film Studies were reduced to account for lower book usage in the production of honors projects in those majors.
- The translation from LC Classification to fund code is an approximation at best and is a continuing work in progress. For Slips Sent and Circulation, reports needed to be run by hand to fill in smaller ranges for a variety of fund codes. Sometimes these "slices" were then removed from the data for the entire LC Class range as a whole, sometimes they were not (especially when the number was extremely small or the two funds were seen as having considerable content overlap).

Apologetics

- Art (-\$6,038). None of the criteria support Art's historical allocation. It has been funded at 11.5% of the budget while the criteria suggest closer to 9%.
- Biology (-\$6,830) / MB&B (+\$3,989). These basically even each other out, since they will be spent on very similar books anyway.
- Classics (-\$9,493). Again, the data does not support the historical allocation -- especially book supply and circulation.
- Economics (+\$9,972). Appears to have been quite underfunded (2.34%), as circulation, theses and especially book supply all suggest more in the 4-5% range.
- German (-\$3,192). The existence of the healthy Mueller fund (\$2,211) brings German down.
- FGSS and African American Studies (+\$4,626 and +\$2,214). The strong numbers of theses and circulation in these areas supports these increases.
- Earth and Environmental Sciences (-\$4,554). The small publishing output in this area along with weak circulation is the culprit here.

Problems to Fix Next Year

- Incorporate publisher output in areas that are affected by poor representation in GOBI e.g., foreign languages
- Reserves: FY10 should have been \$16,500, not \$11,500.
- Some LC Class changes:
 - o PL1-PL7511: masif, PL8000-PL8844: mollf
 - o DS501-DS937: masif
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