Library Classification Schemes and Access to Electronic Collections: Enhancement of the Dewey Decimal Classification with Supplemental Vocabulary

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Introduction

Traditional uses of the Dewey Decimal Classification

The Dewey research agenda—create a more flexible version of Dewey

Improve presentation of information in library classification schedules, including more user-accessible vocabulary & better captions;

Identify automated ways to improve the Dewey to enhance its usefulness as an online tool.

These changes are especially important for managing growing collections of electronic resources, especially Web documents.

Many native classification schemes are emerging to fill the need (e.g., Yahoo);

Dewey is already being pressed into service (e.g.,--Web sites classified with Dewey).

A new generation of products are needed that offer:

Improved subject browsing;

Improved user access;

Automatic classification.

The fast pace of change means that new subjects and terminology are emerging faster than traditional editorial processes can keep up with them creating the need to have electronic versions of Dewey that can be locally updated and customized. These challenges are not peculiar to Dewey. They were recognized at the Allerton conference on classification in the electronic age. Bates and Thomas identified many pathways for expanding the role of library classification in a network information environment. Many are being addressed by the Dewey research agenda.

What this research does:

Address one part of the problem: automatically adding useful vocabulary and evaluating its effectiveness in automatically classifying electronic resources

Uses two sources of vocabulary: LCSH and machine-readable free text

The problem/the promise of library classification data

Why library classification data should be applied to electronic resources

Expands literary warrant

Inadequacies of traditional classification schemes

Improving library classification data

Adding vocabulary to Dewey

Why link Dewey with LCSH and Free Text

Linking vocabulary from LCSH

Why

How

Supplemental indexing vocabulary that has been reviewed editorially

Statistical mapping to LCSH (done in Dewey For Windows)

Systematic mapping to LCSH (new work)

Results

Linking vocabulary from free text

Why

Identifies extant vocabulary

Fills in gaps that are missed by other techniques

How

Results

Evaluation

Brief description of Scorpion

Results with added LCSH terms

Results with free text

Conclusion