

LIBRARIANS AS ACTION RESEARCHERS:

**A PRACTICAL FRAMEWORK FOR
EVIDENCE-BASED INFORMATION LITERACY
INSTRUCTION**

**Kevin Michael
Klipfel**
and
**Alexander J.
Carroll**

OUR INSPIRATION: HATERS

- Haters everywhere. Hate, hate, hate, hate, hate.
Everywhere.”

-'Sheed
Carolina '95



HATERS IN THE LIBRARY GAME

- When resistance to new ideas is not based on any evidence.
- Resistance based on a *vague intuition* that:
 - “This isn’t what we do” (blocking forward improvement or progressive thinking)
 - “This seems (to me) to work so I’m going to keep doing it (blocking reflection on current behaviors, i.e., “is this the *best* method?”).
- So the frustration seemed to boil down to an implicit assumption we were making about the importance of evidence for effective library practice.

WHAT'S SO IMPORTANT ABOUT EVIDENCE?

- **1. It's at the core of librarianship.**
 - We provide resources because librarians are *empiricists* in practice. We think that our beliefs about the world ought to be based in the best available evidence. Literally whole point of what we do.
- **2. It's at the core of instruction librarianship.**
 - Our goal is to promote student *learning* of IL skills. We must, then, ensure that we are doing the best we can to promote student learning. This requires evidence-based practices.

THE PRIMACY OF EVIDENCE IS A SIMPLE, RADICAL PROPOSAL

- Seems simple: follow the evidence.
- But: If we ask ourselves how we can organize our own instructional practices so that they are based in the best available evidence, a whole host of difficult theoretical questions with practical implications arise.
- Goals:
 - Break down for you the questions that arise when it comes to EBP.
 - Offer practical, evidence-based solutions to them.

AGENDA

- 1. What Does it Mean to Ground One's Practice in Evidence?**
- 2. Why "Librarians as Action Researchers?"**
- 3. Problems, Obstacles, & Solutions**

1. MAJOR QUESTION: WHAT DOES IT MEAN TO GROUND ONE'S PRACTICE IN EVIDENCE?

- Looked to other disciplines.
 - Why? Knew there were other professions who had this struggle b/w evidence and intuition.
- Other disciplines we examined:
 - Medicine
 - Nursing
 - Education

EVIDENCE BASED MEDICINE (EBM)

- Took off within medicine in the mid 1990s. As defined by Sackett et al. in 1996
- “[EBM] is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of [EBM] means integrating individual clinical expertise with the best available external clinical evidence from systematic research.”
- Best available external clinical evidence defined as “clinically relevant research...especially from patient centered clinical research.”

EBM (CONT.)

- “Good doctors use both individual clinical expertise and the best available external evidence, and neither alone is enough.”
- “Without clinical expertise, practice risks becoming tyrannised by evidence, [which] may be inapplicable to or inappropriate for an individual patient... without current best evidence, practice risks becoming rapidly out of date, to the detriment of patients.”

Sackett, D. L. et al. (1996). Evidence based medicine: what it is and what it isn't. *BMJ*, 312(7023), 71–72.

EVIDENCE BASED PRACTICE IN NURSING

- EBP's introduction into nursing was met with considerable resistance
- EBP seen as:
 - dismissing the validity of qualitative studies entirely
 - not allowing for the use of theory to guide decisions
 - discouraging shared decision making with patients
 - marginalizing traditional “ways of knowing”
 - anecdotes, rituals, isolated experiences, and *intuition*

Ingersoll, G. L. (2000). Evidence-based nursing: What it is and what it isn't. *Nursing Outlook*, 48(4), 151–152.

IMPLEMENTING EBP IN MEDICINE/NURSING

- Integrated into the expected core competencies and curriculums of MD, BSN, and ABSN degree programs
 - Academic training during degree programs is critical
- But: new professionals are more likely to retain the EBP skills taught in the classroom and engage in EBP in clinical settings if evidence based behaviors are modeled by senior and supervisory practitioners
 - Academic training isn't enough - *practice*

Cullen, R. et al. (2011). Evidence-based information-seeking skills of junior doctors entering the workforce: an evaluation of the impact of information literacy training during pre-clinical years: Information-seeking skills of junior doctors. *Health Information & Libraries Journal*, 28(2), 119–129.

USEFUL FRAMEWORK: ACTION RESEARCH

- What is it? Research with a “little r.”
 - “A disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the actor in improving or refining his or her actions.”
 - Sagor, *The Action Research Guidebook*.
- “When you teach a lesson and half the class gives you a blank look, you ask yourself, “How else can I teach this concept?” That’s research.”
- “Research is an effort to do things better.”
 - -Hubbard & Power, *Living the Questions: A Guide for Teacher-Researchers*

WHAT QUALIFIES AS ACTION RESEARCH?

- Three criteria:
- 1. Is the focus of the research your own professional action?
- 2. Are you empowered to adjust future action based on the results of the research?
- 3. Is improvement possible?

Sagor, *The Action Research Guidebook*, pp. 5-6.

FOUR STAGES

- **1. Find a Focus:**
 - What's the thing I want to evaluate or improve? What would I like to accomplish?
- **2. Articulate a Theory:**
 - What approach do I think has the greatest potential to help me achieve my goals? What's the rationale?
- **3. Implement Action and Collect Data**
 - What data would I need to collect to assess the effectiveness of my theory and practice?
- **4. Reflect on the Data and Plan Future Action**
 - *According to the data*, is what I'm doing effective? If so, are there further applications? If not, what I might do differently

Sagor, *The Action Research Guidebook*, pp. 6-7.

RESEARCH WITH A “LITTLE R”

Research Component	Formal Research	Action Research
Goal	Generalizable Knowledge	Local Institutional Knowledge
Training Needed by Researcher	Lots	A Lot Less
Method of Identifying the Problem of Focus	Start w/ review of previous research	Start w/ concrete problem currently faced
Lit Review Procedure	Hardcore: Lots of Primary Sources	Less stringent: can use lots of meta-analysis, “popular” books summarizing scholarly research
Sampling Approach	Random, representative sampling	Students/faculty you work with
Research Design	Rigorous control groups, longitudinal	Quicker time frame, less rigid controls.

RESEARCH WITH A “LITTLE R” (CONT.)

Research Component	Formal Research	Action Research
Measurement	Formal, Rigid, often quantitative	More convenient measures, often qualitative
Data Analysis	Stats, looking for statistical significance.	Issues of practical relevance.
Application of Results	Looking to increase theoretical body of knowledge related to teaching more broadly.	Looking to have practical significance, improving teaching in local environment.
Reporting of Outcomes	Journals, conferences, etc.	Sharing can (but need not be) more informal: with colleagues, to improve practice at one's own institution, etc.

2. LIBRARIANS AS ACTION RESEARCHERS

- “Action researchers”: professional library practitioners who
 - (1) methodologically test their assumptions about their practice by conducting research in their local environments, and
 - (2) apply these learnings in their own research and instruction practices.
- & thus
 - (3) adhere to the best available evidence about teaching and learning

WHAT THIS MEANS FOR OUR “INTUITIONS”

How AR weeds out haters:

- (1) Intuition can still be important (on the AR model it serves as an impetus for research)
 - But, AR weeds out haters, because
- (2) Data about student learning, rather than professional intuition or faculty perceptions, is considered the driving force behind our decision making as teacher-librarians.
 - Thus, the best available *evidence is driving our decision-making* as teacher-librarians.

GENERAL BENEFITS OF THE AR FRAMEWORK

- 1. Offers librarians a practical model they can easily learn and use to professionalize their teaching
 - Especially important in our current context where librarians are increasingly required to take on robust teaching roles in academic libraries
- 2. Increased professionalization as educators can help librarians more successfully meet the institutional priorities of higher education,
 - The facilitation and assessment of student learning on campus.
- 3. Seriously engaging with the craft of teaching, teacher-librarians are better equipped to become genuine co-collaborators with faculty across campus.
 - Our understanding of action research as a learner-centered framework for evidence-based practice can thus play an integral role in elevating the status of the profession throughout the academy.
- 4. Places student-learning at the center of our practices
 - Learner, not librarian-centered or faculty-centered.

IS THIS DIFFERENT FROM OTHER EBLIP MODELS?

- We're certainly not the first to look at the EBM and apply it to librarianship.
- Or even the first to suggest Action Research as a model for engaging librarians into reflective practice.
- Ours is a streamlined, practical framework designed specifically for teacher-librarians in higher education settings

Curiosity → Inquiry → Action Research → Discussion

Booth, A. (2000, July). Librarian heal thyself: Evidence based librarianship, useful, practical, desirable? 8th International Congress on Medical Librarianship, London, UK.

Koufogiannakis, D. (2012). Academic Librarians' Conception and Use of Evidence Sources in Practice. *Evidence Based Library and Information Practice*, 7(4), 5–24.

Special Issue: Action Research and the Academic Library Practitioner: Theories and Applications. Bausman, *New Review of Academic Librarianship*, 20(2), 2014.

PRACTICAL EXAMPLE: “AUTHENTIC ENGAGEMENT”

- 1. Find a Focus: What’s the thing I want to evaluate or improve? What would I like to accomplish?
 - Noticed lack of interest in topics and minimal passion. Wanted to increase students’ interest in their projects.
- 2. Articulate a Theory: What approach do I think has the greatest potential to help me achieve my goals? What’s the rationale?
 - Rogerian “Person-Centered” pedagogy and Deci & Ryan “Self-Determination Theory”
- 3. Implement Action and Collect Data: What data would I need to collect to assess the effectiveness of my theory and practice?
 - Adapted survey from psychology literature and literature on student motivation to measure “authentic topic selection”
- 4. Reflect on the Data and Plan Future Action: According to the data, is what I’m doing effective? If so, are there further applications? If not, what I might do differently
 - Seemed to work. Thought of different ways to implement and expand.

SHARE DATA & THEORY

- Klipfel, K. M. (2014). Authentic engagement: Assessing the effects of authenticity on student engagement and information literacy in academic library instruction. *Reference Services Review*, 42(2), 229-245.
- Klipfel, K. M. (2015). Authenticity and Learning: Implications for Reference Librarianship and Information Literacy Instruction. *College & Research Libraries*, 76(1), 19-30.

WAS THIS ACTION RESEARCH?

- Three criteria:
- 1. Is the focus of the research your own professional action?
- 2. Are you empowered to adjust future action based on the results of the research?
- 3. Is improvement possible?

Sagor, *The Action Research Guidebook*, pp. 5-6.

EXAMPLES OF THINGS WE COULD DO

- Is the ref desk important?
 - Why is it important (i.e. what need of learners does it address? How do we know that what we're doing is meeting that important need?)

- Is the flipped classroom a better method of teaching?
 - Why is it better (what need of learners does it address that our lectures don't)? How do we know that it's meeting that need?

3. PROBLEMS, OBSTACLES, & SOLUTIONS

■ Problem: Haters.

The reason haters are haters (in our definition) is that, even though evidence is central to what we do, we're still suggesting a *paradigm shift* (the technical explanation for why haters gonna hate). And, as we all know, conceptual change is hard).

PROBLEMS, OBSTACLES, & SOLUTIONS

- **Obstacle: exposing teacher-librarians to evidence based practice**
From our health sciences context: whether its taught in academic coursework or not, professionals are more likely to engage in EBP if these practices are modeled by senior and supervisory practitioners
- **To encourage a paradigm shift this significant, it's not enough to teach evidence based practice in library schools**
We need to encourage new library professionals to be evidence based by modeling *evidence based behaviors* ourselves

SOLUTION: COMMUNITY OF PRACTICE

- What might this look like?
- Change in priority: institutional priorities focus on student learning outcomes rather than me.
- Requires growth mindset.
- Problem of leadership: how to create a shift in priorities toward learning and provide safety for real growth-mindset oriented culture.

COMMUNITY OF PRACTICE

- Example: forthcoming UMD Libraries Research & Teaching Fellowship
<http://www.lib.umd.edu/tl/researchfellowship>
- Multi-semester program, introduces MLS graduate students to core skills of public services, such as information literacy instruction, research assistance, and basic program assessment.

COMMUNITY OF PRACTICE

- Goal: to improve student learning outcomes by creating an authentic community of practice in research and teaching services
 - Features a journal club that provides fellows and professional librarians the opportunity to stay up to date with professional literature.
 - Fellows work with professional librarian to design and conduct an action research project, and share the findings of this research.
 - Senior fellows train new hires, creating an environment of peer learning and growth.

COMMUNITY OF PRACTICE: LEARNING CELT ENHANCEMENT GRANT

- Education Training for Instruction Librarians
 - Brecher, D., & Klipfel, K. M. (2014). Education Training for Instruction Librarians: A Shared Perspective. *Communications in Information Literacy*, 8(1), 43–49.
- CELT Learning Enhancement Grant
 - Goal: apply contemporary science of learning to info lit instruction
 - Motive: Improve Student Learning.
 - Plus: #YMCMB



THE LIMITS OF LOCAL EVIDENCE

- Problem: Action research “only creates local evidence”
 - One case study does not constitute irrefutable proof of a program’s success OR failure.
 - Demonstrated by the replicability crises in other social science disciplines such as psychology and political science
- Solution: New LIS Research Opportunities

NEW LIS RESEARCH OPPORTUNITIES

- Using Action Research as a starting point can open up new directions for research into information literacy
- Our framework of evidence based information literacy encourages librarians to test the validity of other institutions' successes, thus increasing the entire profession's body of knowledge by providing corroborating or contradictory evidence.

NEW LIS RESEARCH OPPORTUNITIES

- Teacher-librarians committed to EBIL can conduct confirmatory studies to assess the effectiveness of previous research designs in their own local contexts.
- Example: you get asked by a faculty member to teach students about citing sources, and you suspect that compliance focused training on the repercussions of plagiarism doesn't work well, and that students don't care about the mechanics of how to cite something.
- Idea: can “authentic engagement” increase the effectiveness of how we teach students about scholarly discourse and attribution?

TWITTER AS A MODEL OF DISCOURSE

Two Twitter posts are displayed side-by-side.

Post 1 (Left):

rob delaney @robdelaney

Following

guys calm down squirrels invented parkour

Reply Retweet Favorite More

2,138 RETWEETS 884 FAVORITES

8:40 AM - 29 Oct 11

Post 2 (Right):

sammy rhodes @prodigalsam

Follow

It's like squirrels have no idea how incredible they'd be at parkour.

Reply Retweet Favorite More

391 RETWEETS 310 FAVORITES

3:51 PM - 7 May 13

**Paraphrase plagiarism – “Just change
a couple words so it isn’t stealing”**

TWITTER AS A MODEL OF DISCOURSE

Self-plagiarism – “It’s cool. I did a paper on this last semester.”



D'Brickashaw

@DragonflyJonez



I've become a master of dodging people from my past who i see at the grocery store. I turn into f [REDACTED] Jason Bourne.

Reply Retweet Favorite More

13 RETWEETS

4 FAVORITES



12:09 PM - 7 Aug 11



sammy rhodes

@prodigalsam



I'm the Jason Bourne of avoiding people on Facebook chat.

Reply Retweet Favorite More

113 RETWEETS

108 FAVORITES



5:48 PM - 20 Sep 12



sammy rhodes

@prodigalsam



I'm the Jason Bourne of avoiding people I know at Starbucks.

Reply Retweet Favorite More

124 RETWEETS

200 FAVORITES



7:31 AM - 8 Nov 12

NEW LIS RESEARCH OPPORTUNITIES

- On the surface, using Twitter to talk about attribution seems very different than helping students pick a research topic that's interesting.
- But, both projects fundamentally are testing the validity of the same idea – that learner centered instruction resonates with students.

Carroll, Alexander J. and Robin Dasler. (2015). "'Scholarship is a Conversation': Discourse, Attribution, and Twitter's Role in Information Literacy Instruction." *The Journal of Creative Library Practice*.

<http://creativelibrarypractice.org/2015/03/11/scholarship-is-a-conversation/>

CALL TO ACTION

- As a teacher-librarians, we need to commit to:
 - Systematically testing our assumptions and intuition by using *curiosity* to drive *inquiry*, leading to *action research* projects that can be *discussed* with the professional community
 - Conducting replication/confirmatory studies, and potentially systematic reviews of previously published literature
 - Pressuring our professional associations to fund this kind of research, and our journals and conferences to showcase studies that confirm or contradict previous studies
 - Or, said another way...

“THINK LIKE A PROFESSIONAL LIBRARIAN”

- Research is an effort to do things better.”
 - -Hubbard & Power, *Living the Questions: A Guide for Teacher-Researchers*
- Takeaways: Radical Change in Practice Starts with a Radical Change in *Thinking*.
- Change starts with one person: *you*.