Comparative Approaches to Interdisciplinary KOSs: Use Cases of Converting UDC to BCC

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Interdisciplinarity is an important new approach to knowledge organization seeking to provide useful clustering of knowledge concerning particular phenomena that might otherwise be scattered by discipline. While gathering by discipline provides certain epistemic assurances concerning the treatment of phenomena, scattering by discipline can prevent phenomenon-based knowledge discovery. In this paper we report an exploratory study in which we seek to compare the approach to interdisciplinarity provided by the Universal Decimal Classification's synthesis and faceted auxiliaries to that provided by the Basic Concepts Classification, which is a phenomenon-based interdisciplinary general classification. To this end we created a fairly random set of 30 use cases, for which we could compare the subject classifications provided by UDC and BCC.

We will compare these two sets of subject classifications in several ways:

- The notational length
- The expressivity of the subject classification
- In particular the number of separate terms captured
- How closely does the terminology in the subject string correspond to the terminology of the document description?
- How easy it would be to browse for similar works if desired
- More generally, ease of classification and retrieval

We also hope to develop quantitative measures of the nodes, auxiliaries, and connectors that constitute a network among elements of each classified string in the sample. And we will investigate the number of distinct subject strings associated with particular works, and evaluate the potential advantages of having fewer subject strings.