

# Supporting Undergraduate Researchers with Discovery

Community College League of California

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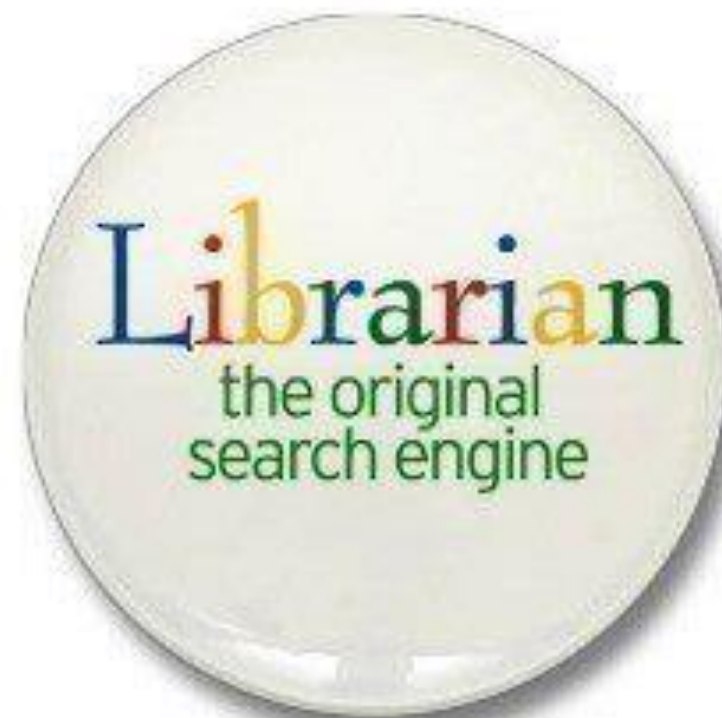
# Session Objectives

**At the end of the session, you will be able to**

- Recognize how the search practices of undergraduate students influence their library experience
- Determine the features and functionalities of discovery that are most helpful when assisting students
- Inform students at the reference desk and in bibliographic instruction on when and how to use discovery

# Librarians' Search Habits

- Readily identify when a particular search or approach is necessary
- Start in specific databases or collections
- Construct complex searches



# Undergraduates' Search Habits

- Limited experience with catalogs and databases
- Rudimentary search strategies
- Struggle to select keywords and structure queries
- Risk averse with library anxiety



# Undergraduates like discovery... ...but they don't use it well

They ...

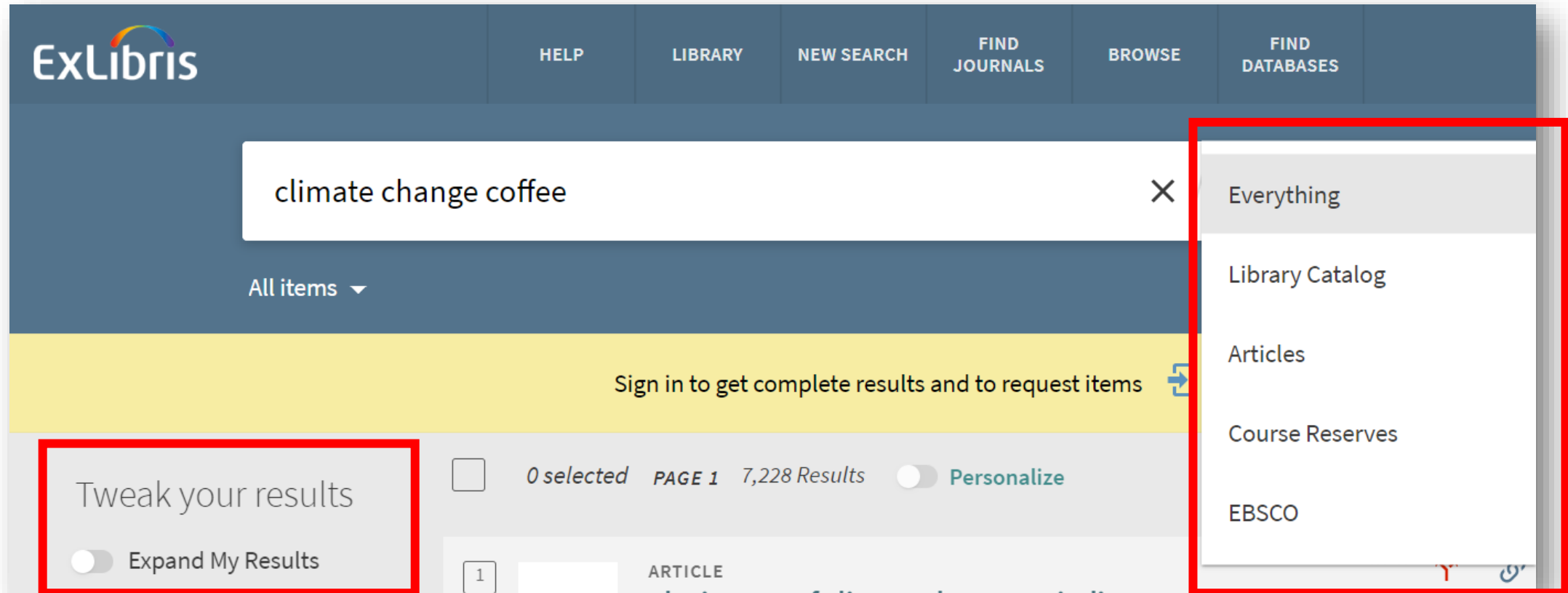
- do very simple or too complicated searches
- repeat searches, rather than using facets or discovery tools
- have difficulty understanding results

And that is if they can find the big search box!

**OneSearch**

Search

# What IS a OneSearch?



The Goal: to assist users in finding research in one place

How would  
you locate  
research  
articles on  
this topic?

Culturally Responsive Pedagogy

How would  
you locate  
research this  
article?

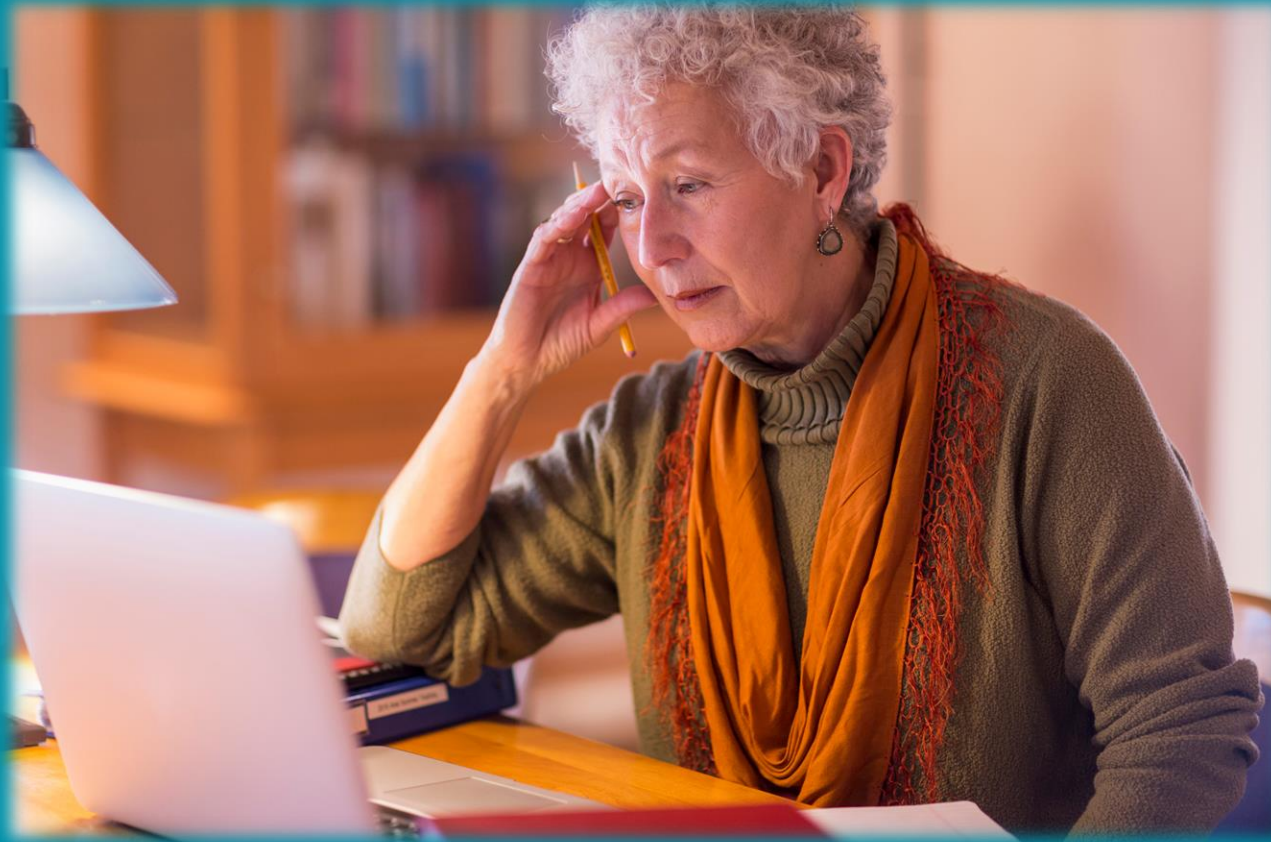
Ford, M.J., et al. 2018.

“Inbreeding in an endangered  
killer whale population.”

Animal Conservation 21 (5): 423-  
32.



# How would a student at your library approach the same searches?



# Undergraduates are Exploratory Researchers and Novice Searchers

- Driven by course assignments
- Research multiple, new topics each semester
- May know very little about their topics



Targeted search  
Complex queries  
Faster, persistent  
Successful

Fallas, A., and S. Tatham. 2017. "Evidence-based Design for Discoverability." *Learned Publishing* 30, 55-64; Head, A. 2013. "Learning the Ropes." Project Information Literacy

# Undergraduates are overloaded and overwhelmed

- Busy
- Time constraints
- Risk averse
- Library anxiety



Dahlen and Hanson 2017; Head 2013

# Undergraduates prefer library resources

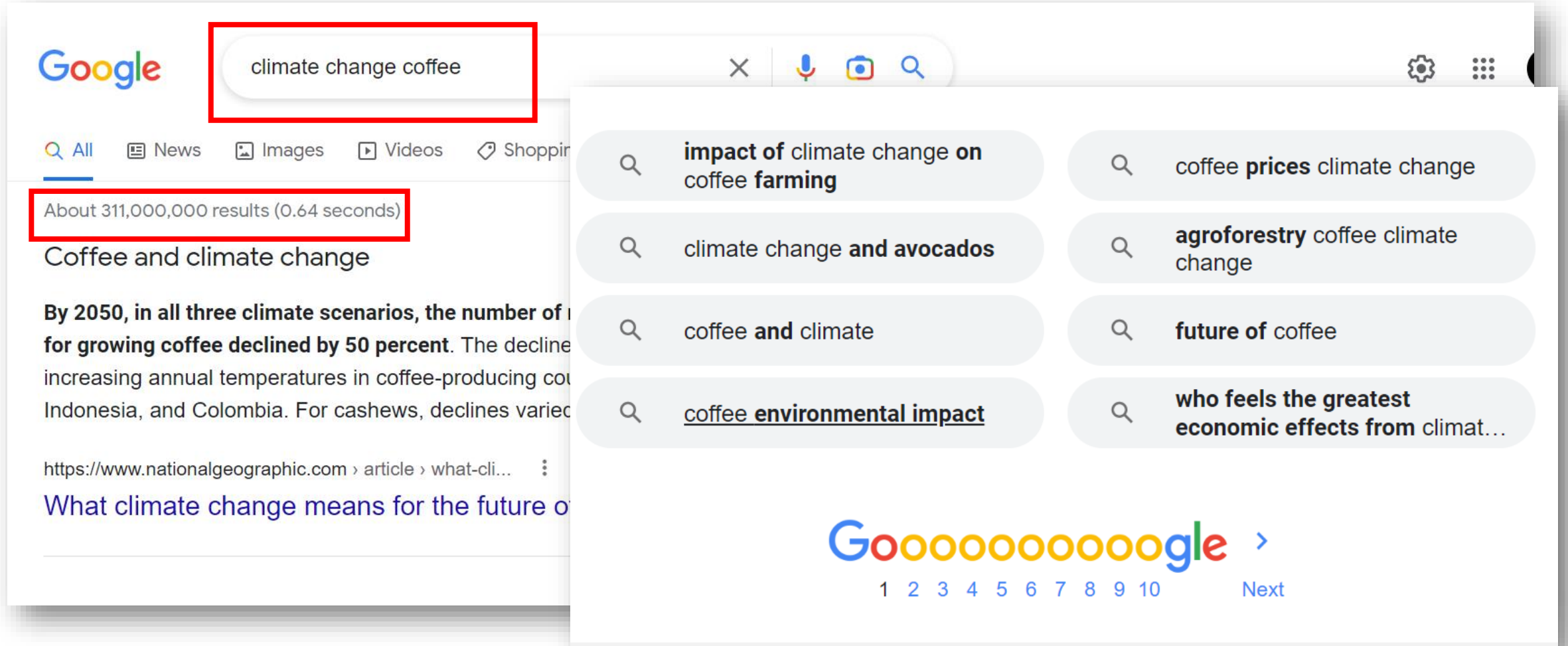
- Credible
- Meet faculty expectations



Head, A. 2013. "Project Information Literacy: What Can Be Learned about the Information Seeking Behavior of Today's College Students."



# Undergraduates prefer library resources



## Strategy 1

# Teach Students When To Use Discovery

- Explain content
- Suggest a metaphor
- Compare with specialized databases

## Classroom Activity

### Compare Tools

- Select a search topic and divide the class into 2-3 groups.
  - Group 1 – search the discovery tool
  - Group 2 – search an appropriate subject database
  - Group 3 – search Google or Google Scholar
- Lead a discussion, asking students to report:
  - What types of information can you find with this tool?
  - What helpful search features are available?
  - How do you find the full-text from this tool?
  - When would you recommend this tool?

## Strategy 2

# Teach Students to Use Discovery Effectively

- Construct searches
- Understand results
- Use facets
- Interpret citations
- Link to full text / find local resources
- Expand beyond local resources



## Strategy 3

# Help Students Evaluate Resources

- Understand relevancy ranking
- Evaluate resources for quality, relevance, etc.
- Explore critical perspectives in information literacy

## Classroom Activity

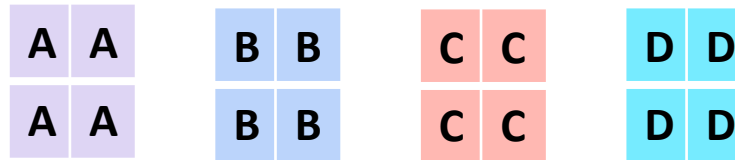
### Create a Search Engine

- Ask students to imagine they are creating a new search engine.
  - Brainstorm criteria for ranking results.
  - Discuss whether the system would be foolproof.
- Compare to discovery's relevancy ranking.

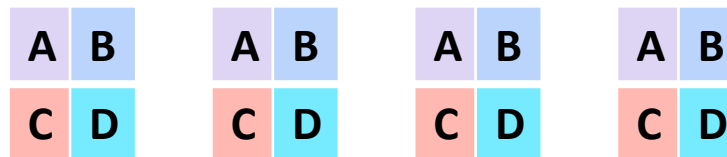
## Classroom Activity

### Evaluation Jigsaw

- Assign each group a source to evaluate.



- Recreate groups to share and compare sources.



## Strategy 4

# Explore Critical Information Literacy

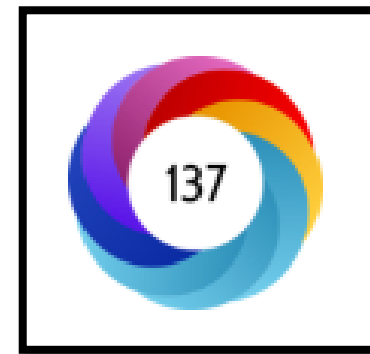
- Social, political, and economic contexts of information production and use.
- Can be in conjunction with DEI lessons and experiences

## Strategy 5

# Information Chaining



Cites / Cited by



7



ARTICLE

## Climate change and specialty coffee potential in Ethiopia

Chemura, Abel ; Mudereri, Bester Tawona ; Yalew, Amsalu Woldie ; Gornott, Christoph

Scientific reports, 2021, Vol.11 (1), p.8097-13

“ Current climate change impact studies on coffee have not considered impact on coffee typicities that depend on local microclimatic, topographic and soil characteristics...”

PEER REVIEWED OPEN ACCESS

Available Online >



### NOW LISTING SOURCES CITING:

Climate change and specialty coffee potential in Ethiopia

Chemura, Abel ; Mudereri, Bester Tawona ; Yalew, ...

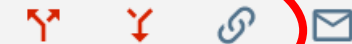
5 Results

1



ARTICLE

Performance of Push-Pull Technology in Low-Fertility Soils under Conventional and Conservation Agriculture Farming Systems in Malawi



## Classroom Activity

### Compare Citation Counts

- From the results list, identify a highly cited and a less cited article.
  - Discuss factors that influence citation counts.
- Follow each citation trail.
  - What additional valuable resources can you find?

## Classroom Activity

### Explore Altmetrics

- Using an article with altmetrics, break students into groups and assign each a “mention” to research.
- Discussion points:
  - Where is this work being discussed?
  - Why has the work garnered attention?
  - Does this coverage affect your understanding of the original article and/or topic?
  - How does research enter and influence the public sphere?



# Summary

## Now you can

- Recognize how the search practices of undergraduate students influence their library experience
- Determine the features and functionalities of discovery that are most helpful when assisting students
- Inform students at the reference desk and in bibliographic instruction on when and how to use discovery

# Thank you!

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