

What Can We Learn from Library Instruction Research?

A Content Analysis of Evidence Summaries from
Evidence Based Library and Information Practice

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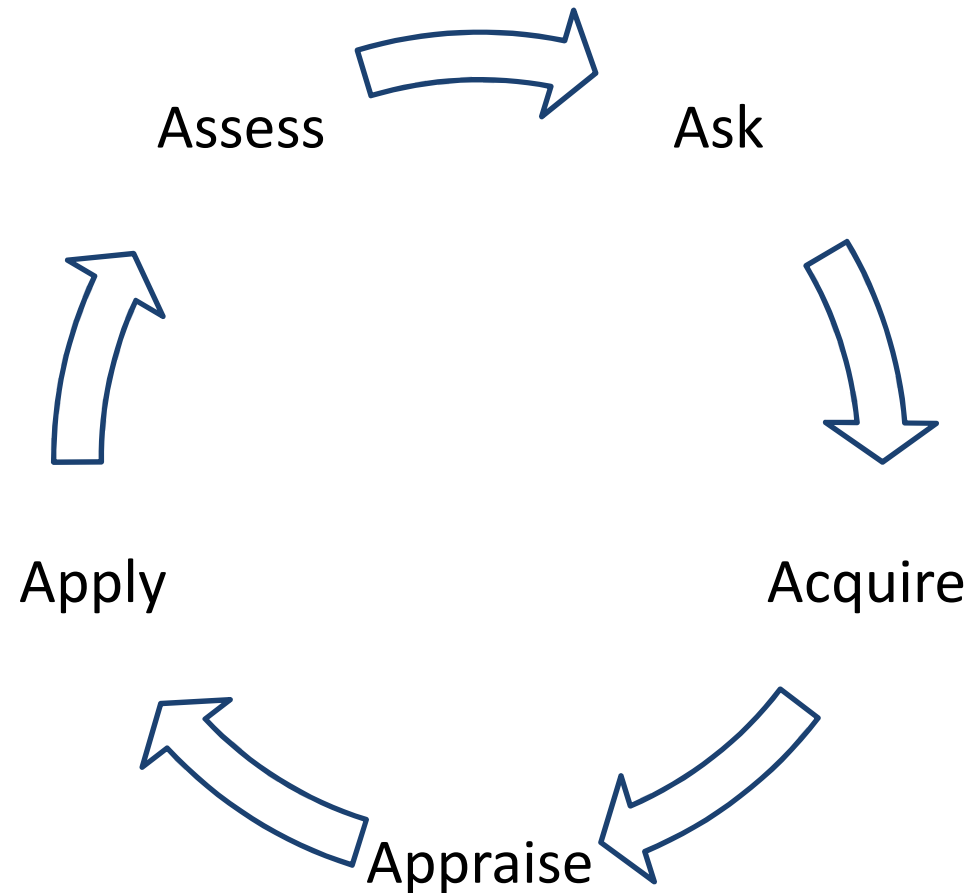
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- Open access, non-profit
- Peer-reviewed
- Published quarterly since 2006
- Open Journal Systems (University of Alberta)
- International audience
- 2000+ registered readers

Evidence Based Practice



Evidence Summaries

Structured abstract

objective – design – setting – subjects –
method – main results – conclusion

Commentary

- 300-400 words
- appraisal of validity, reliability, applicability
- significance, implications for practice



Evidence Summary

Undergraduate Students Perceive Reference Encounters to be Teaching and Learning Activities

A Review of:

Gremmels, G. S., and K. S. Lehmann. "Assessment of Student Learning from Reference Service." College & Research Libraries 68.6 (2007): 488-501.

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Objectives



- Determine common strengths and weaknesses of research relevant to Library and Information Studies (LIS), as reported in the commentary section of published evidence summaries;
- Identify commonalities in existing evidence summary commentaries.

Design



Content analysis.

Setting



LIS literature, as represented in the journal, *Evidence Based Library and Information Practice (EBLIP)*.

Subjects

Commentaries of 21 evidence summaries on library instruction research published in *EBLIP* between 2006 and 2008.

Method

- Data extraction form
- Pre-testing
- Emerging categories
- Each commentary analyzed by 2 researchers independently; discrepancies resolved by 3rd

Validity

1. Focused issue/question
2. Conflict of interest
3. Appropriate and replicable method
4. Population and representative sample
5. Validated instrument

Reliability

1. Results clearly explained
2. Response rate
3. Useful analysis
4. Appropriate analysis
5. Results address research questions
6. Limitations
7. Conclusions based on actual results

Applicability

1. Implications reported in original study
2. Applicability to other populations
3. More information required

Main Results

- General attributes (domain, setting, source, length)
- Validity
- Reliability
- Applicability
- Other findings of note

Domain Overlap

Education 21

Collections	0
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Information access & retrieval	2
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Reference	1
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Management	1
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Professional issues	2
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Setting

Academic	14
Health	5
Public	1
Special	0
School	3

Publications

- Canadian Journal of Learning and Technology
- College & Research Libraries
- First Monday
- Health Information & Libraries Journal
- Information Technology & Libraries
- Internet Reference Services Quarterly
- Journal of Academic Librarianship
- Libraries & the Academy
- Library & Information Science Research
- Library Review
- Library Trends
- New Library World
- Ohio Educational Library Media Association
- School Libraries Worldwide
- School Library Media Research

Length of Commentaries

Word Count	Frequencies	
200-299	1	
300-399*	5	
400-499	7	Mean =
500-599	4	476
600-699	3	words
700-799	1	

Topics Covered in Original Studies

Effect of instruction program or service on learning	8
Exploration of attitudes/perceptions	6
The literature of the field	2
Library or librarian effect on learner outcomes	2
Librarian roles/professional issues	2
Factors that impact student outcomes	1

Validity

- ↑ Focused issue/question (n=10)
Conflict of interest (n=2)
- ↓ Appropriate and replicable method (n=17)
- ↓ Population and representative sample (n=18)
Validated instrument (n = 11)

[appropriateness of method]

This study employs a quantitative methodology to answer a question about understanding or meaning of terminology used in library instruction. A qualitative research design, such as one using focus groups, would have also been appropriate for discovering more information about the students' perceptions of library jargon....

[population and representative sample]

Participants were randomly contacted but it is unclear how randomization was done or whether there was a self-selection bias in the type of respondent who agreed to participate (response rates were not provided).

[focused question]

The aims of the study were clear: ...

Reliability



Results clearly explained (n=7)

Response rate (n=8)

Useful analysis (n=7)

↓ **Appropriate analysis (n=10)**

Results address research questions (n=5)

↓ **Limitations (n=13)**

Conclusions based on actual results (n=7)

[appropriate analysis]

The study reports several statistically significant results in relation to the research questions, yet the analyses seem misinterpreted. For example, self-efficacy and use of electronic information jointly contributed 9% of the variance of academic performance. A large amount of variance and thus other contributing factors (91%) remain unaccounted. Both the R^2 and the adjusted R^2 (0.05531) indicate that these data do not represent a good statistical model ...

Applicability



- ↑ Implications reported in original study (n=13)
- Applicability to other populations (n=9)
- More information required (n=8)

[applicability]

... suggests that Web-based tutorials are at least as effective as face to face teaching sessions and that these may be successfully delivered either in the classroom or via the Web.

Other Findings of Note

- Commentary length / categories coded
- Situated research in wider setting
- Significance of research
- Literature review

[literature review]

What is perhaps more valuable in this paper is the extensive use of the research literature to inform the various ideas throughout. The literature review is robust, and the author includes results from previous studies all though the paper to strengthen his statements and conclusions.

Limitations

- Small set of commentaries
- Writers have varying styles of writing, appraisal experience
- Bias of researchers

Conclusions

- Aspects of **validity** and **reliability** in studies that were critically appraised in *EBLIP* were more often noted as **weaknesses** of the study. Whether this was due to general poor study design or the focus of the writer in trying to point out faults rather than positives, is unknown.
- Despite the criticisms of validity and reliability, **applicability** was still viewed **positively** – why?

Implications for Practice

- Consider aspects of validity, reliability and applicability when you are developing a research study.
- Think critically when reading a research article – regardless of where it was published, was it well done and can you apply its findings to your own environment?
- Improvements to *EBLIP* evidence summaries: content/structure of the commentaries.