Enriching GoldRush with core subject Open Access journals: motives and methods

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## Abstract

Open Access (OA) journals in some subject areas can be overlooked by existing OA database providers. Subject bibliographers at the Colorado School of Mines Library collected OA journals as part of their collection development responsibilities, and in the process identified 48 overlooked OA journals. The titles were uploaded to the Gold Rush e-journal management system, making them findable by all GoldRush users. The motives, methods, and analysis of this collaborative project are discussed.

## Introduction

The user community of the Arthur Lakes Library at the Colorado School of Mines includes undergraduate and graduate students, faculty, staff, and professional community patrons (consultants, engineers, geologists). Journal collections concentrate on core engineering and applied sciences, with only peripheral interest in life sciences. The Library uses GoldRush as its e-journal management system, replacing several generations of library-maintained A to Z lists.

As part of their subject responsibilities, librarians collected Open Access (OA) journal titles in selected core subject areas. To make these OA titles more visible, librarians proposed supplying the core subject lists to the Colorado Alliance<sup>i</sup> for loading into GoldRush, with Colorado School of Mines identified as the "Provider." GoldRush developers were amenable, and the lists, first Geoscience, then Applied Science and Engineering, then Chemistry, were loaded.

# Motives

Our motives for posting the OA core subject lists included:

- Using GoldRush, a familiar interface, to provide structure and subject-based resource aggregation. By creating CSM core subject lists, existing OA titles in broad aggregations are made more visible to our users, and overlooked OA titles are visible for the first time.
- Providing the basis for GoldRush Linker referrals from records in subscribed bibliographic databases to sources for full text of an article.
- Enriching the finding aid with content we consider valuable for our users. These titles are not "known items" to most users, therefore would not be found with Internet (e.g., Google) searches.
- Improving credibility titles with content valuable to our user community, even if they are "free," should be findable in a Library-sanctioned resource. The journal and the Library both stand to gain credibility.
- Promoting quality international journals. Subjects with a geographic aspect, such as the geosciences, may be represented by a diverse group of journals published outside the USA.
- Sending a message to users and authors that good OA titles exist in a subject.

• Making our work accessible to other Alliance libraries and other GoldRush users by adding to GoldRush's "Public Access Resources."

#### Methods

Sources for harvesting titles for CSM OA core subject lists included:

- Directory of Open Access Journals (DOAJ) and other OA databases, archives, and aggregations that already exist
- Subscription serial sources such as Ulrich's
- Subject listservs and current awareness resources
- Web searches
- Leads found in professional reading

Criteria for including a title on an OA subject list included:

- Quality
  - o Peer reviewed/scholarly/substantive content
  - Reputable supplier
  - Reasonable backfile
  - o Content appropriate for our user community
- Accessibility
  - o Stable server, minimal downtime
  - No access restrictions
  - English language (primarily)
  - ISSN (required for GoldRush load)

#### Analysis

Once the CSM core subject lists were loaded, the "Compare Two Databases" feature in the GoldRush Administrative module could be used to easily compare CSM lists to existing OA databases<sup>ii</sup>. Highwire OA and BioMedCentral databases contain predominantly life science titles; we were not surprised that CSM lists included many titles that they did not include. However, the multidisciplinary DOAJ database also missed a number of CSM core titles (Fig. 1).

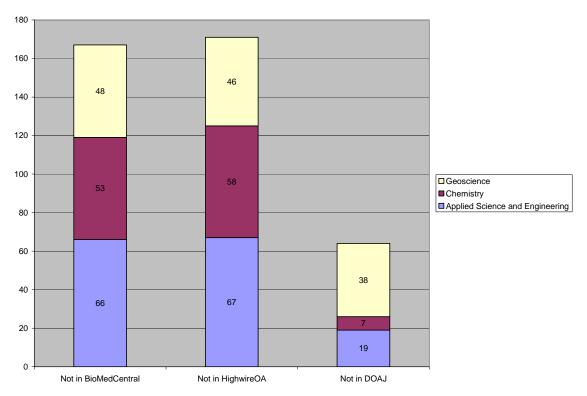


Fig. 1. Number of unique titles in CSM core subject lists compared to major OA databases.

As a means of assessing quality, CSM title lists were cross-checked to coverage by Web of Science (Science Citation Index Expanded) (Fig. 2) and to coverage by a core bibliographic database (Compendex and INSPEC for Applied Science and Engineering; SciFinder Scholar for Chemistry; GeoRef for Geoscience) (Fig. 3). Results varied by core subject. Only about 20% of Geoscience titles are covered by WOS (SCIE), compared to almost 50% of Chemistry titles. Chemistry OA titles are well represented in SciFinder Scholar; other subjects are less well represented by their respective core databases.

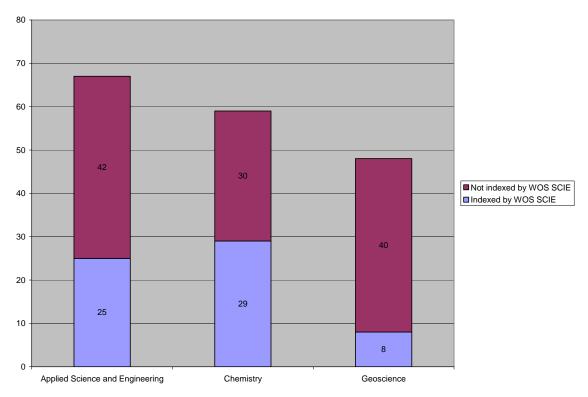


Fig. 2. Titles in CSM core subject lists that are indexed by Web of Science (Science Citation Index Expanded).

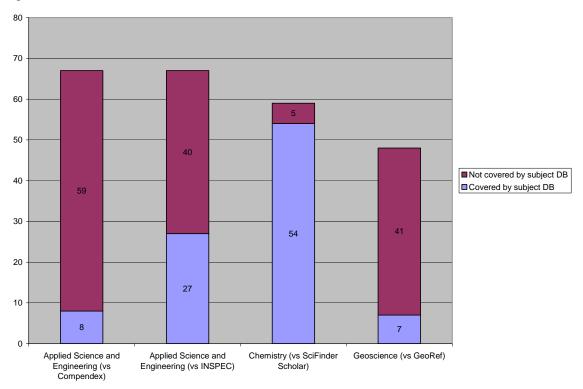


Fig. 3. Titles in CSM core subject lists that are indexed by a core bibliographic database (Compendex or INSPEC for Applied Science and Engineering, SciFinder Scholar for Chemistry, GeoRef for Geoscience).

Factors that may affect OA representation in core databases:

- Geoscience literature is time and location dependent, and frequently published by government agencies or small societies. As a result, OA publications are more common but more difficult to track.
- Applied Science and Engineering literature is dominated by commercial and large society publishers, which are inherently less supportive of OA ventures. The difference between the number of OA titles covered by Compendex and INSPEC is striking, and not easily interpreted. One vendor is a commercial publisher, the other a large society publisher.
- Chemistry literature is dominated by large society and commercial publishers, yet in our analysis it had strong coverage of OA titles. The good results cannot be attributed to crossover biochem/biomed titles. HighwireOA and BioMedCentral, which are both strong in bioscience titles, compared poorly with the CSM Chemistry core list (see Fig. 1).

#### Maintenance of CSM lists

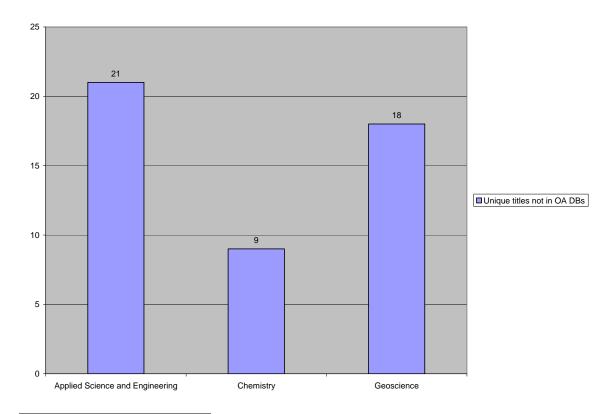
- Find and add new OA titles
- Link check existing titles
- See if ISSNs have been added for titles that were missing them; GoldRush requires ISSN data for loading titles
- Check to ensure titles are still OA and still meet our criteria for inclusion
- Review: yearly (ideally), or as need arises
- Alliance can upload revised lists as needed.

#### Problems/issues/future plans

- Initial expectation that other Alliance libraries would contribute their OA core subject lists; this has not happened.
- Data problems e.g., mismatched ISSNs, titles not tagged OA, or tagged but not really OA
- Inconsistencies in database naming conventions ("open" in the title would allow easier patron retrieval)
- Hybrid databases: some titles are OA and some are not, from the same supplier
- Considering OA lists for environmental science, materials and metallurgy.
- Open Access Conference Proceedings is anyone working on collecting these?
- We plan to forward our lists to OA databases and core subject databases for their consideration.

#### Conclusion

The CSM OA lists were merged and de-duped. If titles included in existing OA databases are removed, 48 unique titles added by CSM librarians to GoldRush remain (Fig. 4). The addition of 48 quality OA titles to GoldRush is a good outcome from a project initially designed to highlight OA journals in CSM core subjects.



<sup>i</sup> http://www.coalliance.org
<sup>ii</sup> Reports for the figures in this paper were run December 2006. The data is updated frequently, and results may vary from those presented at the 2006 Charleston Conference.