

# The Challenge of Appraising Science Records

Determining the value of a work of art or historical document can be difficult. Projecting that value into the future can be even more daunting. Ascertaining the current and future value of science work is just as challenging. This paper examines how the records management function of appraisal can help determine the long-term value of science records. Various themes employed are briefly discussed to illustrate commonalities in differing approaches.

### The Appraisal Function Defined

Records Management provides the means to establish intellectual and physical control over science records. Typically, Records Management is composed of the following functions: accession, appraisal, arrangement, description, access, reference, preservation, disposition, outreach and advocacy. This Briefing Paper focuses on the appraisal function as applied to scientific records.

The Society of American Archivists defines appraisal as:

- 1. The process of identifying materials offered to an archives that have sufficient value to be accessioned.
- 2. The process of determining the length of time records should be retained, based on legal requirements and on their current and potential usefulness.
- 3. The process of determining the market value of an item; monetary appraisal.

This definition repeatedly stresses the words process and value. Creating a process is relatively straightforward. Determining the science value from records is another matter.

## Applying Appraisal to Science Records

Science records are different from business or administrative records. The Encyclopædia Britannica states that science 'involves pursuit of knowledge covering general truths or the operations of fundamental laws.' Science allows us to build upon work previously carried out, allowing new perspectives to be applied. Thus, predicting the future usefulness of science records will always be elusive. Adopting a 'save everything' attitude would allow for possible reuse of the records in the future.

Unfortunately, science projects typically do not adequately address the ongoing preservation or access issues that leave the ever-growing volumes of their data to languish, often becoming unusable. This situation favors making conscious decisions about how long science records need to be maintained.

## A Sampling of Approaches

The literature on appraisal details a number of approaches that can be applied towards placing a value upon science. Common themes that arise from these approaches include developing or examining the institutional collection policy, assuring that the authenticity, reliability, integrity and usability of the collection can be ascertained, and determining the uniqueness of the records.



#### **References and Further Information**

[1] Society of American Archivists. A Glossary of Archival and Records Terminology

http://www.archivists.org/glossary/index.asp (6 November 2007)

[2] Encyclopædia Britannica

http://www.britannica.com/eb/article-9066286/science (11 April 2008)

[3] U.S. Geological Survey, Earth Resources Observation and Science Appraisal Tool

http://eros.usgs.gov/government/ratool (14 April 2008)

[4] National Archives and Records Administration 2007. Strategic Directions: Appraisal Policy

http://www.archives.gov/recordsmgmt/initiatives/appraisal.html (17 January 2007)

[5] Lord, Philip and A. Macdonald (2003). Data Curation for E-Science in the UK: An Audit to Establish Requirements for Future Curation and Provision. E-Science Curation Report. Prepared for the JISC Committee for the Support of Research (JCSR), Further themes include identifying any physical or legal constraints inherent in the collection, recording who created the records and what the provenance has been through time, examining the overall quality of the records, and possibly conducting a cost/benefit analysis, especially if significant preservation or access issues are present.

Some institutions also consider the possibility of re-appraising science records at a later date. This effort could either add credence to the decision made earlier or lead to different recommendations based upon changing science requirements. Either way, the documentation compiled from the original review would be invaluable.

Incorporating such themes as listed above into a process allows entities to justify the resources applied to preserving and making science collections accessible. The process includes documentation of the review itself, a list of who participated, and the resulting actions. All appraisals of science records should include those who best know the records being reviewed. Soliciting the support of scientists in the appraisal process greatly assists the records manager in formulating recommendations related to the retention or disposition of science collections.

#### **Conclusions**

Placing a value upon science records continues to be challenging. The difficulty in doing so reinforces the need to develop a process that is defensible, includes scientists, and documents outcomes.

Together, records managers and scientists can best determine where to place resources so that the science needed in the future will be available.