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Editorial

Exploring the library's contribution to the academic institution: Research agenda

1. Introduction

Research on the academic library's contribution to its institution is a topic of interest to researchers, in particular those taking library-related variables from preexisting datasets (e.g., IPEDS [the Integrated Postsecondary Education Data System]) and comparing them to certain institutional variables in the same datasets. Such variables include output metrics related to institutional and library expenses (perhaps also including the number of library staff), amount and types of library use and, in some instances, comparisons to student grade-point average. Using either parametric or nonparametric statistics, researchers may conclude that the library makes a significant contribution to institutional success. Success might be viewed in terms of student satisfaction (measured, in part, through the application of data from NSSE [National Survey of Student Engagement]), the library's contribution to the placement of colleges and universities in national institutional rankings, and the library's contribution to the institutional graduation and retention rates.

2. It's not so simple

Hernon, Dugan, and Matthews (2015), who identify a number of such studies,[1] note questionable assumptions underlying such research. These include:

- The authors might assume all students need and use the library—and do so on a regular basis.
- If the number of library visits–gate count–is one of the output metrics, the analysis excludes the fact that students enter library buildings for various reasons, not all of which involve the use of library collections or services.
- The authors might focus on grade point average without factoring in any discussion of grade inflation.
- The analysis might exclude student learning outcomes and the library's role as an educational partner in institutional success.
- The authors might exclude from analysis any data that reflect the student perspective. When satisfaction is included as a variable, the data are usually drawn from libraries completing the LibQUAL survey, which actually measures service quality—which is not the same as satisfaction (Hernon, Altman, & Dugan, 2015).
- The data analyzed are usually based on self-reporting or self-perceptions, or the amount and type of use as reported by database vendors or gate counts, as opposed to data that reflect actual student performance and indicators of student satisfaction, perhaps reported by use of the net promoter score[2] and drawing a comparison across service units within the institution.

One study that Hernon et al. (2015) discuss merits mention. Stone and Ramsden (2013) compared e-resource use, library borrowing statistics, and library gate counts for more than 30,000 graduating students in eight universities in the United Kingdom. They used focus group interviews and quantitative data collection and found "a statistically significant relationship between student attainment and two indicators–e-resource use and book borrowing statistics–and that this relationship has been shown to be true across all eight partners in the project" (p. 556). Still, the study excluded student learning outcomes from consideration.

Jackson (2015) examined the contribution of Canadian academic libraries to institutional rankings. He based his analysis of the library contribution on responses to the LibQUAL survey and its three dimensions: affect of service, information control, and library as place. He concluded that only library as place influenced the rankings. He seems to use the terms service quality and satisfaction interchangeably and does not address low response rates common to LibQUAL surveys.[3] While it is certainly relevant to ask about the extent to which the library (1) has an impact on institutional rankings and (2) influences student recruitment, the use of LibQUAL as the sole method (or even one of the methods) of data collection is questionable.

Turning by contrast to the literature produced by governments, think tanks, and consulting firms, accountability tends to be considered from four perspectives:

1. Institutional productivity, defined in terms of graduation rate.
2. The size of the graduating workforce finding employment–well-paying jobs–within the state.
3. The size of the investment that government contributes to higher education.
4. The debt incurred by students during their education; whether or not they graduated, the debt incurred still needs to be paid.

[1] See also Hernon, Dugan, and Matthews (2014).

[2] This metric views responses to the question, "How likely are you to recommend [our library] to a colleague or friend?," in terms of those users who are library promoters and those who are detractors. Promoters indicate their satisfaction on a ten-point scale by answering 9 or 10, whereas detractors respond with a score no higher than 6; those with scores in between are labeled as passive and are excluded from analysis. For a fuller explanation, see Hernon et al. (2014, pp. 114–115).

[3] For other limitations see Hernon et al. (2015, pp. 158–160).

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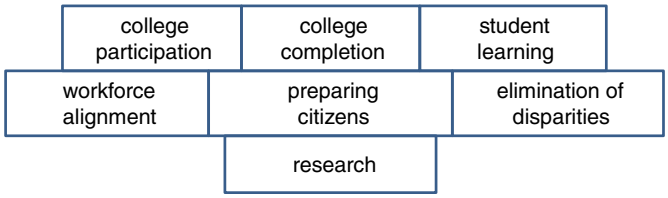

Fig. 1. Metrics mosaic.

For governments and the advocates of smaller government, one less involved in education, return on investment addresses all four perspectives. In essence, the key metric becomes total educational resources (faculty, library, and so on) expended in relationship to the number of degrees generated. Such a metric is simplistic and does not focus on learning. However, in response, these stakeholders would retort that all graduates have become educated; thereby consideration of student learning outcomes is not necessary.

As an alternative, accountability might be applied at the state level and serve as a means of competition among states for graduates able to contribute to an "innovation-dependent, knowledge-based economy" (Massachusetts Department of Education, 2015). Fig. 1 displays the mosaic of areas for which metrics can be applied to make comparisons across institutions. In the figure, college participation for the Massachusetts Vision Project might be characterized, in part, in terms of raising the percentage of high school graduates going to college and the readiness of these students for college-level work. College completion might be partially viewed in terms of increasing the percentage of students who complete degree and certificate programs. Student learning focuses, in part, on achieving higher levels of student learning through better assessment and more extensive use of assessment results. Workforce alignment might involve the alignment of occupationally-oriented degree and certificate programs with the needs of statewide, regional and local employers. (It might also focus on the placement of English and history graduates in the workforce; they are valued because of their communications skills—writing and presenting—as well as their abilities to find and evaluate information sources—their humanities/social sciences background). Preparing citizens relates to providing students with the knowledge, skills, and dispositions to be active, informed participants in society. Elimination of disparities focuses partially on closing achievement gaps among students from different ethnic, racial, gender, and income groups in all areas of educational progress. Research might examine all of the areas in the mosaic and how graduates contribute to a state's economy. Further, how does exposure to the library influence the mosaic and stakeholders' perspectives on institutions?

In the Massachusetts Vision Project, each of these areas encompasses a set of metrics. For instance, one metric for student learning is "pass rates on a broad range of professional licensure tests, with national comparisons" and "performance on a broad range of graduate school entrance examinations, with national comparisons." Workforce alignment is defined in terms of the following metrics:

- The number of and level (undergraduate; graduate) degrees and certificates produced in key occupational areas, with national comparisons.
- The number of degrees and certificates conferred in key occupational areas[4] compared to forecasted growth in state.
- Student persistence and degree completion in key occupational areas, with disaggregation by student population groups.
- Employment, and/or continuing education, of graduates from the state's public higher education.
- STEM (science, technology, engineering, and mathematics) degrees and certificates produced in key occupational areas, with national comparisons.
- Retention and graduation rates in STEM majors.
- The number and percent of undergraduate and graduate students pursuing STEM fields.

The metrics for research encompass "level of research expenditures, with national comparisons" and "level of licensing income [e.g., revenue from research innovations], with national comparisons."

3. Research agenda

Fig. 2 depicts the areas defining institutional accountability; those areas might be recast as Fig. 3. In which of these areas (in either Figs. 2 or 3) do libraries contribute? What evidence is used to demonstrate the library's role? How much of that evidence might appear in the form of metrics and dashboards[5]? Which metrics merit inclusion on a library dashboard? To what extent do stakeholders, including institutions themselves, accept that evidence and how is that evidence combined with other evidence to tell a more complete story?

Student satisfaction is assumed to be connected to retention. Is it true that increasing student satisfaction with the institution and its educational programs and services influences students' opinion that they made the right choice in attending this institution? In essence, how does the library show its contribution to retention? Does the presence of learning or other type of commons, which is assumed to engage the student population in a comfortable and friendly atmosphere, make a difference?

Once any set of metrics is established, how well do they capture activities and results across departments, within an entire institution, and across institutions?

Along with the focus on metrics and accountability, research on the topic of value, such as the ACRL [Association of College and Research Libraries] Value of Academic Libraries project (http://www.acrl.ala.org/value/), should continue and should explore applications across libraries and institutions. Library and institutional stakeholders should participate in shaping this research. It may be that the research moves in the same direction as the Massachusetts Vision Project and stakeholders begin to view value from a framework that looks across organizations.

4. Conclusion

Demonstrating the value or importance of the library from an institutional or stakeholder perspective necessitates awareness of what metrics institutions or stakeholders consider important. Any preexisting set of metrics may not fully capture the types of metrics these stakeholders find valuable and relevant. After all, "student persistence is … a more complex issue than merely the identification and analysis of some library input metrics" (Hernon et al., 2014, p. 39). Complicating matters, some stakeholders question the importance of a college degree, for example in disciplines such as anthropology, which they perceive as low paying and not contributing well to the state economy (Hernon, 2013b). They definitely view importance in terms of earning power generated by those possessing a college degree. For some stakeholders concerned about institutional accountability, the most important metric relates to the number of degrees awarded per year by a program of study and an institution. Companion metrics might, for instance, consider the number of degrees awarded in terms of employment demand by student major, the amount of appropriations provided by government, net tuition revenues viewed in relationship to the number of degrees awarded, and student earning capability over their career (Hernon, 2013a). These metrics apply at the program and institutional levels,

[4] This is also known as "areas of strategic emphasis," which change from state to state.

[5] A dashboard is a web page that displays the metrics in graphic form. An example would be the graduation or persistence rate for a college or university. Dashboards are part of an institution's effort to demonstrate its accountability. For examples, see Dugan, Hernon, and Nitekci (2009, pp. 228–234).

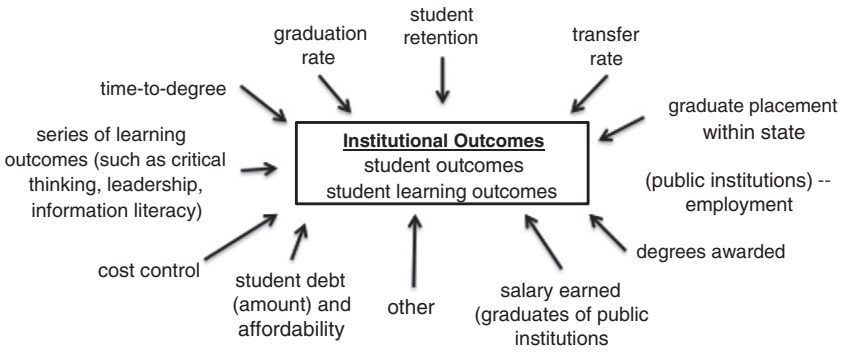

Fig. 2. Some areas of institutional accountability.

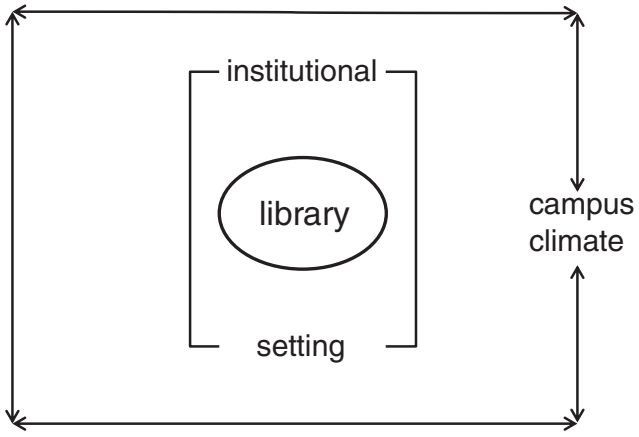

Fig. 3. Future research: translating the depiction into meaningful metrics and a meaningful story.

and the key question is, "how do libraries demonstrate their contribution at the program and institutional levels?". Whatever metrics are used to answer this question must be able to withstand public scrutiny. It is time for a national debate within the library community on how to answer this question and which metrics are most relevant to that answer. As the profession develops an answer, it should not ignore a dialogue with relevant stakeholders and the impact of movements such as the Massachusetts Vision Project.

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