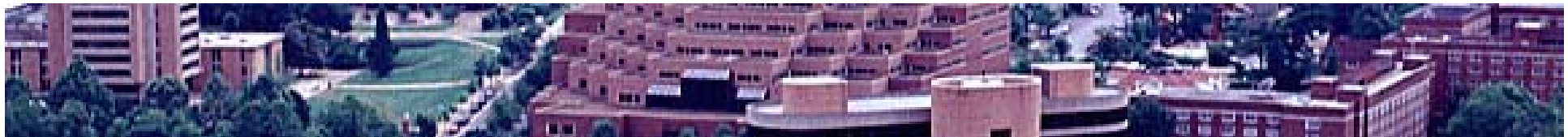


Measuring Value and Outcomes of Reading

Fiesole
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THE UNIVERSITY of TENNESSEE
School of Information Sciences



Methods for measuring value

Usage

Experiments

Citations

Critical incident

FOCUS GROUPS

Contingent valuation

Observations

Return on Investment

Conj o i nt measurement

Perceptions

Interviews



Critical Incident Technique

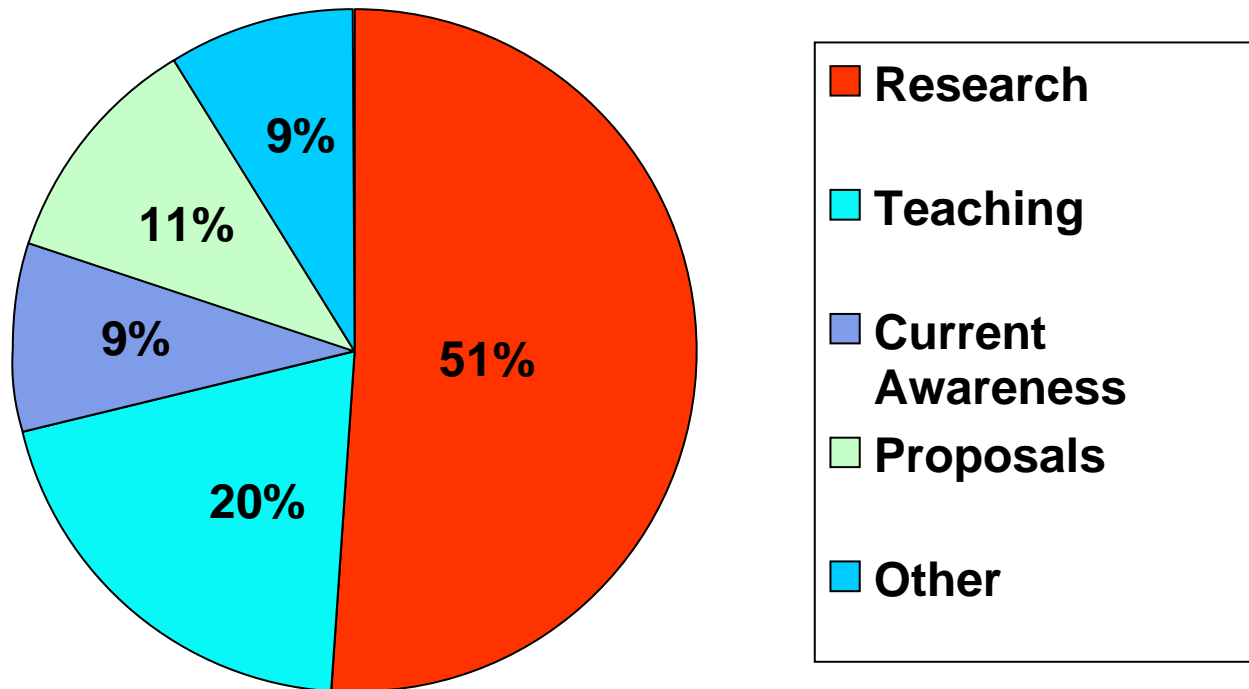
- Surveys by Tenopir and King (1977-present)
- Ask respondents about most recent reading
- Ask questions on purpose, motivation and outcomes of specific reading
- In-depth picture of complexity of readings

Critical Incident

“The following questions in this section refer to the SCHOLARLY ARTICLE YOU READ MOST RECENTLY, even if you had read the article previously. Note that this last reading may not be typical, but will help us establish the range of patterns in reading.”

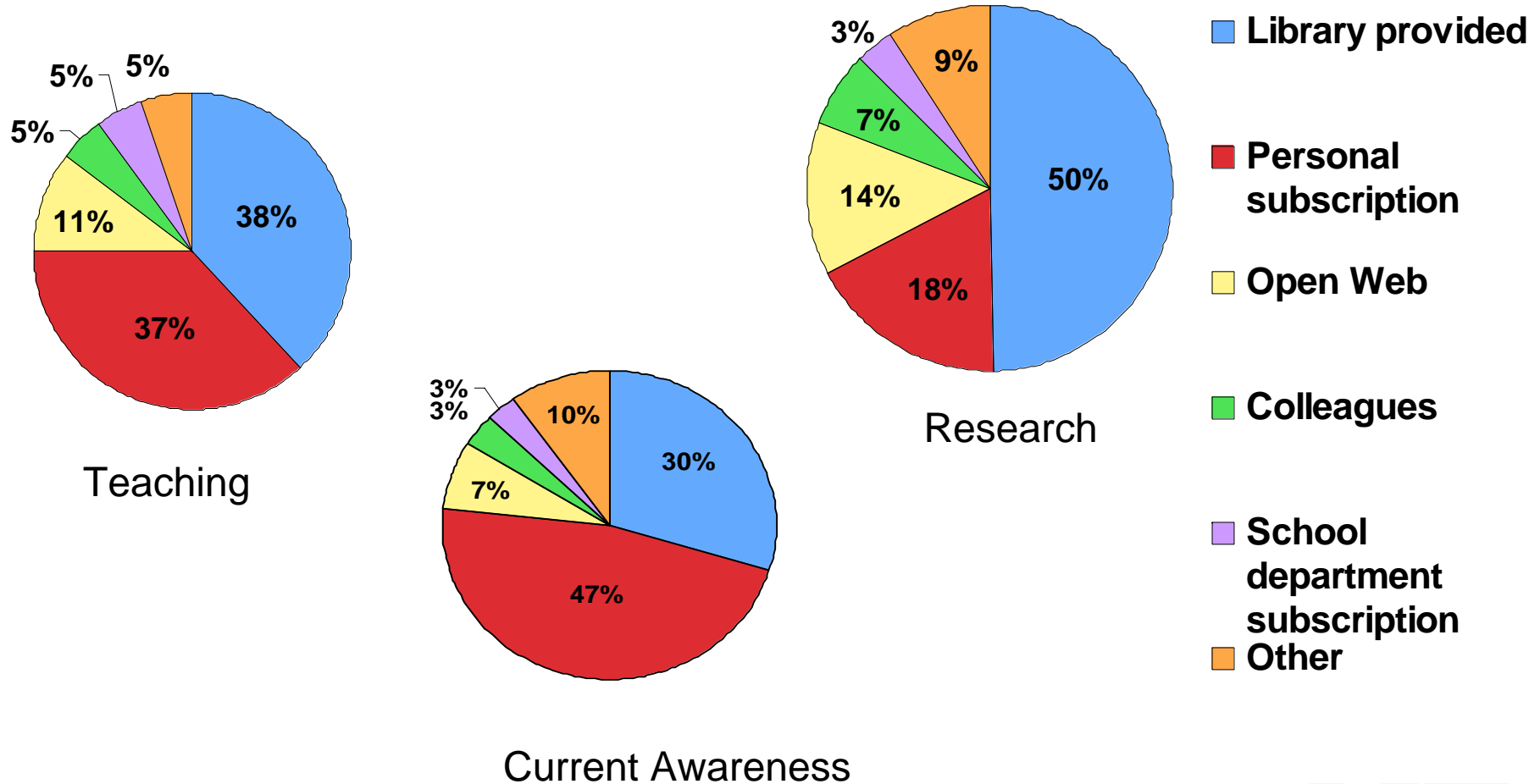
Principal Purpose of Reading

(Faculty in U.S. and Australia, 2004-2006, n=1433)



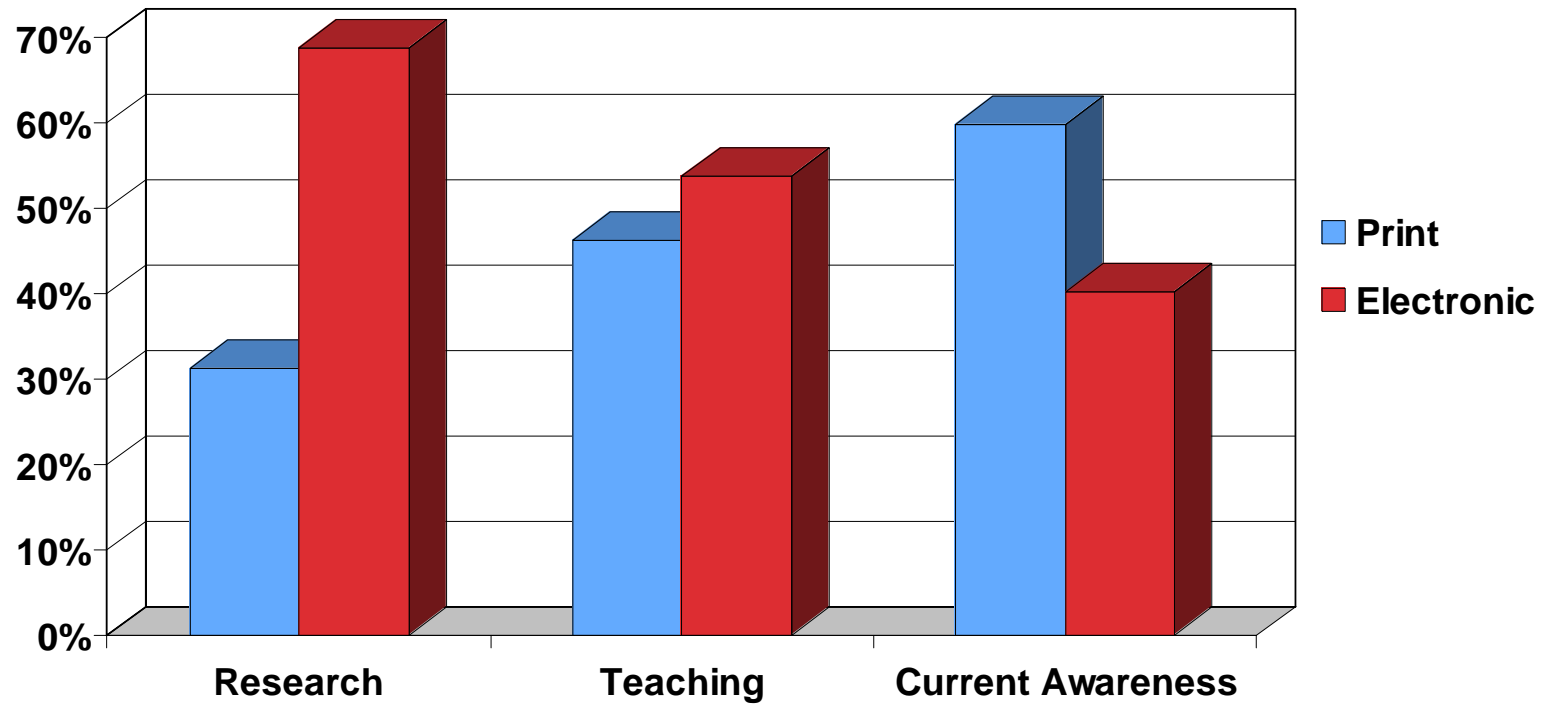
Source of reading by purpose of reading by faculty

(Faculty in U.S. and Australia, 2004-2005, n=1412)



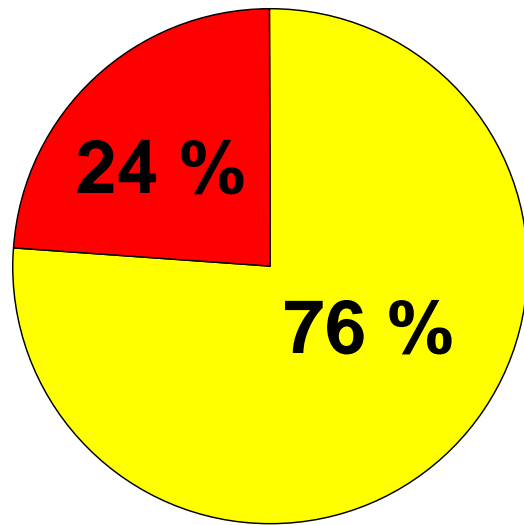
Format of articles read by science faculty

(Faculty in U.S., n=727)

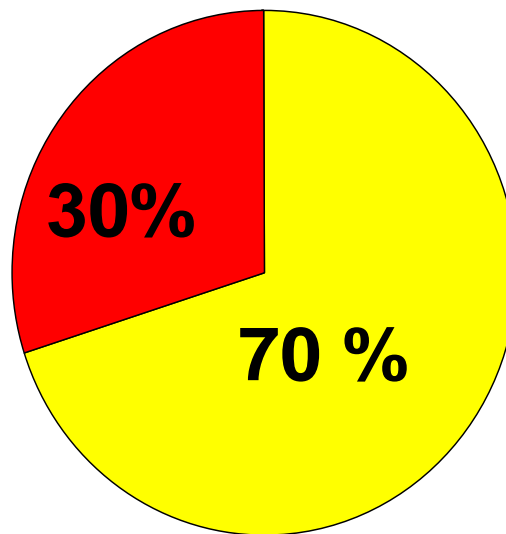
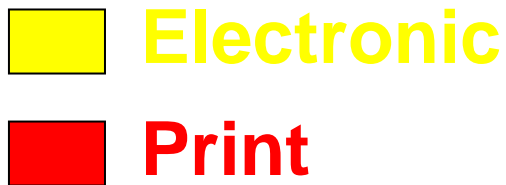


Print or Electronic

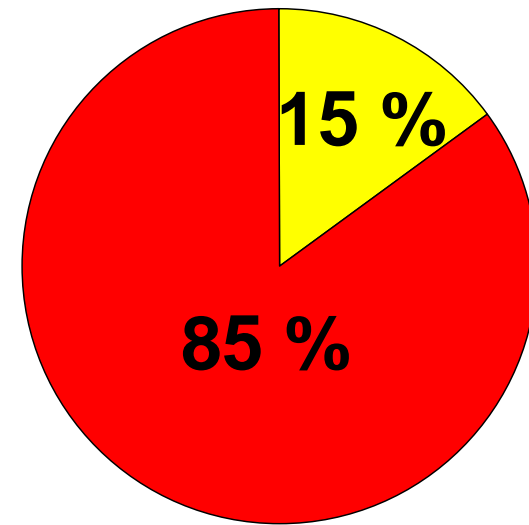
(Faculty in US, 2000-2006, n=923)



Library-
Provided



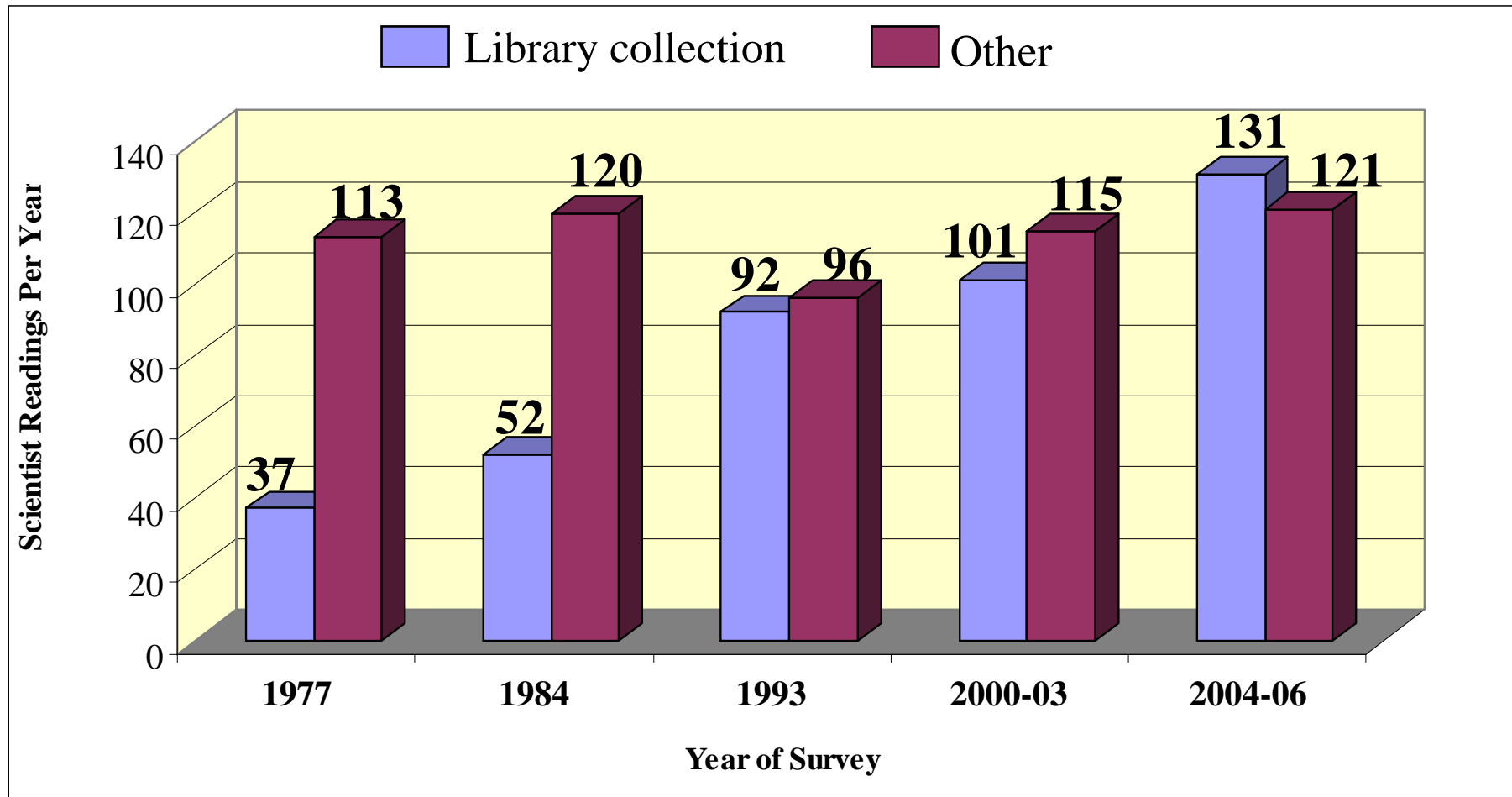
Other



Personal
Subscriptions



Library E-Collections are Most Common Source of Additional Readings



Readings for Research

- More likely to be rated “absolutely essential”
- More likely to be found by searching
- More likely to be from e-sources
- More likely to be from the library



Value of Reading in Order of Frequency of Responses (Faculty in U.S., n=880)

- Inspired new thinking/ideas (55%)
- Improved results (40%)
- Changed focus (27%)
- Resolved technical problems (12%)
- Saved time (12%)
- Faster completion (7%)
- Collaboration (6%)
- Wasted my time (<1%)

Comments (2008) tell us that E-Collections improve...

- Efficiency and productivity

“[e-access] saves me a lot of time which can be used for more extensive reading.”

- Writing and proposals

“[E-access] is essential for scientific writing.”

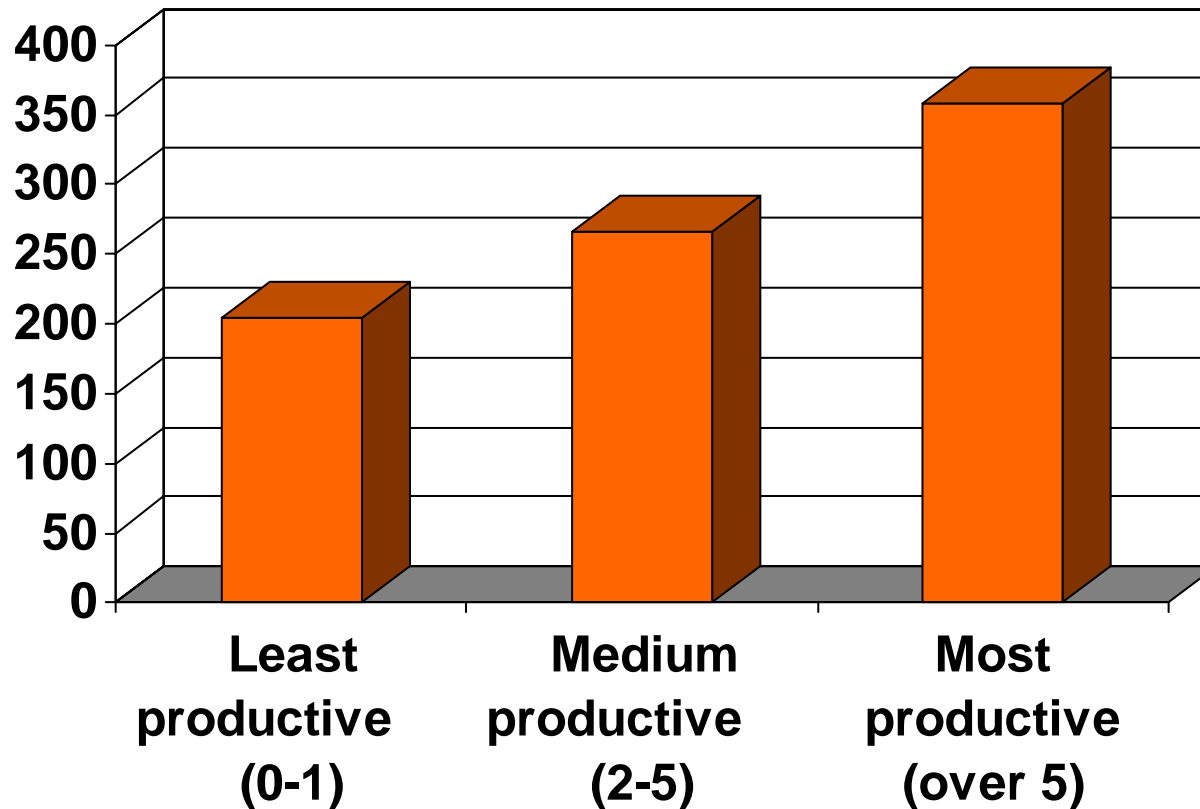
- Research and teaching

“I could not do the kind of research or teaching I do without these resources.”

Average number of articles read annually by publishing productivity

(number of articles published in the past 2 years)

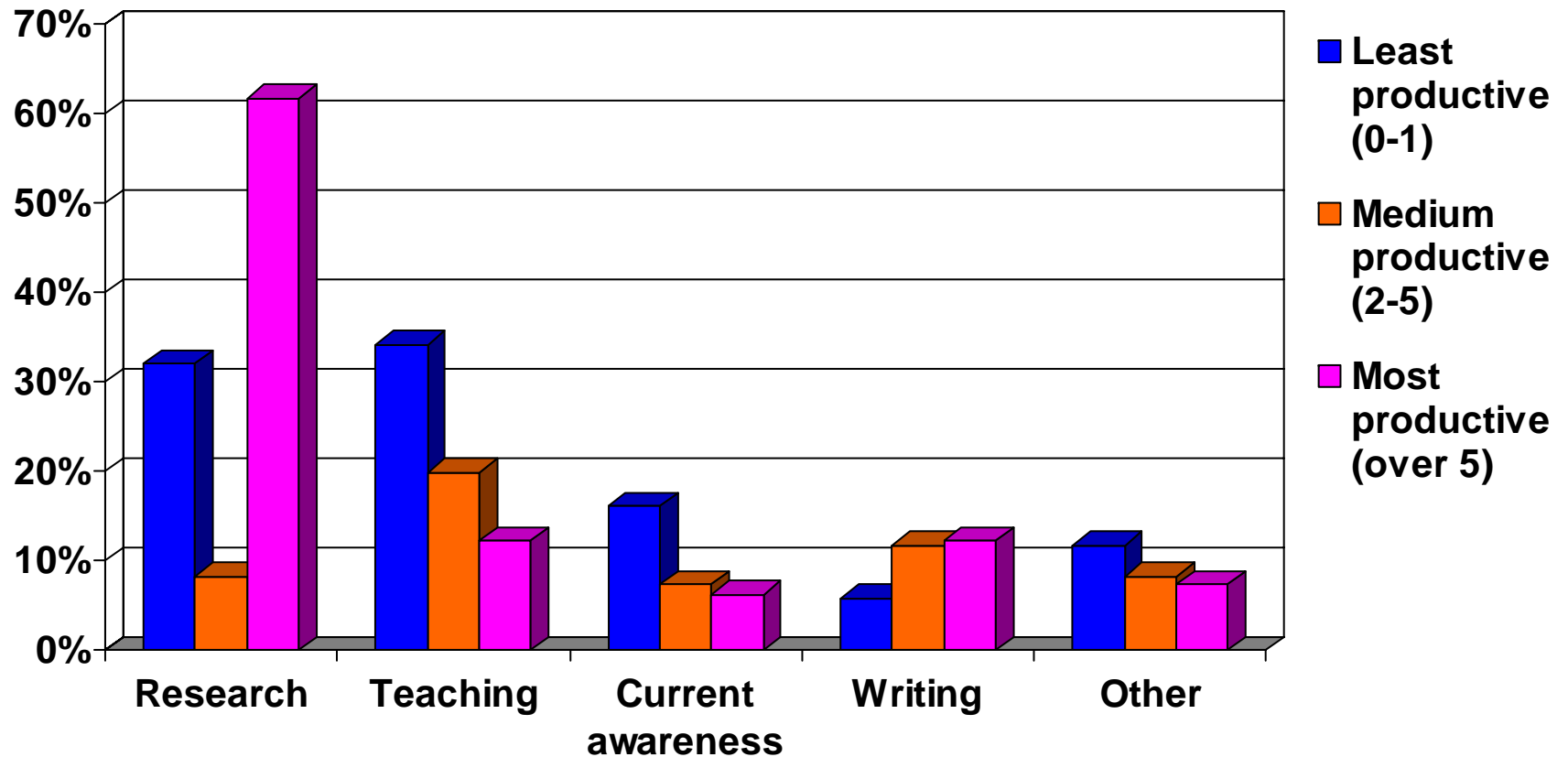
(Faculty in U.S. and Australia, 2004-2005, n=1364)



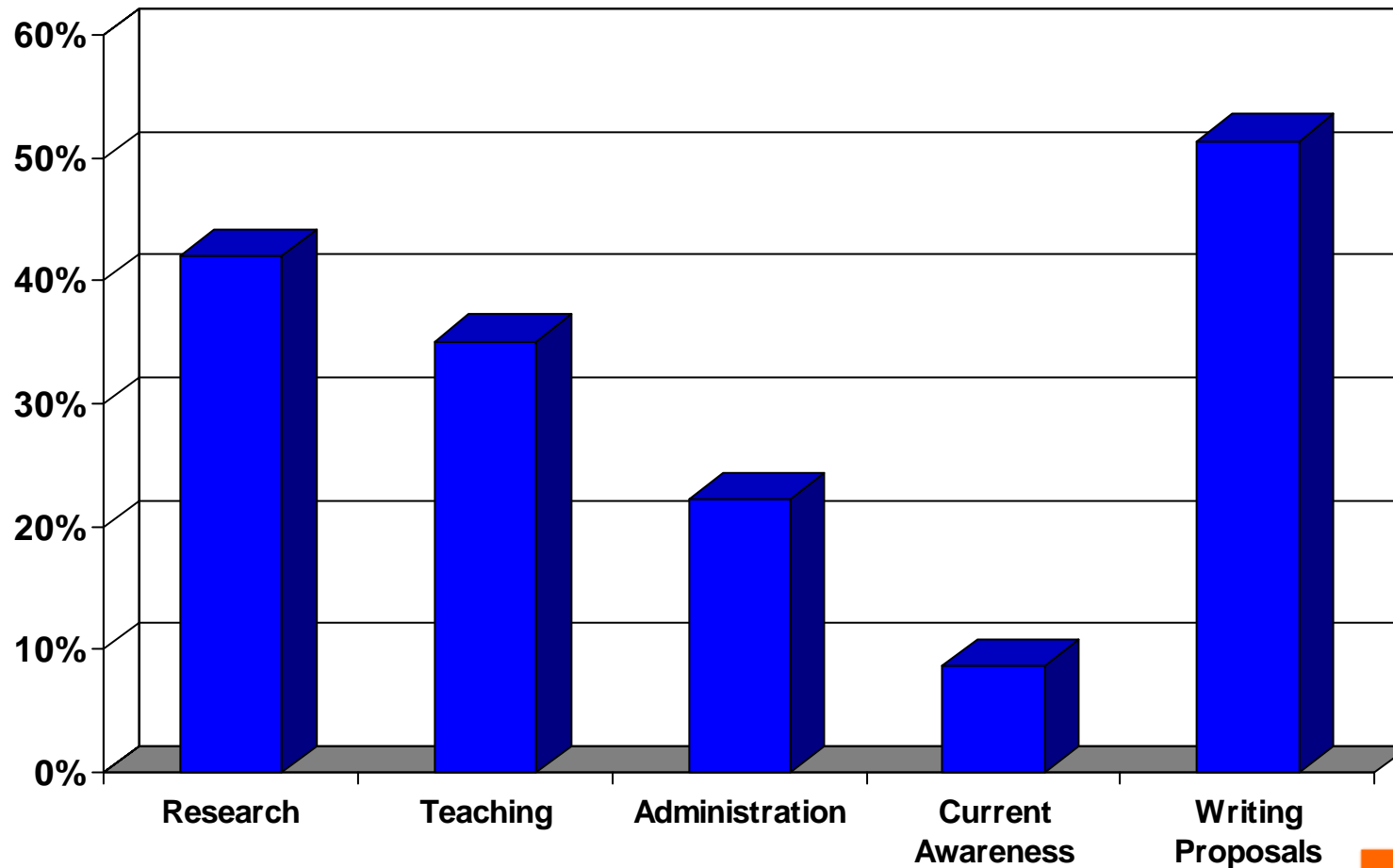
Principal purpose of reading by publishing productivity

(number of articles published in the past 2 years)

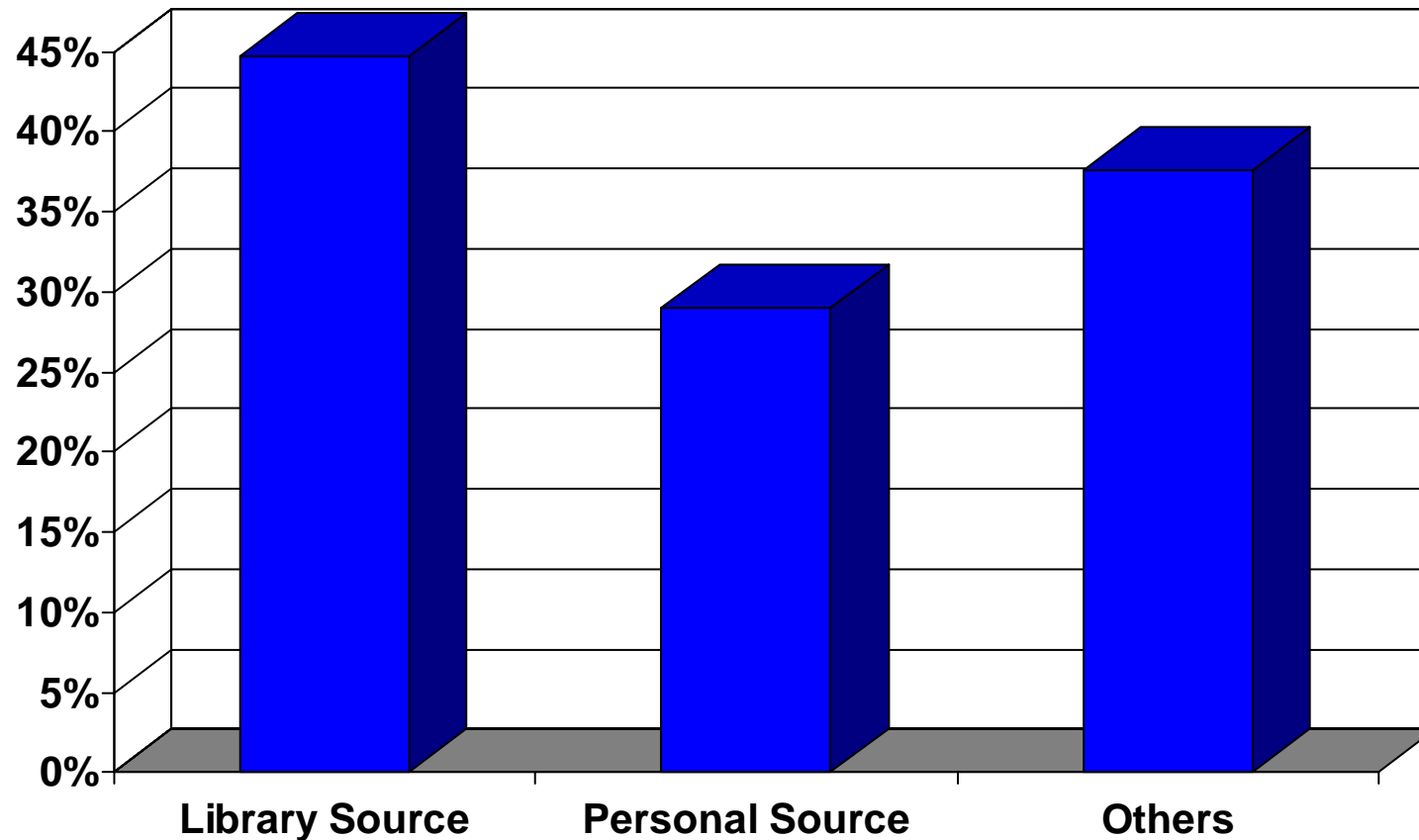
(Faculty in U.S. and Australia, 2004-2005, n=1366)



Proportion of readings that contain information that is rated as absolutely essential to the principal purpose



Proportion of readings that contain information that is rated as absolutely essential to the principal purpose

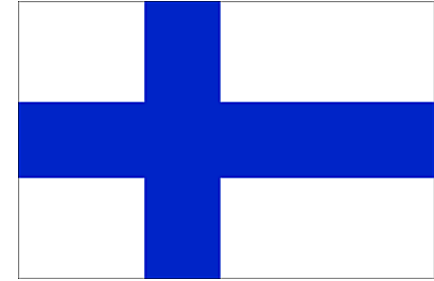


National differences

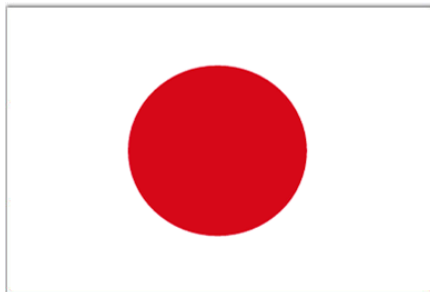


- Faculty in Australia have the highest amounts of e-reading and report a significant amount (6.7%) of readings done while travelling

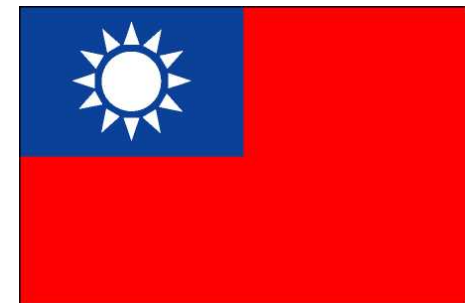
- Faculty in Finland access articles more at the office or lab, less at home



- Finnish scholars report a higher use of searching in locating e-articles



- Faculty in Taiwan, Japan and Finland have a higher percentage of readings from the library



Return on Investment (ROI)

ROI is a quantitative measure expressed as a ratio of the value returned to the institution for each monetary unit invested in the library.

**For every \$/€/£ spent on the library,
the university received 'X' \$/€/£ in return.**

Demonstrate that library collections contribute to
income-generating activities

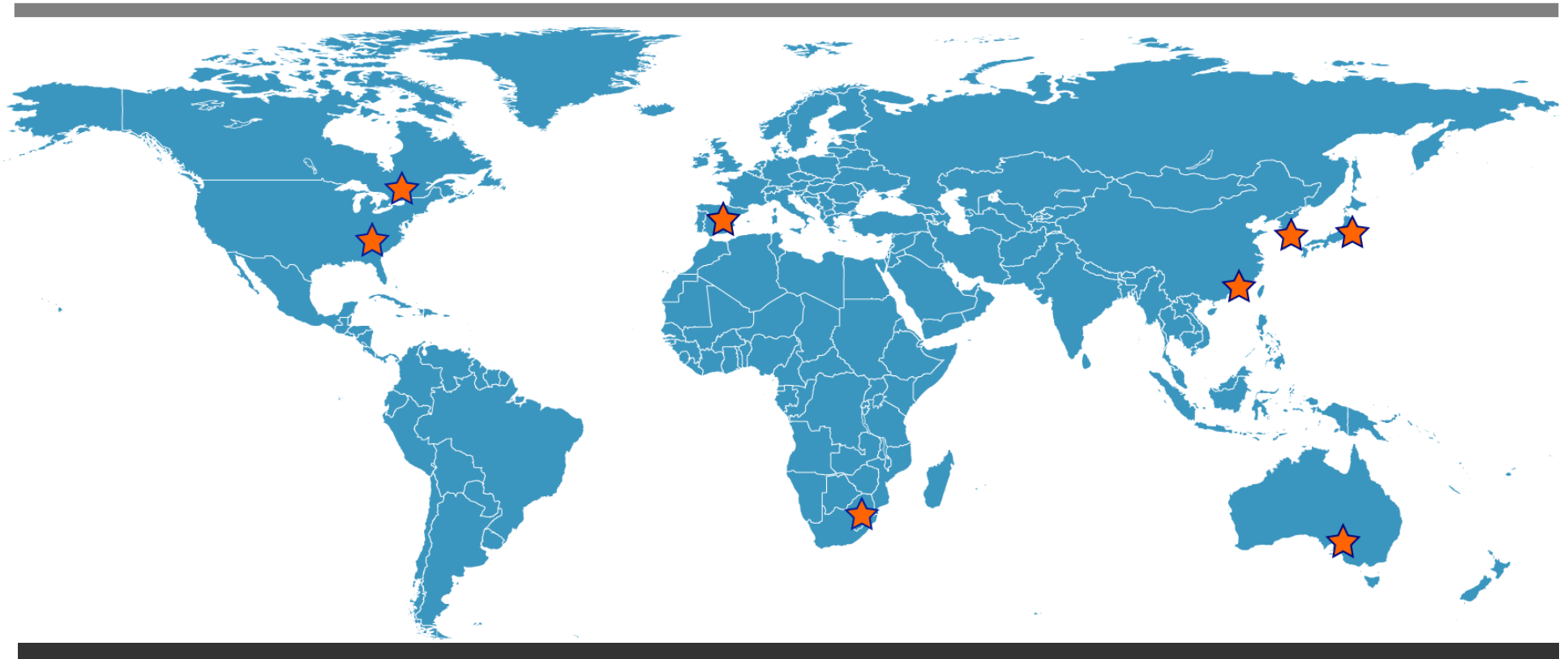
ROI Model for University of Illinois (Phase 1)

\$4.38 grant income for each \$1.00 invested in library

(% of faculty who rated citations in proposals from library as important to the proposal x % of proposals funded / library budget)

Phase 2: Value of E-journals in Grants

8 institutions in 8 countries



Phase 2: Findings

Research
STM

- 13.2:1 to 15.5:1

Research and
Teaching
STM/Hum/SS

- 1.3:1 to 3.4:1

Research and
Teaching

- Under 1:1



Phase 2: Why Does ROI of E-journals in Grants Vary?

- ROI depends on institutional mission
- Research institutes have very large grants
- Teaching universities have smaller and fewer grants
- ROI varies depending on methods of government funding
- Be cautious comparing ROI across institutions
- Phase 3 will expand scope

Some Final Thoughts on Measuring Value

- Measure purposes and outcomes
- Variations in value by purpose
- No one method stands alone
- Measures show the contribution of articles to scholarship

For further information...

- Tenopir, C. (2009). University Investment in the Library, Phase II: An International Study of the Library's Value to the Grants Process. Report prepared for Elsevier LibraryConnect.



For further information...

- Tenopir, C., King, D. W., Edwards, S., Wu, L. (2008). Electronic journals and changes in scholarly article seeking and reading patterns. *Aslib Proceedings*, 61 (1), 5-32.
- Tenopir, C., King, D. W., Spencer, J., Wu, L. (2009). Variations in article seeking and reading patterns of academics: What makes a difference?. *Library & Information Science Research*, doi 10.1016.