

Poster

Evidence Based Collection Development

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Introduction

Numerous sources in the library literature address the theory and practice of collection development and management. These include monographs on the general principles of collection development (Johnson, 2009) (Evans & Saponaro, 2005), research evaluating collections using materials-based and usage-based methods (Ching & Chennupati, 2002) (Kao, Chang, & Lin, 2003), and research on decision support systems for collection development (Uzoka & Ijatuyi, 2005).

This poster departs from previous studies by addressing collection development decision-making at the item level. It presents findings from a study of three evidence based methods applied to the acquisition of chemistry monographs (Wright, 2008). It describes these methods in detail, illustrates their practical application, reports how their efficacy was tested using circulation data, and outlines plans for further research.

Methods

Three evidence based methods were developed for the selection of chemistry monographs at the University of Houston (UH) Libraries: (1) the analysis of circulation statistics for related titles in the Libraries' integrated library system (ILS), (2) Google-mediated searching of UH Chemistry Department web pages, and (3) searches in SciFinder Scholar limited to research done by UH faculty and graduate students. Two hundred and ninety-five (295) chemistry monographs were selected between 2005 and 2007 by applying these methods rigorously. The average circulation rate of this cohort of monographs was compared to the average circulation rate of 254 chemistry monographs selected between 2002 and 2004, when the methods were not used or were in an incomplete state of development.

Results

Circulations/month were on average 9% greater in the cohort of monographs selected with the rigorously-applied evidence based methods. Further statistical analysis, however, found that this apparent increase in circulation was due to natural variations in the rates of circulation among the two cohorts, and that the 9% increase could not be attributed to the different application of these methods.

Conclusions

While the methods described in this poster provide an evidence base for the selection of chemistry monographs, their application did not change circulation rates in a statistically significant way. Further research is needed to determine if this lack of statistical significance is real or if it is a product of the organic development and application of these methods over time, which might make definitive comparisons difficult.

Further Research

The evidence based methods described above were developed and perfected incrementally over time, thus making it difficult to determine with certainty the degree to which the methods were applied at different points in time between 2002 and 2007. A different strategy is now being undertaken which compares evidence based selection methods that are fully developed and distinct.

These selection methods reflect the unique environment of the Universities at Shady Grove (USG), an institution with a primarily teaching focus that supports programs from nine separate universities: Bowie State University; Salisbury University; Towson University; the University of Baltimore; the University of Maryland, Baltimore; the University of Maryland, Baltimore County; the University of Maryland, College Park; the University of Maryland Eastern Shore; and the University of Maryland University College. The methods also reflect monograph selection in a broad range of disciplines outside of chemistry, including biology, nursing, pharmacy, psychology, public health, respiratory therapy, and social work.

These circumstances mean that a straightforward, Google-mediated search is not possible. They also mean that searching SciFinder Scholar for faculty and graduate student research is not relevant to monograph selection decisions. In this new setting, the evidence based selection methods that will be used and compared are (1) the analysis of circulation statistics for related titles in the Library's ILS, (2) using course descriptions and other documents from online searches of the web sites of USG and its nine partner institutions, and (3) faculty input on selection decisions.

Instead of using methods as they are being developed and refined, methods that are fully developed will be used. Instead of testing the impact on monograph circulation of the combined use of all the methods, each method will be tested individually to determine its impact on circulation. In this way, the difficulty of making a definitive case for the value of selection methods should be overcome.

References

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