Research & Knowledge Exchange
between and among
LIS Practitioners and Academics

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About the speaker

- ## Dr. Brian Detlor

  - **Professor & Area Chair** (Information Systems) at the DeGroote School of Business, McMaster University
  - **Visiting Professor** at the Centre for Social Informatics in the School of Computing, Engineering & the Built Environment @ Edinburgh Napier University
  - Former Past-President of the Association of Information Science and Technology (ASIS&T)
  - **Research interests** bridge the Information Systems and Library & Information Science communities
  - Latest **research projects**: digital skills training; digital storytelling

Agenda

- Setting the Stage
- LIS Research-Practice Gap
- Bridging the Gap
- Exercise!

Setting the Stage

- **What is research?**
  - A systematic inquiry to describe/explain or predict phenomena
  - Involves both inductive and deductive methods:
    - *Inductive methods* analyze a phenomenon and identify the general principles, structures, or processes underlying the phenomenon observed (i.e., develop explanations)
    - *Deductive methods* verify the hypothesized principles through observations (i.e., test the validity of explanations)

Setting the Stage

- **Why conduct LIS research?**
  - Library & Information Science (LIS) is its own discipline / profession having its own set of problems and questions to ask
    - LIS research is needed to *create new knowledge* and thereby contribute to the growth of LIS as a profession or discipline
    - This research can lead to *improved problem solving and decision making* in the LIS workplace/field leading to the *better provision of information services and resources*

Setting the Stage

- **Libraries are fascinating institutions to research**
  - They are complex organizations with a steep history
  - They provide a wide variety of information services and resources
  - They serve diverse user populations with ever growing needs
  - They are undergoing and responding to continual and profound changes and challenges in both the internal and external environment (e.g., technological, fiscal, legal, political, societal)

Setting the Stage

- **Research on libraries is important**
  - "Improves problem-solving and decision-making in the workplace, to make professional practitioners critical consumers of the research literature, and to better equip librarians to provide optimal information services to researchers in other fields" (Powell et al., 2002, p. 50).

Setting the Stage

- **Who conducts LIS research?**
  - ❑ *Academics*
    - Typically, researchers based in universities in LIS departments and schools
  - ❑ *Practitioners*
    - Typically, professionals based in library settings
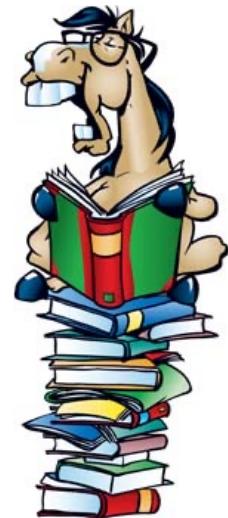
Setting the Stage

- **Who conducts LIS research?** (continued)
  - A considerable amount of LIS research is conducted by librarians (Hildreth & Aytac, 2007)
    - 47.1% of articles in a sample of LIS journals written by librarians
    - 9.7% of articles by mixed research teams (academic & practitioner)
    - Research among academic librarians significantly higher than that of public librarians

Setting the Stage

- **Why should LIS practitioners conduct research?**
  - According to Powel et al. (2002):
    - To improve problem solving & decision making in the workplace
    - To better equip LIS practitioners to provide optimal information services
    - To help LIS practitioners be critical consumers of the research literature
    - Improve an individual's ability to think critically and analytically
    - Enhance the status of the LIS organization (library)
    - Contribute to career advancement (especially academic librarians on tenure track in North America)

Setting the Stage

- **Why should LIS practitioners conduct research? (cont'd)**
  - The volume of published literature, especially on applied topics, is not always rich
    - Research on applied topic could be non-existent, especially with the introduction of newer leading-edge technologies in libraries, and new happenings in the environment (e.g., political, legal, physical)
  - LIS practitioners thus often find themselves needing to:
    - conduct research themselves, or
    - replicate research conducted by others to determine the applicability in their own local environments

Setting the Stage

- **Why do LIS practitioners conduct research?**
  - **For quality assurance / performance evaluation purposes**
    - Figure out how well certain products and services perform
    - Such research tends to be very applied and less theoretical
  - **Required of their profession or employment**
    - Academic librarians at some institutions are expected to conduct research for tenure & promotion
    - Accreditation bodies require evidence-based decision-making
  - **Personal fulfillment or growth**
    - Sharpen and maintain expertise in their subject area
    - Career advancement

Setting the Stage

- **What type of research activities do LIS practitioners do?**
  - ❏ Most research activities conducted by LIS practitioners involve **consuming research** (e.g., reading and interpreting existing research) as opposed to **conducting research** (Luo, 2011; Powel et al., 2002)
    - The most popular data collection method used by librarians is the self-administered survey questionnaire
    - The least popular is experimental design

LIS Research-Practice Gap

- **A research gap in the LIS domain exists**
  - Research in the LIS domain is conducted by both academics and practitioners
  - Research by these two communities often happens independently and research results are often not shared between the two

From a network model to a model network: strategies for network development to narrow the LIS research–practice gap

Narrowing the LIS research–practice gap

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Hazel Hall, Bruce Martin Ryan, Rachel Salzano and Katherine Stephen
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Abstract

Purpose – The purpose of the empirical study was to examine whether strategies shown to work well in one model of network development for library and information science (LIS) practitioners and researchers could be applied successfully in the development of a new network and contribute to the narrowing of the research–practice gap in LIS.

Design/methodology/approach – Overall, 32 members of a new professional network were surveyed by a questionnaire following the completion of a programme of four network events held between 2019 and 2021.

Findings – The analysis demonstrates the transferability of the existing model of network development to a new network and that it can be successfully adapted for online delivery of network events and activities.

Practical implications – The criteria deployed for the evaluation of the new network could be used in other similar settings. Funding bodies can also use these findings as demonstration of the value of their investment in network grants.

Originality/value – This contribution on means of growing collaborative networks to narrow the LIS research–practice gap stands out in contrast with prior research that tends to focus the support of research productivity of academic librarians in North American universities for the purposes of career development. Here wider aspects of research engagement are considered of value for LIS practitioners from a range of sectors and institutions, beyond North America, for purposes that are broader than personal advancement.

Keywords Collaboration, Evaluation, Librarians, Researchers, Networks

Paper type Research paper

LIS Research-Practice Gap

- **This gap is problematic**
  - "Academics and practitioners have a joint duty to carry out appropriate research, to be aware and make use of existing research findings and to communicate across the academic-practitioner divide on these issues" (Bawden & Robinson, 2022, p. 341)

LIS Research-Practice Gap

- **Facts reported in the literature:**
  - LIS practitioners don't do a lot of research, even at the most basic level of reading the scholarship
  - Librarians rarely make use of research outputs unless directly involved in the research project themselves
  - Librarians tend to submit their research findings to the professional press rather than peer-reviewed journals (which academics read)
  - Academics don't read professional press (where LIS practitioners publish)
  - The percentage of LIS practitioner-authored articles in journals is on the decline

LIS Rearch-Practice Gap

- **Why don't LIS practitioners read academic journals?**
  - The practical irrelevance of the research reported
    - Academics conduct research on topics which are funded, which may run counter to more pressing concerns witnessed by practitioners
    - Published research is heavily context-specific and thus can't be generalized broadly to other contexts
    - Lack of practical (actionable) recommendations documented in the academic literature
    - Long length of time to dissemination of the LIS academic research in journals diminishes the practical value of the reported research
  - Lack of access to LIS academic journals
  - Lack of time

LIS Research-Practice Gap

- **Why the decline of LIS practitioner research?**
  - *Lack of time* in regular work schedules
  - *Lack of formal training* in research methods (leads to low confidence to carry-out research)
  - *Lack of motivation* (research not considered significant enough to affect a librarian's career, status, or finances)
  - *Lack of research culture, support & infrastructure*

LIS Research-Practice Gap

- **LIS practitioners want to increase their research skills in the following order of priority** (Schrader et al., 2012)
  1) How to analyze data
  2) How to choose a research methodology
  3) How to formulate a problem statement or research question
  4) How to publish findings (e.g., how to write a journal article)
  5) How to write a research proposal
  6) How to write a grant proposal

LIS Research-Practice Gap

- **How do LIS practitioners prefer to increase their research skills?**
  - They prefer in-person workshops and seminars, one-on-one consultation (mentoring, coaching), and reading as mechanisms to increase their research skills and confidence **(Schrader et al., 2012)**
    - Want to have access to expert guidance
    - Want "hands-on" sessions with projects in development
    - Want workshops with follow-up discussion and/or assignments
    - Want guidance and resources available at critical points in the research process

Bridging the Gap

- **Employers can create a research environment supportive of LIS practitioner research**
  - Provide research time
  - Provide funding mechanisms for research
  - Support research mentorship opportunities
  - Facilitate opportunities for research collaborations and idea exchanges about research
    - Collaborating with others on research projects leads to increases in motivation to do research, experience with research, and confidence in performing research

Bridging the Gap

- **Example: "Researcher-in-Residence"**
  - During a past sabbatical leave, I served as McMaster University's Library (MUL) "Researcher-in-Residence" for 12 months
    1. Helped librarians conduct their own LIS research projects
    2. Facilitated research collaborations between LIS practitioners at MUL and Hamilton Public Library (HPL)

Bridging the Gap

- **Gave a workshop to librarians @ MUL about how to conduct research**
  - Two parts to the workshop:
    1. *Lecture* (gave a background on research and the barriers to LIS research carried out by practitioners)
    2. *Exercise*:
       - Had attendees fill out a workbook on "Getting to Know Your Research Project". We collectively discussed the answers as a group.
       - Later, I met individually with each librarian to go through their workbook answers and to discuss their projects

1) **What <u>research problem area</u> are you interested in?**

   (e.g., The research problem area I am interested in is 'information retrieval." The research problem area I am interested in is "information literacy instruction". The research problem area I am interested in is "physical library spaces").

   To what extent are you interested in, or knowledgeable about, this research problem area?

Statement	Strongly Disagree		Agree		Strongly Agree
I know what my research problem area is.	1	2	3	4	5
I am very interested in this research problem area.	1	2	3	4	5
I am well-versed and up to date in this research problem area.	1	2	3	4	5
I attend conferences/presentations that discuss this research problem area.	1	2	3	4	5

   Given your answers above, what steps should you take concerning your research problem area?

2) What <u>literature and/or background material</u> is relevant to your research problem area??

To what extent are you familiar with the literature and/or background material pertaining to your research problem area?

Statement	Strongly Disagree		Agree		Strongly Agree
I know the key literature and/or background material that pertains to my research problem area.	1	2	3	4	5
I know the key conferences that pertain to my research problem area.	1	2	3	4	5
I know the key journals that pertain to my research problem area.	1	2	3	4	5
I am well read up on key conference and journal papers in my research problem area.	1	2	3	4	5

Given your answers above, what steps should you take on being conversant in the literature and/or background material pertaining to your research problem area?

3) What <u>theory</u> will inform your study? How is this <u>theory</u> relevant to your research problem area?

To what extent do you know how theory will shape your research project?

Statement	Strongly Disagree		Agree		Strongly Agree
I know and understand theories from within my academic discipline that traditionally inform my research problem area.	1	2	3	4	5
I know and understand theories from other academic disciplines that may potentially inform my research problem area.	1	2	3	4	5
I understand how theory shapes and informs research investigations.	1	2	3	4	5
I know which specific theories will shape and influence my own research investigation.	1	2	3	4	5

Given your answers above, what steps should you take to sharpen the use of theory in your research investigation?

4) What are your <u>research questions</u>?

(e.g., My research questions are...)

To what extent have you identified your study's research questions?

Statement	Strongly Disagree		Agree		Strongly Agree
I have identified my study's research questions.	1	2	3	4	5
My research questions are linked to theory.	1	2	3	4	5
Answers to my research questions will make significant contributions to theory and/or fill a gap in the academic literature.	1	2	3	4	5
Answers to my research questions will make significant contributions to practice and/or be of high relevance to practitioners.	1	2	3	4	5
I like my research questions. They are interesting.	1	2	3	4	5

Given your answers above, what steps should you take concerning the formulation of your research questions?

5) **What are your research hypotheses (*if applicable*)?**

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To what extent have you identified your research hypotheses?

Statement	Strongly Disagree		Agree		Strongly Agree
I know what my research hypotheses are.	1	2	3	4	5
My research hypotheses are linked to theory.	1	2	3	4	5
Answers to my research hypotheses will greatly influence theory in my research problem area.	1	2	3	4	5
Answers to my research hypotheses are very important to practitioners.	1	2	3	4	5

Given your answers above, what steps should you take concerning the formulation of your research hypotheses?

6) **What is your research methodology?**

   (e.g., describe your data collection approach and your data analysis approach).

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To what extent have you planned out your research methodology?

Statement	Strongly Disagree		Agree		Strongly Agree
I know what data collection methods I will use.	1	2	3	4	5
I am confident in my abilities (or my research team's abilities) to collect the data I plan to collect.	1	2	3	4	5
The data I plan to collect are needed to answer my research questions.	1	2	3	4	5
I know what data analysis techniques I will use.	1	2	3	4	5
I am confident in my abilities (or my research team's abilities) to carry out these data analysis techniques.	1	2	3	4	5
The data analysis I plan to use will allow me to answer my research questions.	1	2	3	4	5

Given your answers above, what steps should you take to improve or finalize your data collection and data analysis approach?

7) What practical considerations shape your research project?

(i.e., describe any deadlines, opportunities, or critical milestones that shape your research project).

To what extent have practical considerations shaped your research project?

Statement	Strongly Disagree		Agree		Strongly Agree
I have incorporated deadlines of critical events (e.g., conference dates, research funding opportunities, data collection opportunities, vacation schedules, student hiring opportunities, work schedules) into my project schedule.	1	2	3	4	5
I am able to manipulate at least one of the following factors to help manage my project schedule: i) time, ii) resources, & iii) scope.	1	2	3	4	5
I have been very honest in planning out my project schedule.	1	2	3	4	5
I have applied the KISS principle to my project plan.	1	2	3	4	5
I have selected research collaborators that will carry their own weight on the project.	1	2	3	4	5
My research collaborators are in full agreement with the project schedule.	1	2	3	4	5
I have taken advantage of funding opportunities that can support my research project.	1	2	3	4	5
I have factored in the need to obtain research ethics clearance into my project schedule.	1	2	3	4	5

Given your answers above, what steps should you take to improve the practical considerations surrounding your project?

Bridging the Gap

- **Research Idea Generator**
  - Led a ½ day workshop involving LIS practitioners from MUL & HPL
  - Ran it as a *Knowledge Café*
    - 32 attendees (5 academics, 13 practitioners from HPL, 12 practitioners from MUL, 2 research staff)
    - 3 rounds of interaction across 5 tables
    - Each table had a separate theme

Bridging the Gap

- **Research Idea Generator** (cont'd)
  - ❑ Many positive outputs
    - Strong support & desire to form research collaborations
      - Led to a very successful SSHRC-funded *"digital storytelling" research project* involving MUL, HPL, and McMaster researchers
      - Led to a formal arrangement of regular *staff exchanges* between MUL & HPL practitioners to promote knowledge sharing and collaboration on projects

Bridging the Gap

- ## **Digital Literacy Summits**
  - ❑ Brought together academic researchers and community practitioners with interests in digital literacy training
    - 1st summit held in 2017 (95 attendees)
    - 2nd summit held in 2018 (65 attendees)

  - ❑ Spawned a few collaborative academic/practitioner projects
    - E.g., Detlor's SSHRC-funded "*digital literacy training*" project

Bridging the Gap

- **Digital Literacy Summits (cont'd)**
  - *Challenges*
    - Hard to keep the energy after the event is over!
    - Tried implementing an online collaborative tool (Basecamp)
      - No one available to moderate and encourage content contributions on a regular basis
      - No one wanted to collaborate online
      - Lack of time to check and participate
      - People disliked email updates
      - Hard to remember to check Basecamp for new messages

Recall the Agenda

- Setting the Stage
- LIS Research-Practice Gap
- Bridging the Gap
- Exercise! ⬅
    - *Before we start the exercise, are there any questions?*