Metamorphosis of the chemistry library: What will emerge?

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Libraries & Information – Radical Transformation

- What is driving this transformation?
- What will the consequences be?
I. Nature of chemistry libraries (academic)

What do libraries / librarians at present (and historically) do?

- acquire and manage subscriptions to journal literature (which involves ownership, to a degree)
- acquire and manage subscriptions to indexes and abstracts
- provide access to these journals, indexes and databases by organizing and storing them so that they’re retrievable by end-users
I. Nature of chemistry libraries (cont.)

- monitor development/creation of new resources
- provide instructional support for use of resources
- meet with researchers/faculty to discuss information resource needs
- develop finding aids, solutions to facilitate info retrieval
- work with publishers, commercial info providers in improving information products
Essential functions or characteristics:

- organize, preserve, and provide access to information.
Function of *access* involves relationships:

Three primary partners:
- producer (researcher) –
- publisher (journals) –
- distributor (libraries);
- secondary partner, indexers and abstracters.
How have changes in the physical production and transmission of information affected this relationship and the look, if not the nature and mission itself, of the library?
II. Transformation – Stage 1
a. Current State of Affairs

- electronic access to many of the most important bibliographic indexes, e.g. Chemical Abstracts via SciFinder Scholar
- electronic access to many of the most important factual databases
- electronic access to the most important primary journal
- electronic access to many of the most important reference works
- access to an increasing array of books
Results:

- Though not all of these are web-based, we are now very close to being able to provide the essential, or even entire content of a “working” (as opposed to historical) library to our patrons’ desktops. We might call the end form of this stage, *Desktop delivery.*
II. (Transformation – Stage 1)
b. Factors driving transformation?

- resources available, format, costs
- patrons and needs
- research areas
- technology
Immediate Impediment to Stage 1 of Transformation

Costs
III. Effects of Changes in Stage 1 on Libraries

-Organize, preserve, provide access.

Method of fulfilling these tasks has changed dramatically in the digital environment.
Problems, changing arena:

- ownership and access
- preservation
- compatibility areas (browsers, software)
- supplemental material
- permanence, access
IV. Stage 2: “final” stage in transformation
IV. A. Main catalysts currently at work in the second stage:

- Open Access
  - Open Archives
  - Self Archiving
- Open Data
- Commercial software tools bundled with data
IV. B. Nature of Information Transformation

What is the actual goal of information?

- to reach the user in the easiest, and quickest manner possible.
Analogous to a river
C. Outcomes

Changes, possible outcomes:
- Publishing
- Access
- Preservation

The New Library
V. Conclusion

Something lost, or something gained?