Evidence Based Library and Information Practice

Continuing Education and Data Training Initiatives are Needed to Positively Impact Academic Librarians Providing Data Services

Fuhr, J. (2022). Developing data services skills in academic libraries. College & Research Libraries, 83(3), 474. https://doi.org/10.5860/crl.83.3.474

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Citer ce compte rendu

Résumé de l'article

Objective – To measure the existing data services skills of academic librarians and gather information on the preferred training programs available to enhance those skill

Design – Survey questionnaire.

Setting – Libraries in Canada, the United States, the United Kingdom, and Australia.

Subjects – One hundred and twenty respondents who self-identified as providing data services. Most (85%) worked in academic libraries with 7% in hospital libraries, 3% in government libraries and 5% in other types of libraries.

Methods – Permission was received from the institution ethics board to administer an incentivized survey. All respondents received a 22-question survey which consisted of a mix of Likert-scale questions, multiple choice, open-ended, and short answer questions. The survey was open for two months, beginning on February 20, 2020. One hundred and twenty responses were collected from librarians. A regression analysis was run for the four-skill set categories: general data services, programming languages and software, library instruction, and soft skills. The four variables measured were: geographic region, percentage of time spent performing data management services, length of time served in the data services role, and overall length of time spent in the library science field.

Main Results – The strongest data services skill sets were soft skills and instruction. The weakest skill set was programming languages and software. The more time a librarian spent providing data services, the higher their self-assessed score was for programming languages and software and general data services. Librarians from the United States rated themselves higher than Canadian librarians in data analysis software, data visualization, data mining, programming languages, text editors and project management. Preferred forms of professional development were learning by doing and self-directed learning. Biggest impediments to professional development were lack of time (34%), high cost (28%), and lack of support from administrators and supervisors (26%). Qualitative comments revealed challenges related to a lack of support, a lack of direction, and a lack of defined roles.
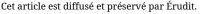
Conclusion – The survey revealed that additional training and development skills initiatives are necessary for practitioners supporting data services in academic libraries. Academic data librarianship is an emerging field with vaguely articulated roles for the data practitioner in a broad range of settings. Furthermore, the skills and training needed are not clearly defined. The standardization of education, training and the core competencies needed for the mechanics of the roles are challenging to define because of diversity within the field. Libraries embarking on providing data management services need to explore what services their community of researchers needs and plan to equip their staff with appropriate skill sets.

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A Review of:
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Abstract

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Commentary

The author provided an overview of the issues pertaining to the emerging field of data librarianship and established the significance of the study to the profession. The survey advances knowledge in this emerging field and brings attention to uncertainties surrounding the role of academic librarians rendering and supporting new data services for researchers. The validity of the study was evaluated using Glynn's tool, and found to be acceptable (Glynn, 2006). The author had a data-centric approach and attempted to gather data from a large population set, as evidenced by the census approach. They aimed to be inclusive by recruiting at academic libraries and beyond, and by recruiting librarians and other practitioners engaged in data services.

The methodology selected by the author was suitable for achieving the aims of the study; the questions asked were clearly defined and the charts in the "Findings" section provided a good visual sequence to interpret the four high-level categories of the study. The survey used for obtaining the data is consistent with accepted practices in the Library and Information Studies (LIS) field. Additionally, the survey can be replicated because the survey tool questions were appended. However, it is not clear if respondents were functioning in the role of data librarian or if they were hired as an expert in other data-related roles to carry out data services work.

The author noted limitations and areas where more research is needed. The sample size was small, especially regarding representation from the United Kingdom and Australia. Additional studies would extend this research work. Exploring data service trends in academic libraries was one of the author's objectives. The study analyzed the length of time librarians spent providing users with this service, and the self-assessed level of proficiency of the respondents. Although the results of the study are significant, reliance on self-reported data is an area of concern because of the potential for respondents' own interpretations and biases. The author did not include the demographic data of survey respondents, such as gender. This omission may impact the results of the analysis.

This study will help librarians of all experience levels to better understand the work of data librarianship. Administrators who are planning on expanding data services to their research community may use this study to identify core competencies needed by librarian staff as the author outlines specific skill sets needed. The insights gained are particularly useful because they are the perceptions of current practitioners performing diverse work in this emerging field.

References

Fuhr, J. (2022). Developing data services skills in academic libraries. *College & Research Libraries, 83*(3), 474. https://doi.org/10.5860/crl.83.3.474

Glynn, L. (2006). A critical appraisal tool for library and information research. *Library Hi Tech, 24*(3), 387-399. https://doi.org/10.1108/07378830610692154.