

# Appraising Professional Networks

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## Introduction

The literature on appraising faculty papers has focused primarily on identifying distinguished or long-time faculty. Such individuals often meet the criteria of representing "excellence in research, teaching, university service, and community service" (Fournier, 1990). Determining whose papers to solicit may be a qualitative analysis, but the contributions of university faculty members can be quantified and reviewed in a variety of ways. Among these methods, network analysis provides a useful supplemental approach for assessing scholarly contributions and service.

## Faculty metrics

For this project, we explored available methods for quantitative assessment of the faculty of the Department of Church History and Doctrine to identify individuals we might reach out to soliciting the donation of their professional papers. Statistical measures were selected in each of the areas of professional assignment.

### Professional service



Faculty name	Degree	Closeness centrality	Eigen-centrality
FM14	21	0.38758	0.413458
FM17	15	0.377871	0.298625
FM12	13	0.374741	0.279846
FM24	13	0.374741	0.239078
FM27	11	0.371663	0.204197



### Publishing



Faculty name	h-index value	Papers	Citations
FM13	17	42	895
FM10	8	39	187
FM7	8	13	264
FM14	7	62	158
FM22	7	58	173
FM4	7	38	300
FM6	6	55	114
FM17	5	84	141
FM9	5	56	143
FM34	5	47	47

### Teaching



Faculty name	Overall quality	Would take again	Difficulty
FM25	4.8	0.9	2
FM23	4.7	--	2.2
FM34	4.7	0.91	2.3
FM31	4.7	0.9	2.6
FM30	4.6	0.77	2
FM29	4.5	0.88	1.3
FM27	4.5	0.93	2.4
FM10	4.4	0.89	2
FM15	4.4	0.92	2.9
FM16	4.4	0.89	2.2
FM4	4.4	--	2.1

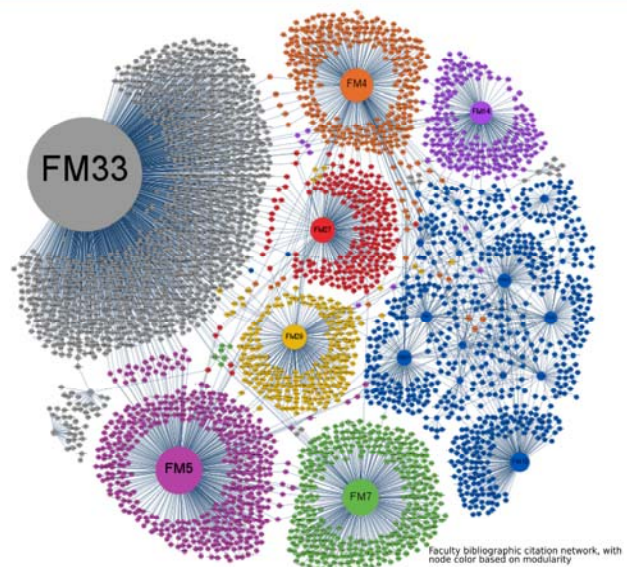
These data sources provided clear metrics for individual faculty members, but particularly in the case of scholarship did not indicate how representative faculty contributions were in the context of the department as a whole.

## Mapping citations

In order to examine the relative impact of faculty scholarship, Google Scholar was harvested using Publish or Perish. This data was then normalized and imported into Gephi to produce a bibliographic citation network graph. The resulting graph was characterized by a low average degree per node (1.107), low graph density (0.001), and high modularity (0.788).

While individual faculty members presented high statistical results, when coloring the graph based on modularity, only the community at the lower-right (shaded blue) includes multiple faculty members from the department.

Faculty name	Degree	Closeness centrality	Eigen-centrality
FM33	1293	0.408359	1
FM5	499	0.36018	0.1225
FM7	369	0.301414	0.049946
FM4	335	0.366192	0.054888
FM29	237	0.317401	0.027997
FM27	235	0.324624	0.040686
FM14	213	0.31311	0.022257
FM10	179	0.272437	0.016195
FM17	124	0.339824	0.012993
FM22	113	0.327571	0.015229
FM9	109	0.318614	0.017144



## Conclusions

Our collection development policy mandates collecting the papers of selected members of the Religious Education faculty, primarily to document their teaching and research. The ready availability of quantitative measures is helpful in making appraisal decisions. However, statistical measures of publishing such as h-index may not give enough context when selecting individuals as representatives of a department's output. Network analysis tools are useful for looking at research connections within a faculty when soliciting professional papers. It may also be desirable to repeat these analyses periodically due to shifting academic trends.



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