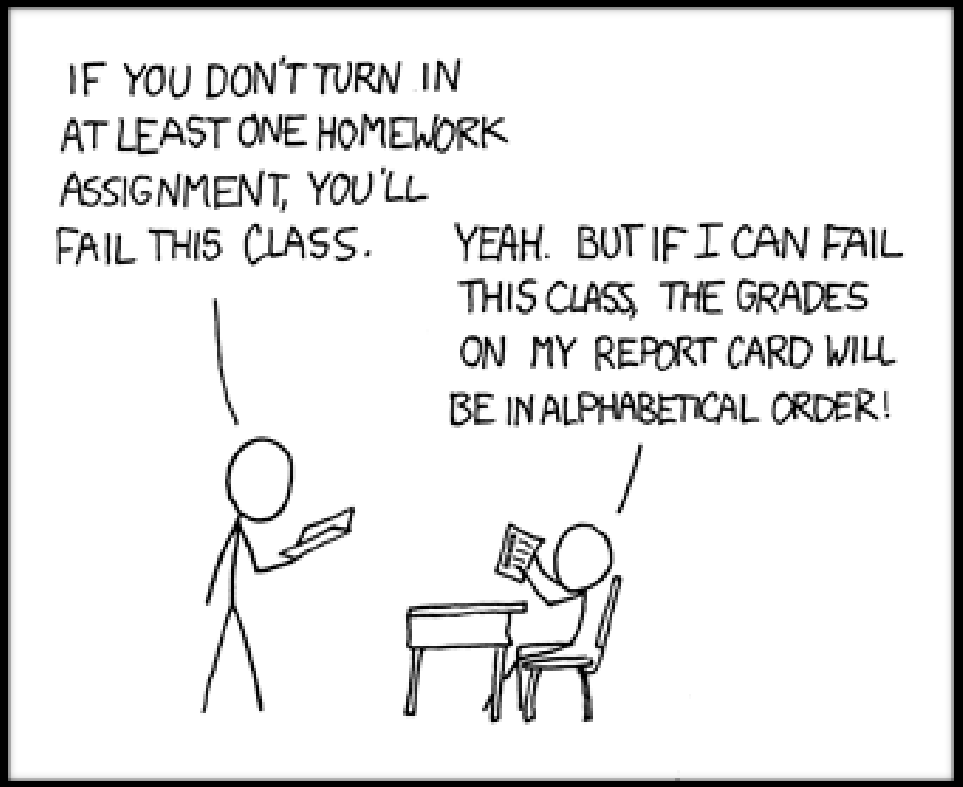


"priorities" by xkcd

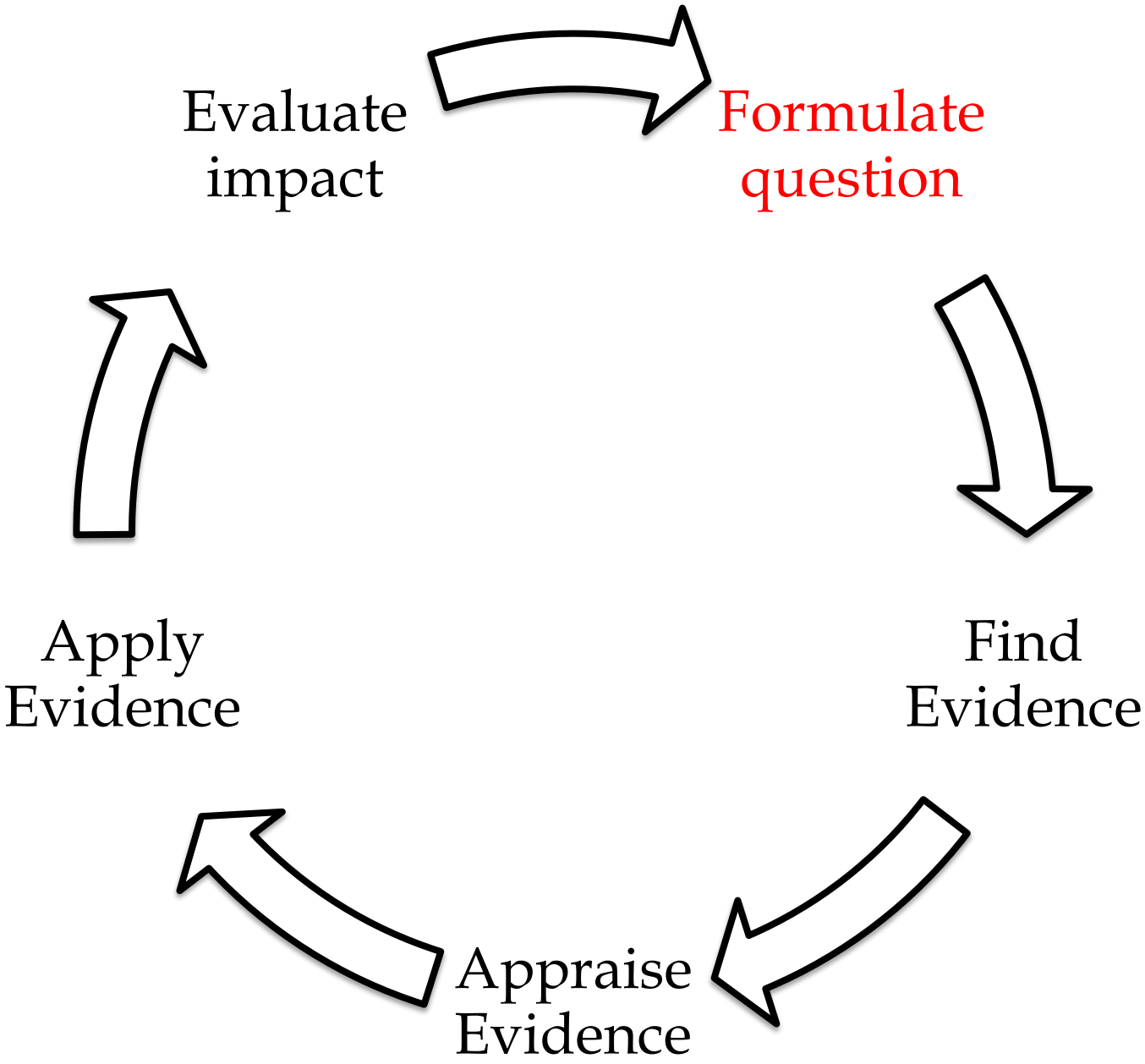
Question, Find, Evaluate, Apply: Translating Evidence Based Practice to Information Literacy Instruction

Megan Oakleaf, Syracuse University
Diana K. Wakimoto, Cal State East Bay

Definition

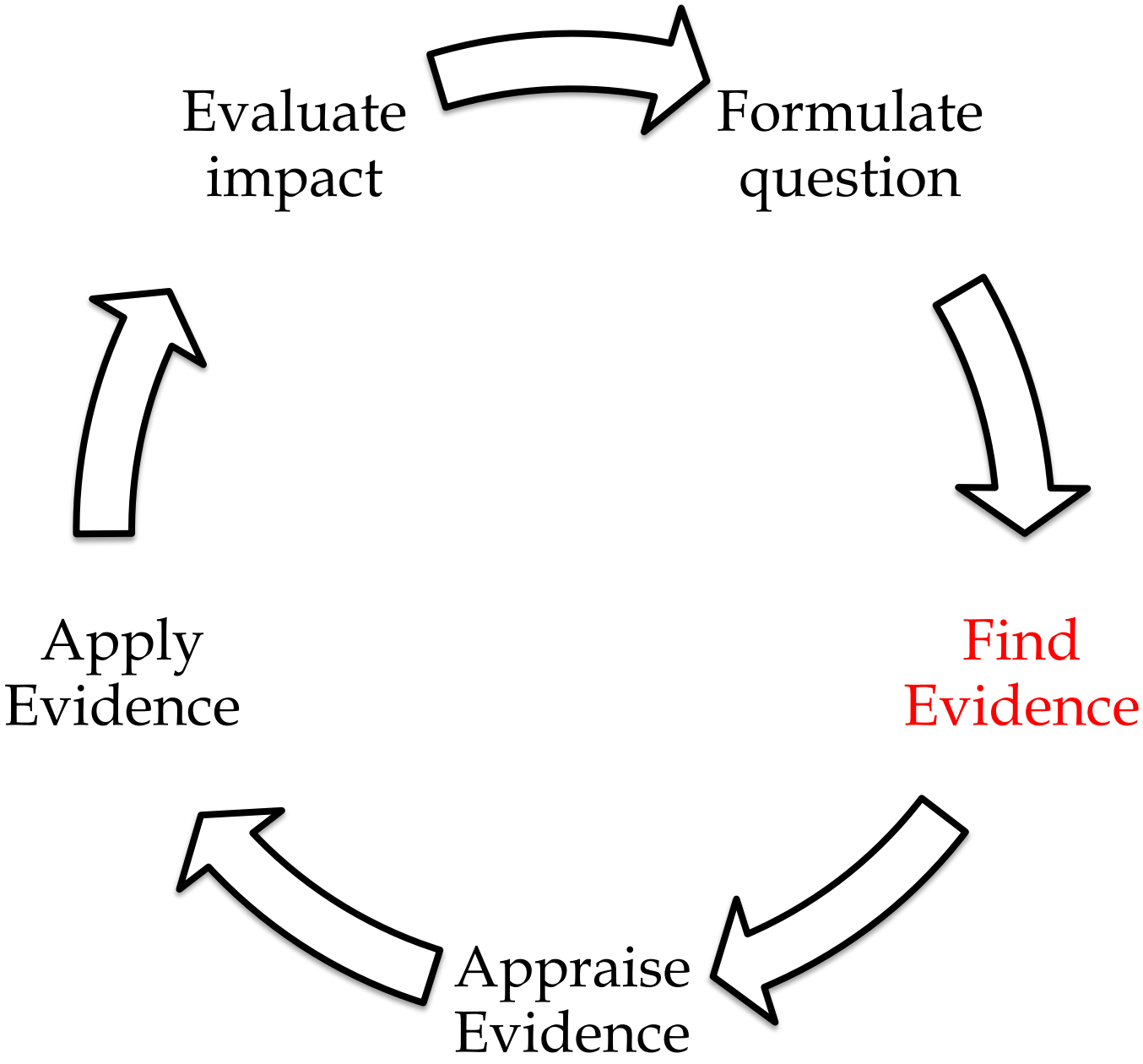
"Evidence-Based Librarianship (EBL) is an approach to information science that promotes the collection, interpretation and integration of valid, important and applicable user-reported, librarian observed, and research-derived evidence. The best available evidence, moderated by user needs and preferences, is applied to improve the quality of professional judgements."

--Andrew Booth

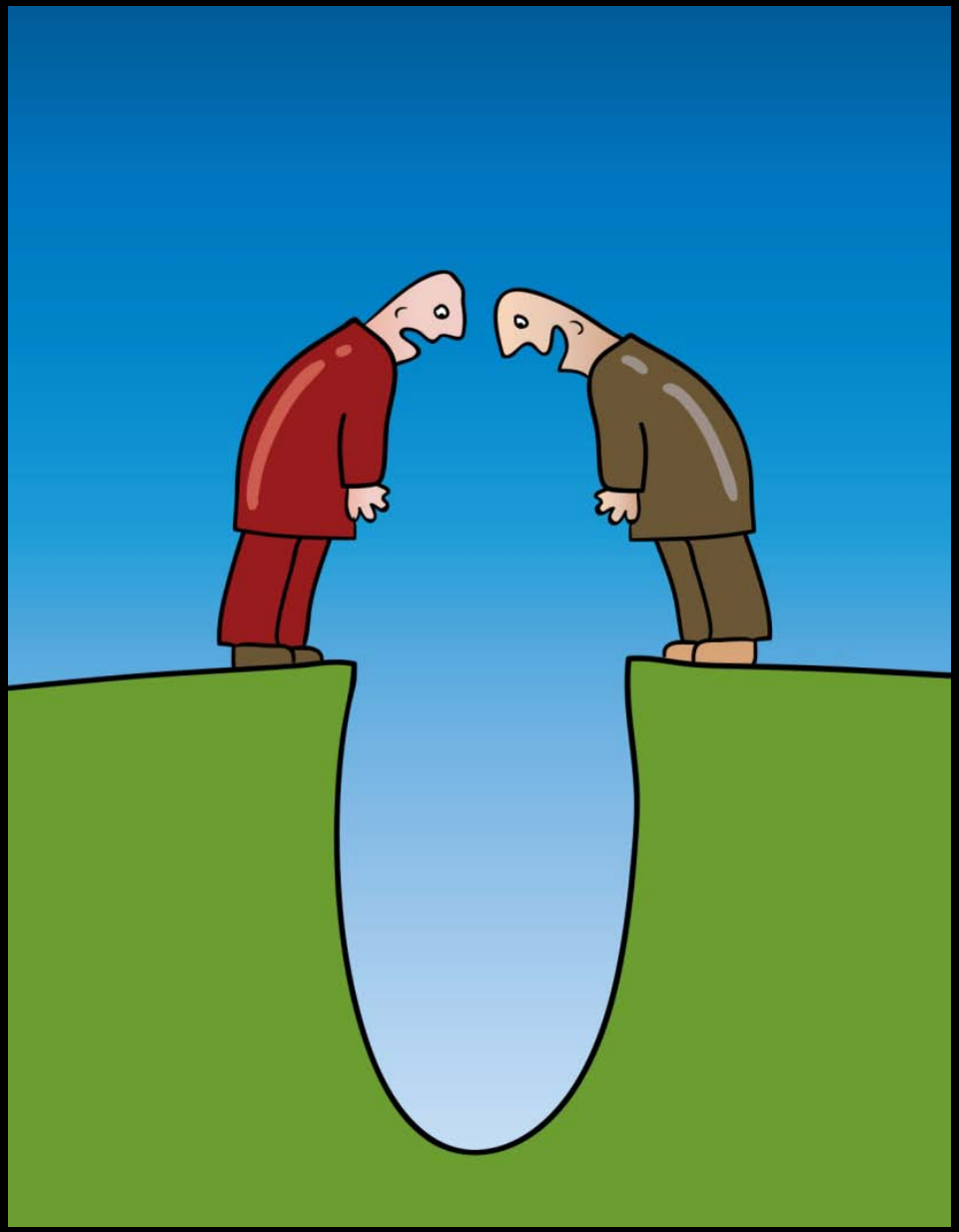

Formulate question
Find Evidence
Appraise Evidence
Apply Evidence
Evaluate impact

Example Question

Is either face-to-face instruction or online tutorials significantly more effective in teaching first-year students information literacy skills?


Evaluate impact
Formulate question
Find Evidence
Appraise Evidence
Apply Evidence

The Search



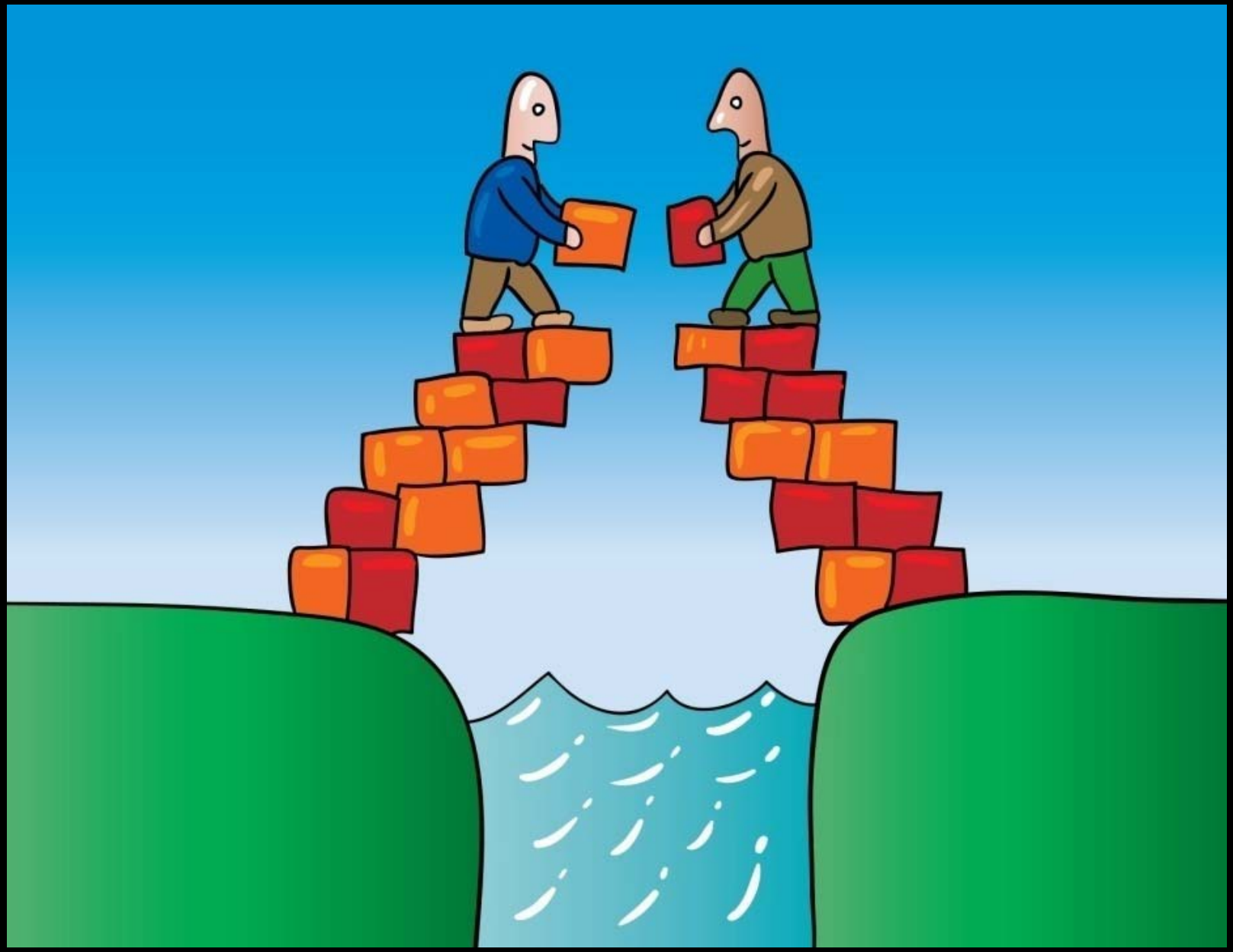
Journal Titles

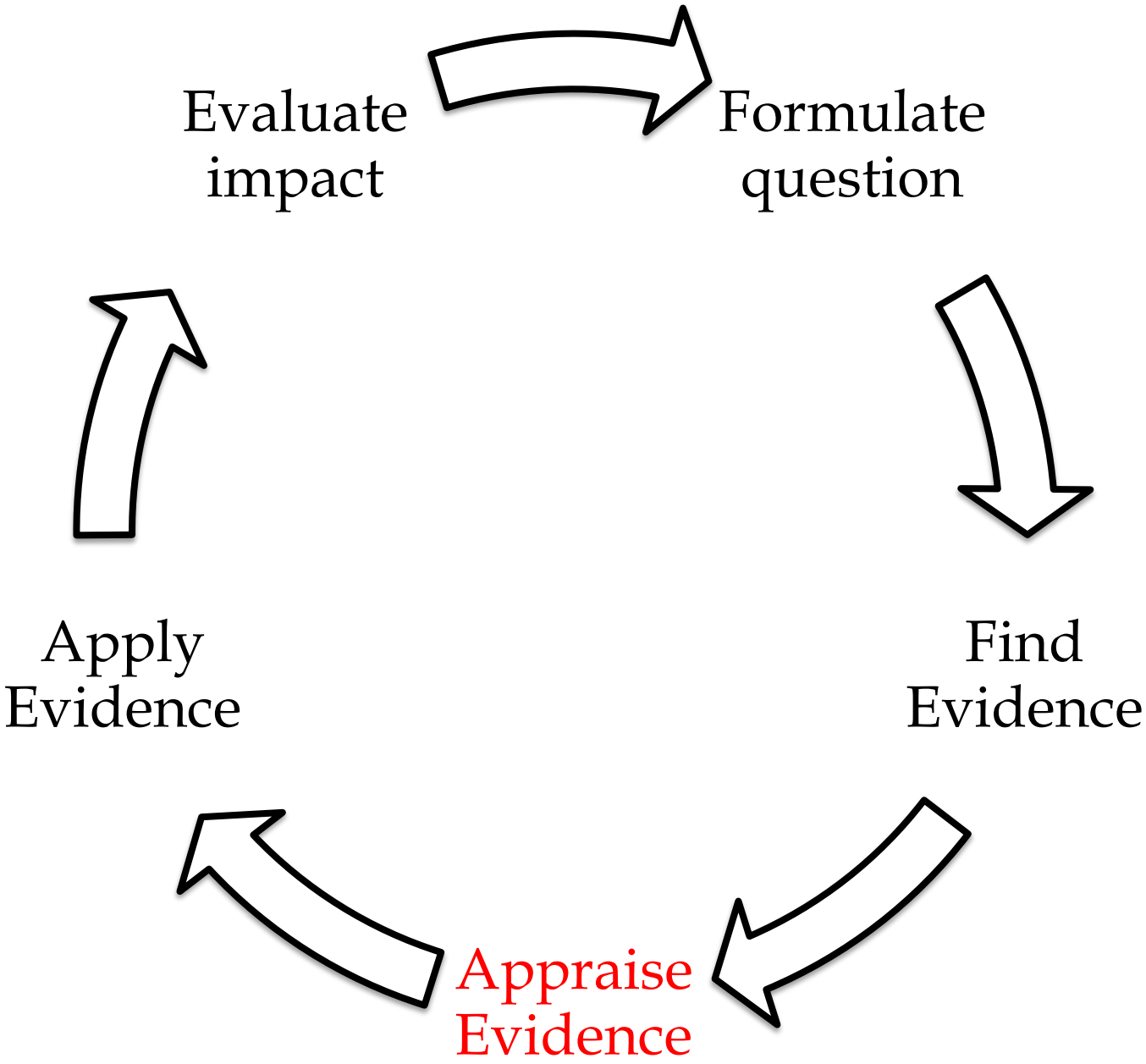
- Journal of Academic Librarianship
- Portal
- College and Research Libraries
- Communications in Information Literacy
- Evidence Based Library & Information Practice
- Journal of Education for Library and Information Science
- Research Strategies

Practitioner-Observed Evidence

- professional judgment and expertise
- interaction with colleagues
- communities of practice
  - Conference papers & posters (grey lit)
  - Institutional/subject repositories
  - Listservs
  - Blogs
  - Wikis

http://www.teresco.org/pics/signs




Evaluate impact
Formulate question
Find Evidence
Appraise Evidence
Apply Evidence

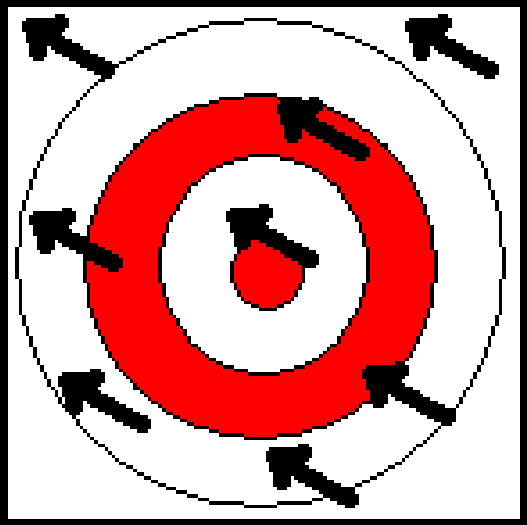
Evidence…

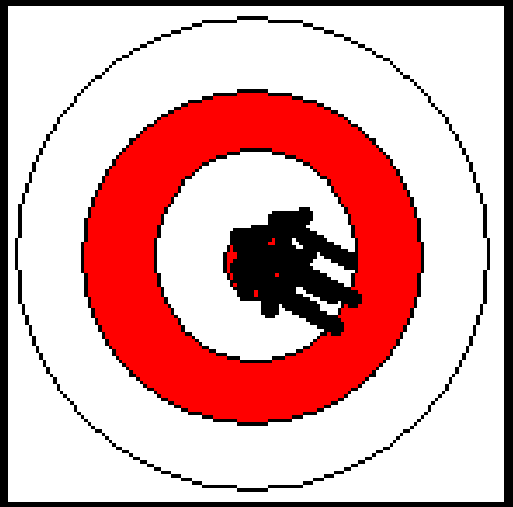
What makes for good evidence?
What makes for bad evidence?

What is critical appraisal?

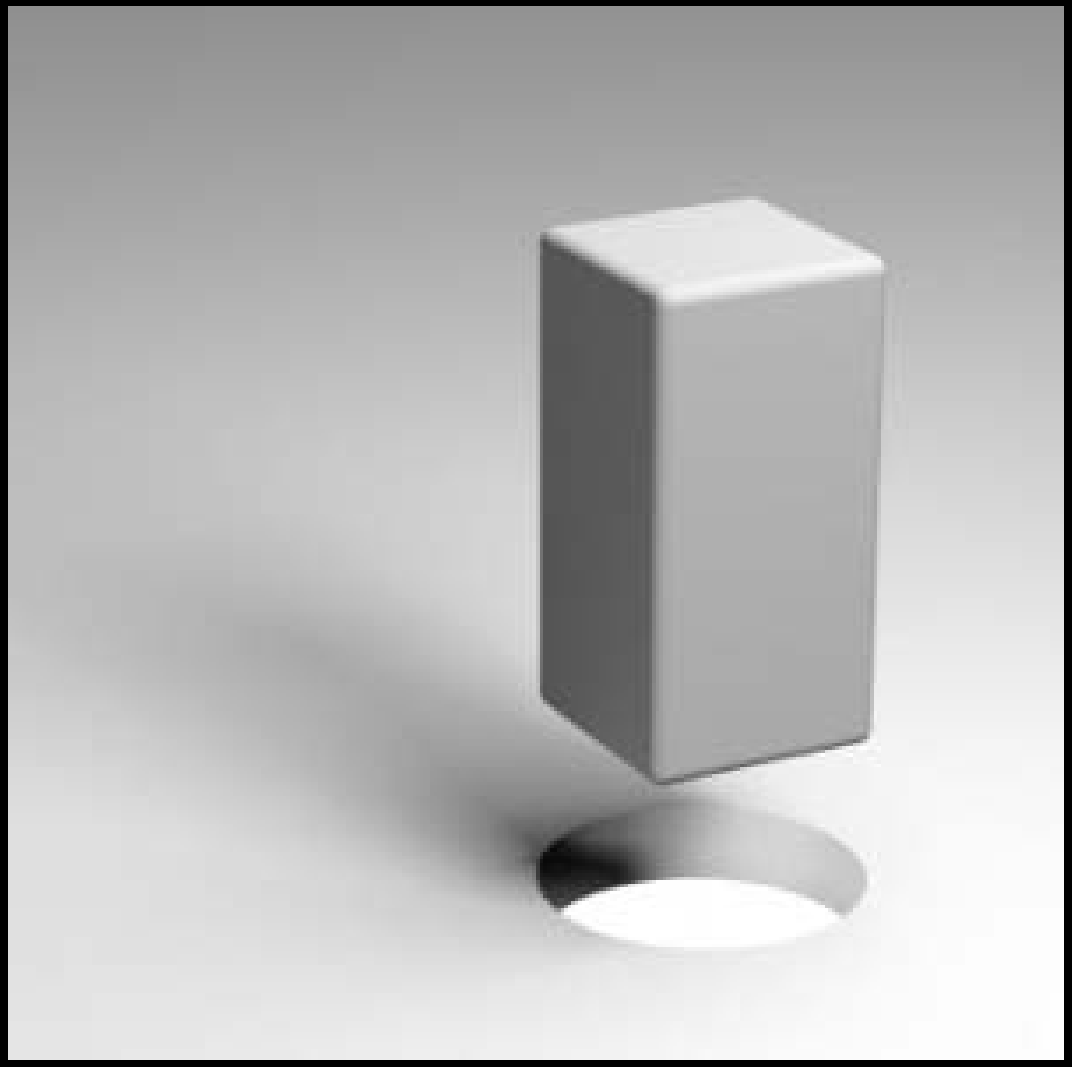
- Putting aside personal opinion and judging a research study on its own merits
- Reading a paper with a questioning mind
- Thinking critically
- Using a structure/set of questions

Denise Koufogiannakis (2009)

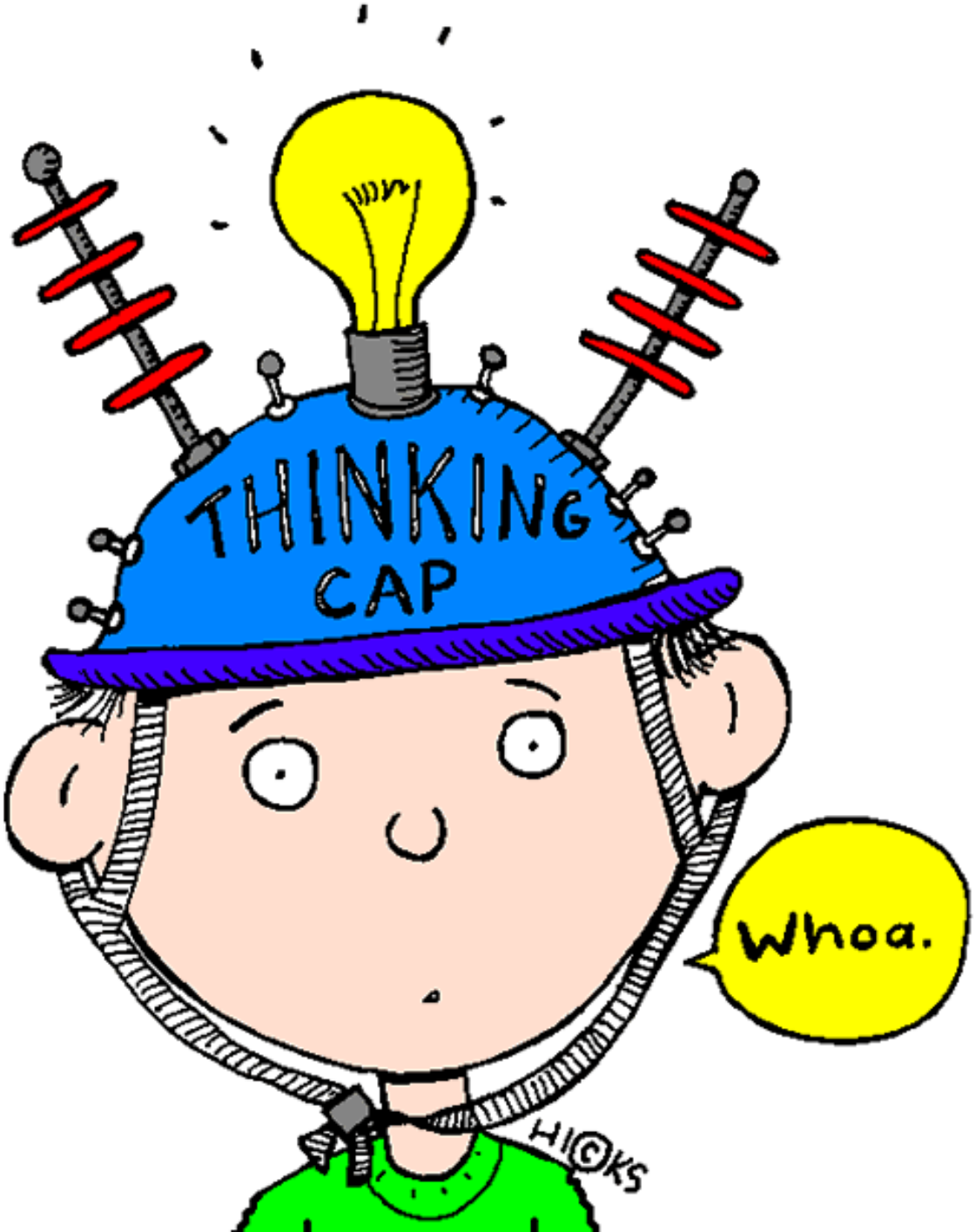


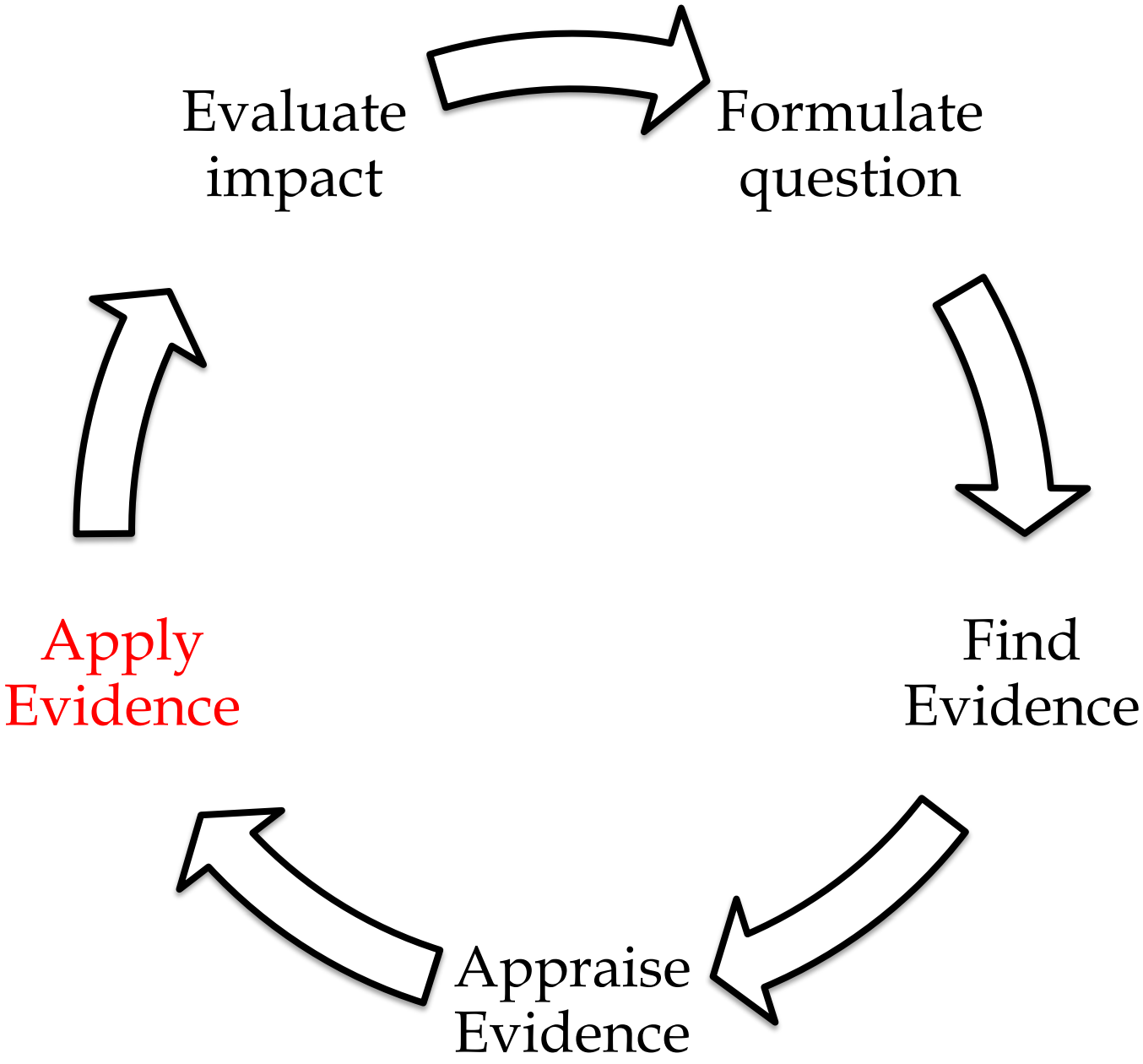


http://psychology.georgetown.edu/resources/researchmethods/research/8304.html



Applicability


THINKING
CAP
Whoa.
HICKS


Formulate question
Find Evidence
Appraise Evidence
Apply Evidence
Evaluate impact

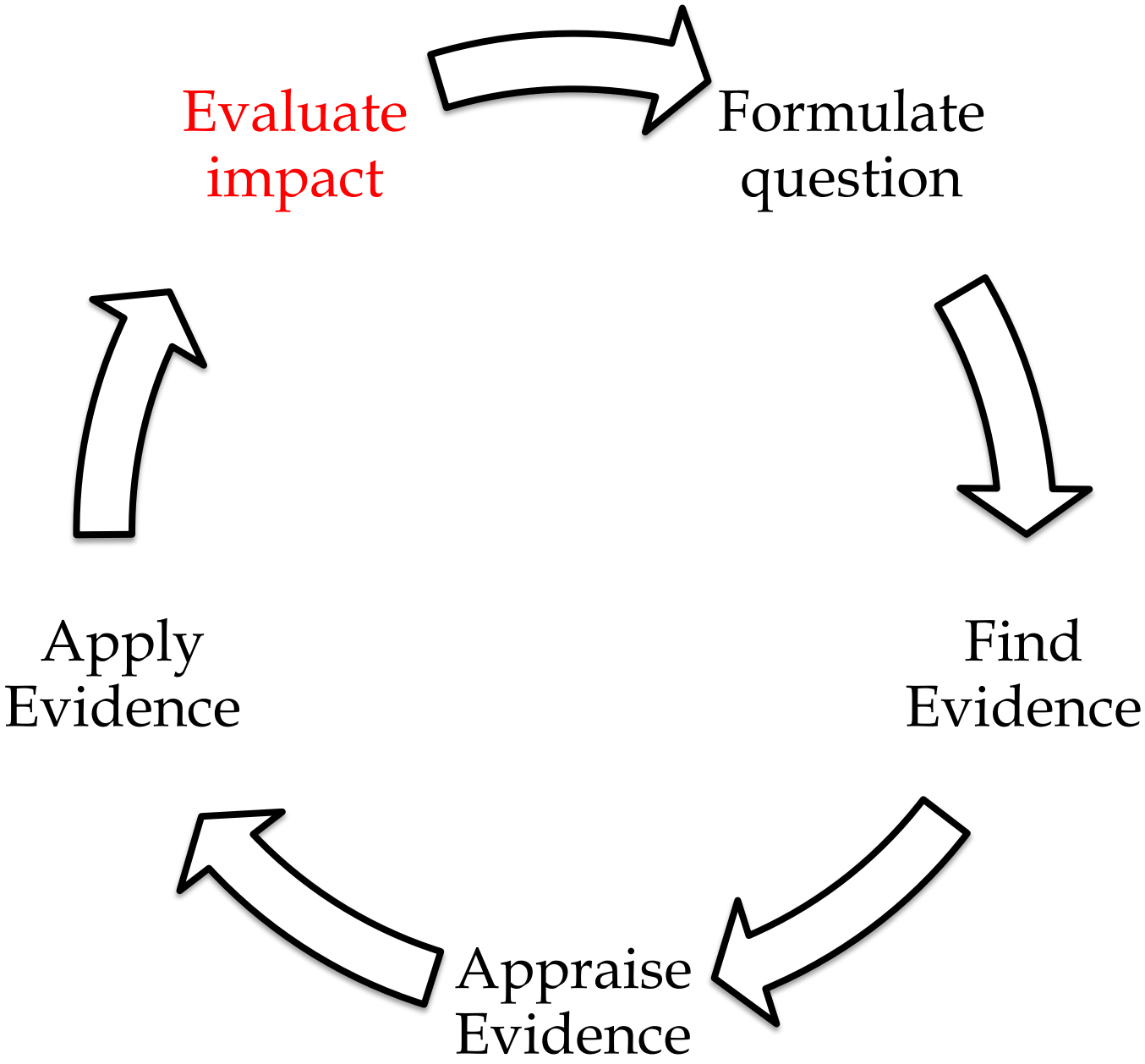
Evidence Summaries

- Critical appraisal synthesis of recently published research
- Objective critique with the goal to help practitioners make more informed decisions about the quality of the research that they may be considering
- Structured abstract gives an overview of the article
  - Objective, Design, Setting, Subjects, Methods, Main Results, Conclusion
- Commentary section critically appraises the research
- Considers questions of validity, reliability, applicability

Denise Koufogiannakis (2009)

Example Question

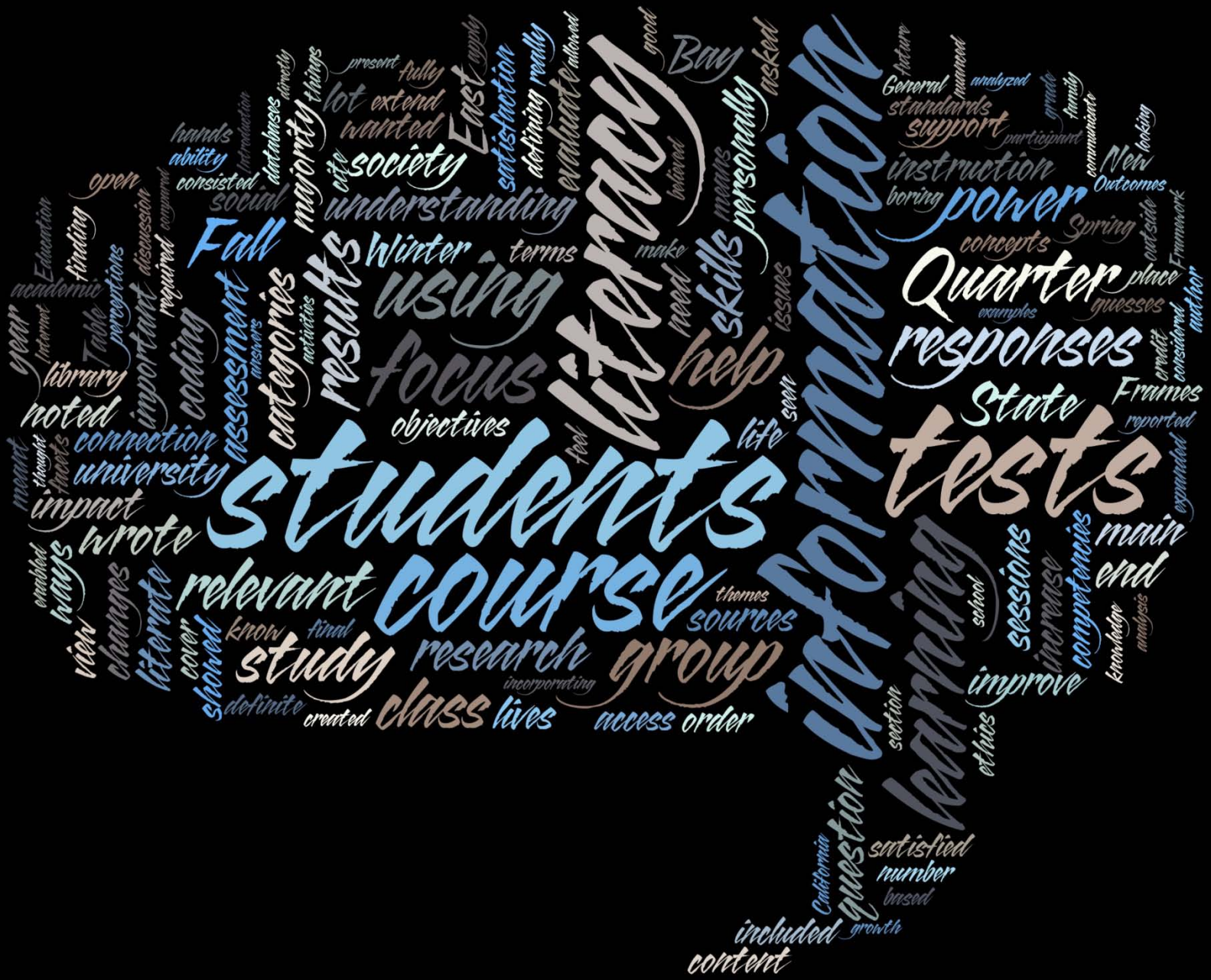
Is either face-to-face instruction or online tutorials significantly more effective in teaching first-year students information literacy skills?


Evaluate impact
Formulate question
Find Evidence
Appraise Evidence
Apply Evidence

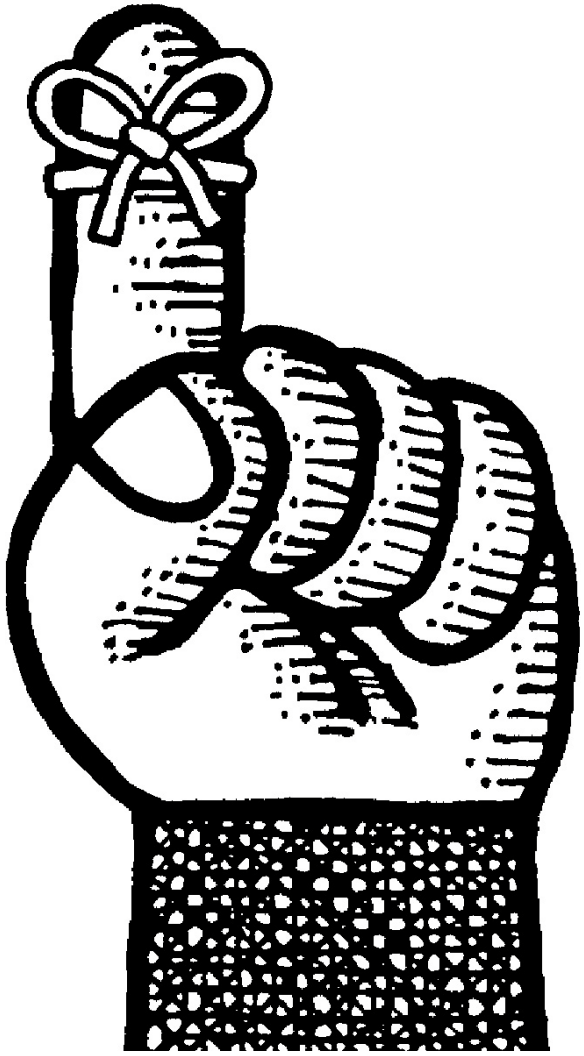
Evaluating Impact & Performance

- Evaluation will determine whether the change you introduced, modified, or cancelled made a difference and if it made the difference you expected.

- Evaluation will help you reflect on your performance as an evidence-based practitioner and hone your skills.


students
course
tests
information
literacy
learning
using
focus
Quarter
responses
power
instruction
understanding
society
Fall
Winter
results
help
skills
personally
evaluate
satisfaction
defining
really
East
lot
extend
wanted
majority
Bay
asked
good
present
fully
apply
hands
ability
consisted
social
open
Education
finding
academic
year
Table
perceptions
important
coding
assessment
categories
activities
answers
library
noted
connection
university
impact
wrote
relevant
study
research
group
class
lives
access
order
incorporating
sources
themes
objectives
life
seen
feel
need
make
issues
means
believed
boring
concepts
Spring
place
guesses
examples
Frames
reported
expanded
main
end
sessions
competencies
increase
school
improve
knowledge
analysis
section
ethics
question
satisfied
number
based
growth
included
content
California
ways
view
changes
literate
cover
showed
know
final
definite
created
meant
thought
facts
Outcomes
New
looking
communicate
family
grade
analyzed
General
standards
support
participant
future
manced
outside
Framework
author
credit
considered
Table
discussion
required
cooperated
Introduction
databases
directly
things
cite
enabled
Table

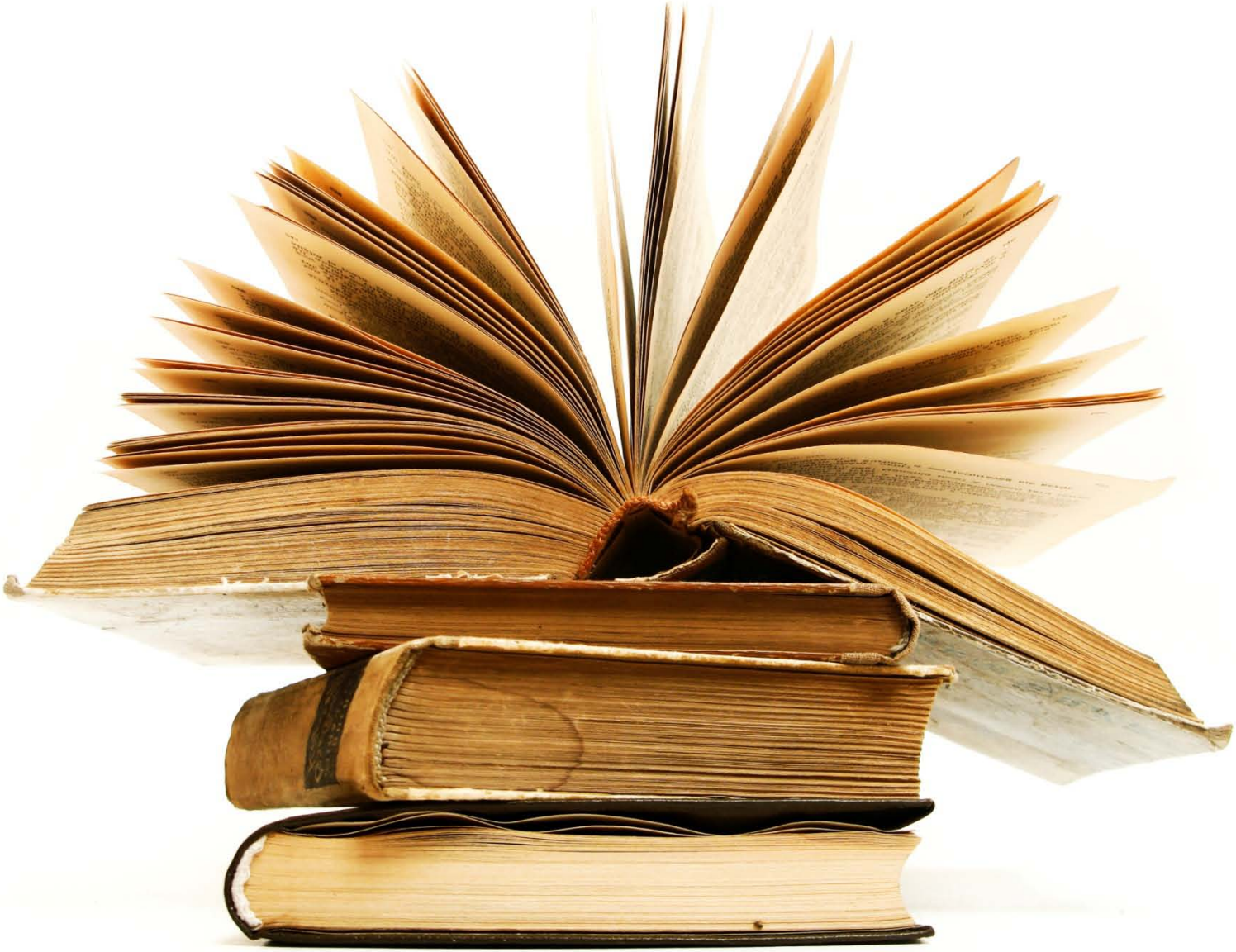
3



Evidence = Good

Anecdote = Bad

In Doubt = Ask



1 ORTVS
2
3
4
5
6

Yes,
we will
now have
human
interaction

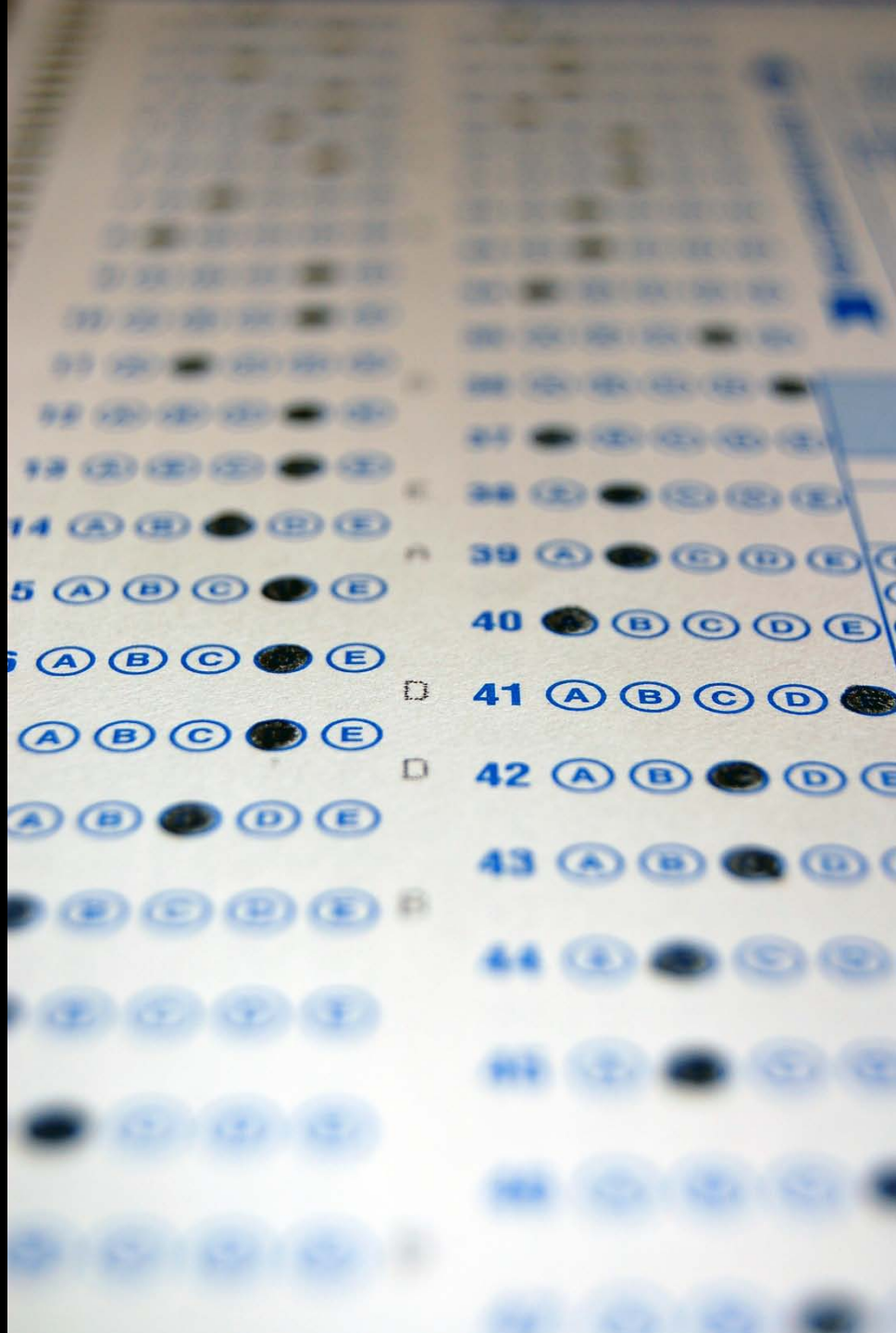
$TOP

Ostermontag
28
Donnerstag
14
April
19
März
14. Woche
4
Montag
April
15. Woche
17
Sonntag
April
11
Montag
3
Sonntag
Samstag
Karfreitag
März
25
16. Woche
April

Courses

The Good,
The Bad,
&
The Ugly

Testing



It
Helps
to be
Innocent

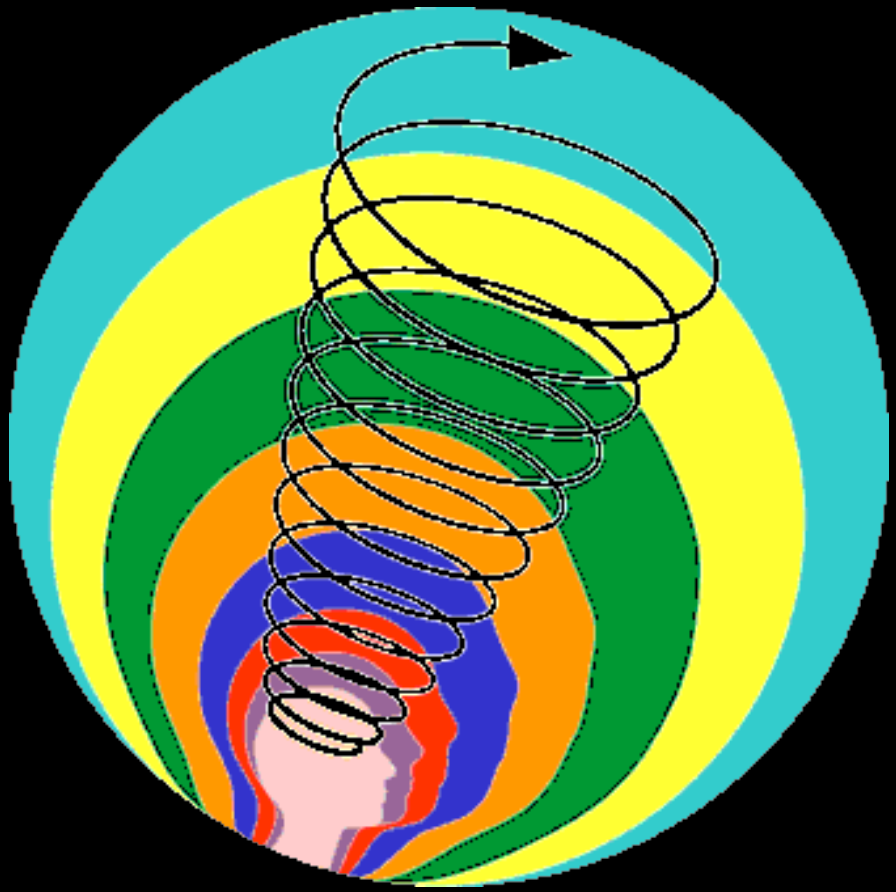
"I learned things
about obtaining
information
that I never knew.
My idea of libraries
and information
has really
changed."

Student from Winter Quarter 2009

EBP at the Program Level

What's a program?

- Instructional structures
- Facilities
- Human resources
- Financial resources
- Support for professional development



http://www.hanskokhuis.nl/SpiralDynamics5.gif

Using Data in Decision Making

Pfeffer and Sutton (2006) cited in Hiller and Self (2008)

What makes it hard to be evidence-based?

- There's too much evidence
- There's not enough good evidence
- The evidence doesn't quite apply
- People are trying to mislead you
- You are trying to mislead you
- The side effects outweigh the cure
- Stories can be more persuasive

How are you making decisions now?

Some Reasons Why Libraries Aren't Evidence-Based

Hiller and Self (2008)

- **Don't know what evidence to collect**
  - Few libraries understand or are skilled in basic research methods
- **Don't understand the evidence**
  - Few library staff have experience in data analysis
- **Don't know how to present the evidence**
  - Difficulty in identifying what is important and actionable
- **Don't want to use the evidence**
  - "We know what's best for our customers"
- **Difficulty using the evidence for positive change**
  - All of the above and organizational structure/culture

If not EBL…

What?

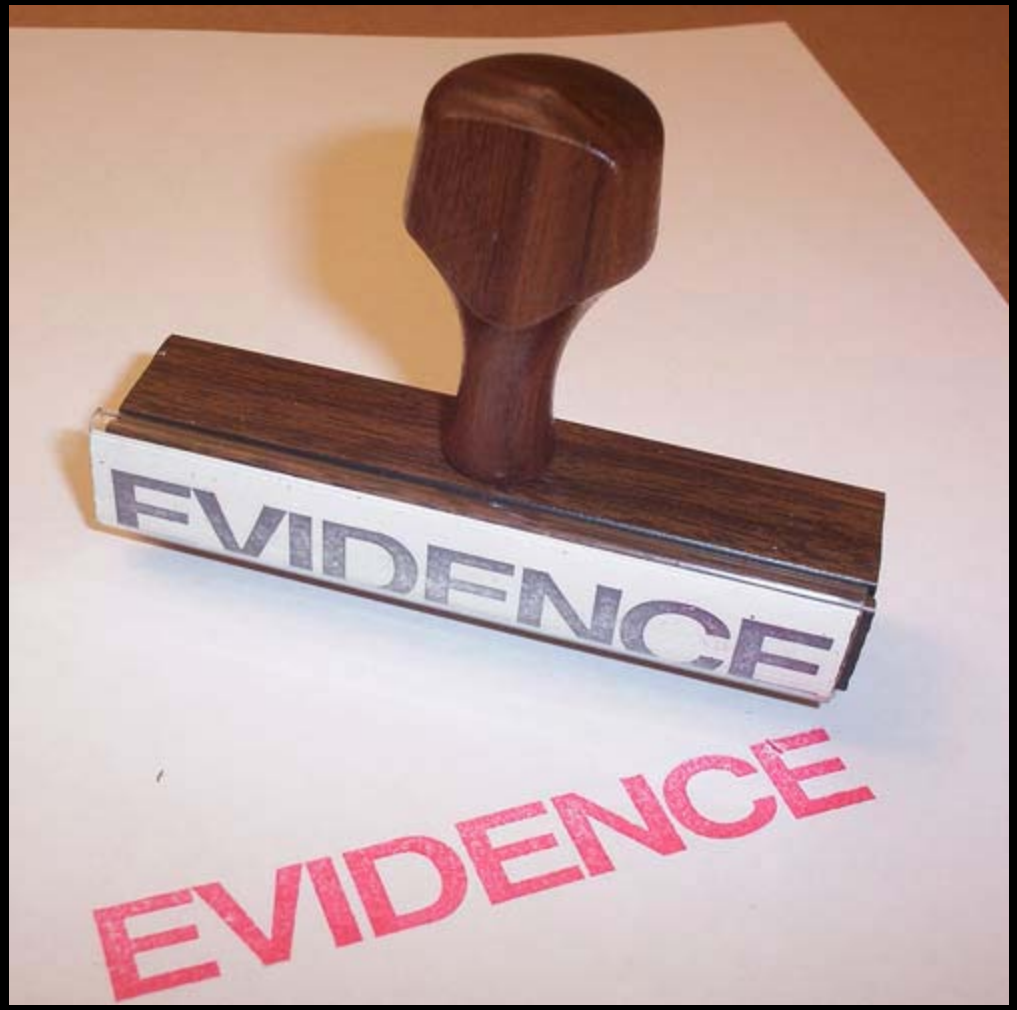
Cognitive Biases

http://superculturereport.files.wordpress.com/2009/11/bias.jpg

Biases Common to Libraries

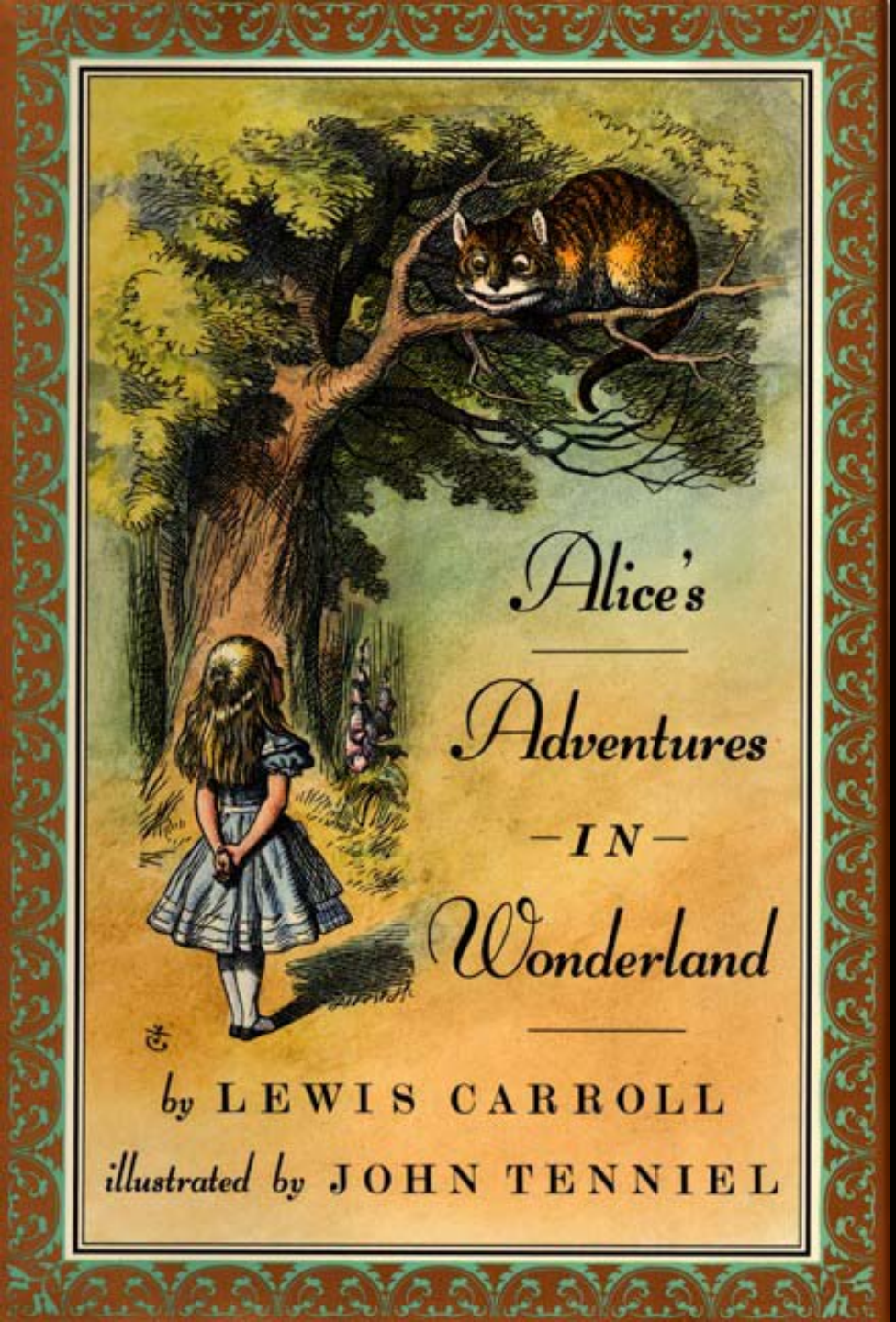
Hiller and Self (2008)

- **Professional Deformation**
  - Viewing a situation through the common perceptions of one's profession rather than by taking a broader perspective.
- **Halo or Horns Effect**
  - Allowing another person's positive or negative characteristics to affect perception of this person in other unrelated contexts.
- **Perseverance of Belief**
  - To persist in believing previously acquired information even after it has been discredited
- **Wishful Thinking**
  - Assessing a situation incompletely according to a desired rather than a likely outcome
- **Worst-Case Scenario**
  - Emphasizing or exaggerating those possible negative outcomes disproportionate to all possible outcomes

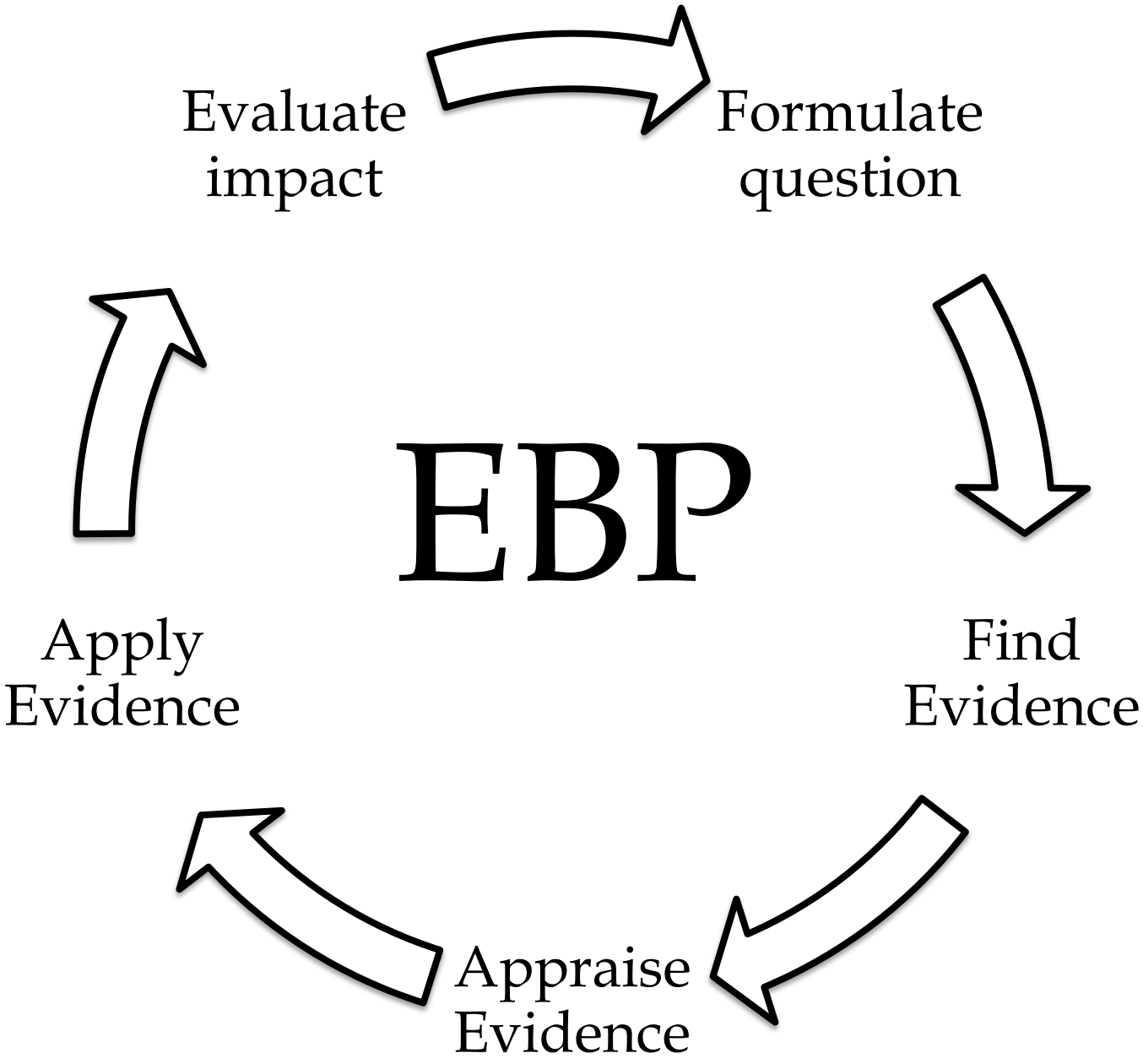


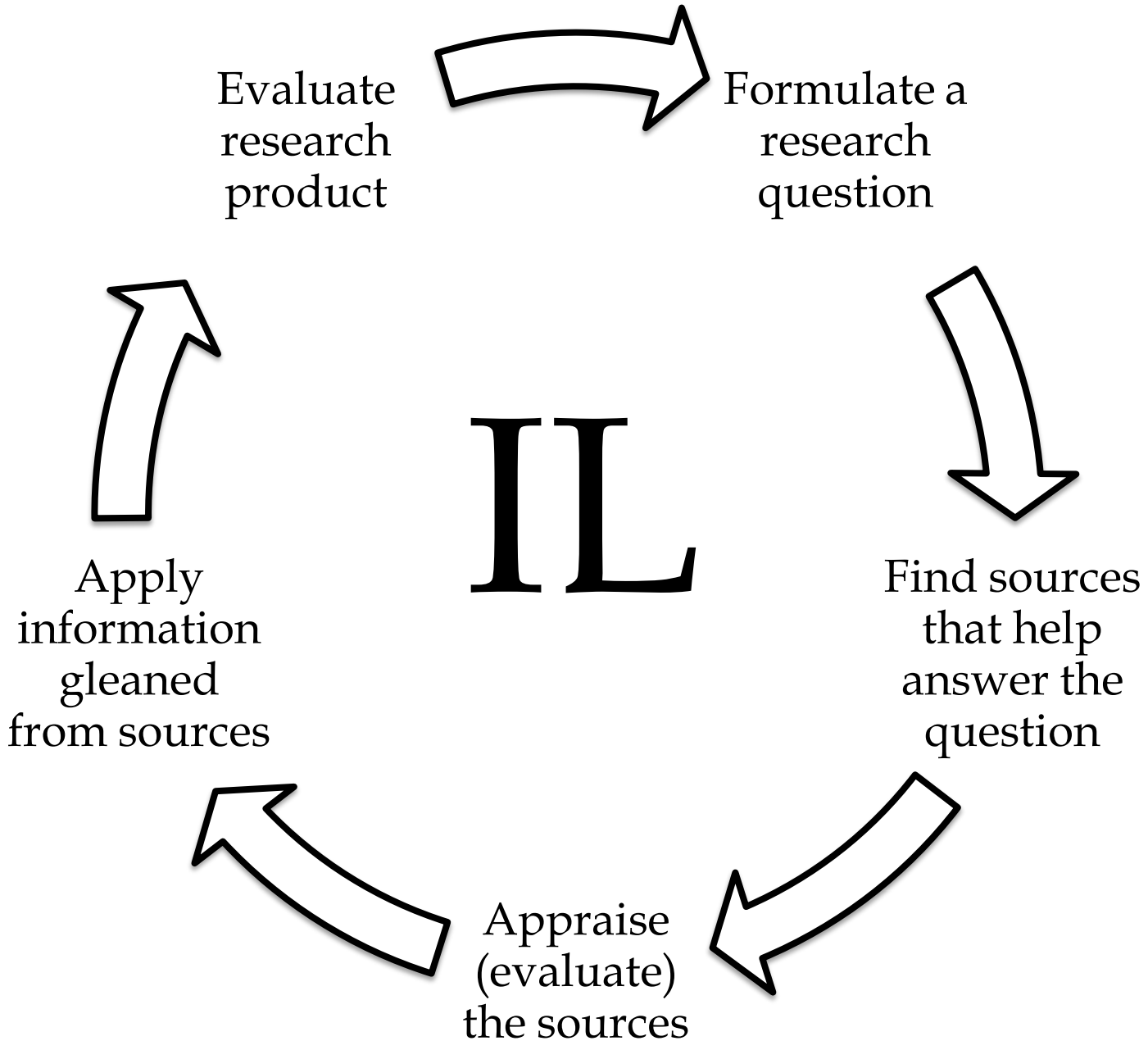
How do you combat cognitive biases?

http://www.flprobatelitigation.com/uploads/image/evidence-75x75.jpg



How is EBP Like IL?


Evaluate impact
Formulate question
EBP
Apply Evidence
Find Evidence
Appraise Evidence


Evaluate research product
Formulate a research question
IL
Find sources that help answer the question
Appraise (evaluate) the sources
Apply information gleaned from sources

Thank you!

Megan Oakleaf, moakleaf@syr.edu
Diana K. Wakimoto, diana.wakimoto@csueastbay.edu

Bibliography of suggested EBP literature: http://bit.ly/awUZ5j

Photo Credits

- “Alice Book” from http://booknoll.com

From Flickr:

- “Happy Baby” by J.Chin
- “Astronomical Clock” by simpologist
- “Elephant Talk” by gin_able
- “Toll” by hypertypos

From stock.xchng

- “Scanning Test” by lm913
- “Reminder” by ba1969
- “Dark Question 3” by svilen001
- “Stop” by linder6580
- “Monitor 4” by sundesigns
- “Old Books” by nkzs
- “Paper chain in the dark” by hoefi