Sharing and Collecting Latin American Publications in the Big Ten: Developing a Methodology for Consortial Data Analysis

BTAA LATIN AMERICAN HOLDINGS (2006-2016) BY COUNTRY AND LC CLASS

BTAA LATIN AMERICAN ILL REQUESTS (2013-2017) BY COUNTRY AND LC CLASS
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How does one measure the relative strength of a collection?

Volume is a traditional measure of assessing collections, one that is still reflected in ARL’s annual statistics. Today an increasing emphasis is placed on collecting unique or distinctive materials. How, then, does one measure the uniqueness of a collection?

The Uniqueness formula below calculates uniqueness for a collection within a consortium, by applying a weight in the range of [0,1] based on the number of members that own the individual items. In the Big Ten Academic Alliance, a collection of 100% unique items would have a uniqueness of 1, and a collection of items that were held by all 15 members would have a uniqueness of 0.07. (Note: the minimum value depends on the number of members and would be lower for a larger consortium). This formula determines uniqueness independent of collection size; a small collection could have a higher uniqueness value than a large one if the items in the former are not widely held. Uniqueness is calculated as follows:

(unique holdings / total holdings) + ((items held by 2 libraries) / (2*total holdings)) + ((items held by 3 libraries) / (3*total holdings)) + ...

Or, in mathematical notation:

\[ \sum_{i=1}^{C} \frac{H(n)}{n \cdot T(n)} \]

where \( H(n) \) is the number of items held by \( n \) libraries, and \( T(n) \) is total collection size.

In the chart below, the bars represent the volume of Latin American holdings published between 2006 and 2016, and the yellow circles represent collection uniqueness within the Big Ten Academic Alliance.

More data visualizations, including this interactive chart, are available at: go.umd.edu/LACC (use Chrome or Firefox)