A bibliometric methodology for identifying interdisciplinary and collaborative publications

Heather K. Moberly (1), Jessica R. Page (2), Gregory K. Youngen (3), Barbara J. Hamel (4)

(1) Texas A&M University, College Station, Texas, USA
hmoberly@library.tamu.edu
(2) Ohio State University, Columbus, Ohio, USA
page.84@osu.edu
(3) Indiana State University, Bloomington, Indiana, USA
gregory.youngen@indstate.edu
(4) University of Wisconsin, Madison, Wisconsin, USA
bhamel@library.wisc.edu

This paper describes developing a bibliometric methodology to define an ancillary journal list as a complement to a core journal list. Although it can be applied to any discipline with a core journal literature, our case study data set is research published by faculty at the 28 American Veterinary Medical Association accredited veterinary schools in the United States. Eleven years of citation data were collected from Thompson Reuters’ Web of Knowledge and exported to Microsoft Excel. Data in several fields were normalized, pivot tables were created, and data were uploaded into the Many Eyes visualization tool. The result sets were compared to the current core veterinary serials list. The images from both the pivot tables and Many Eyes showed clear trends in the data. Overall 56% of articles were published in the core veterinary journals. Bradford’s Law and a Bradford-Zipf plot show an enormous breadth of veterinary publications.