



Taking Instruction Virtual

EVALUATING AND ASSESSING INFORMATION LITERACY IN CHAT REFERENCE



Background: VRC

Virtual Reference Committee (VRC)

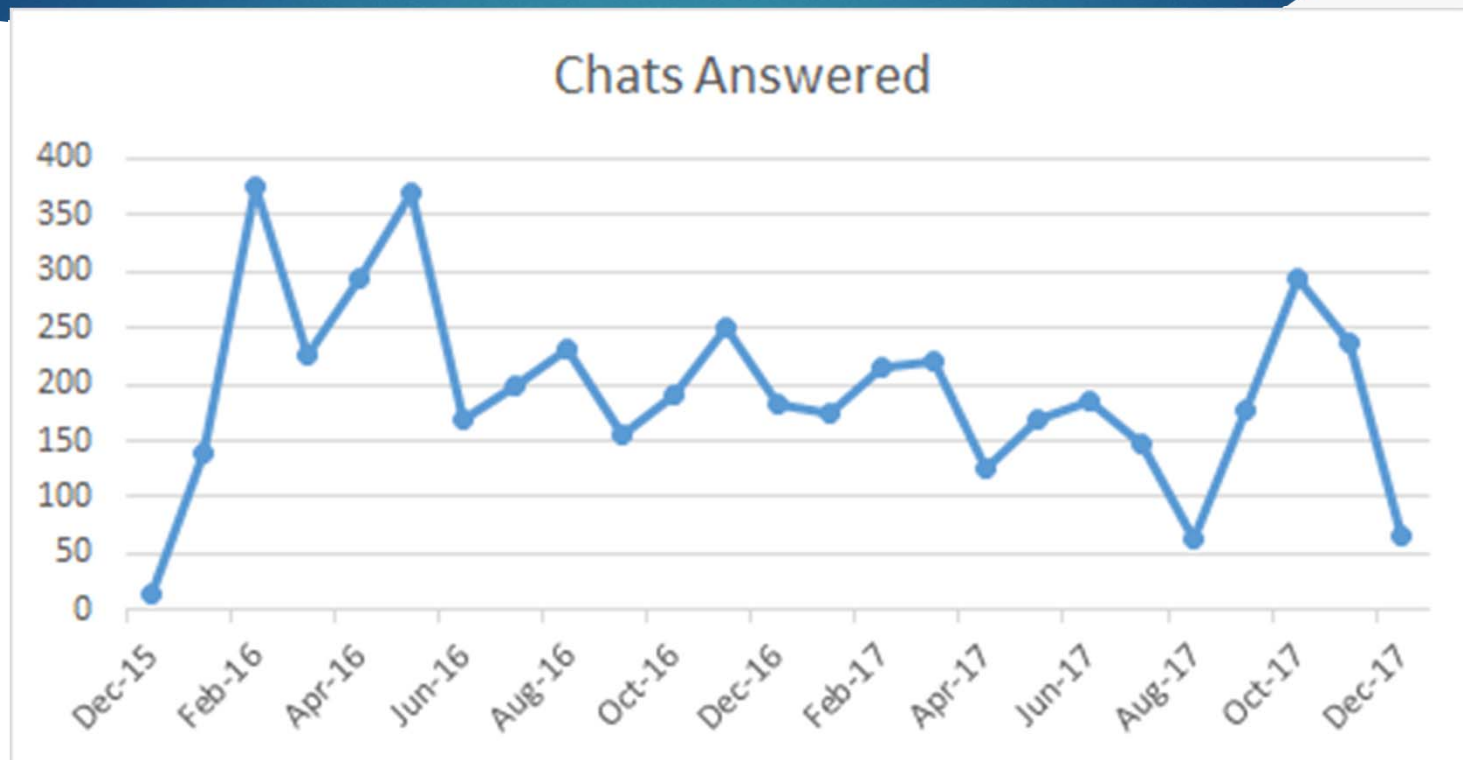
► Mission:

Support the Berkeley Community by providing comprehensive and accessible virtual reference services

Background: LibChat

- ▶ LibChat
 - ▶ Available 90 hours a week
 - ▶ All hands on deck approach

Background: LibChat



IL in Virtual Reference?

► Questions:

- Is there room for IL instruction?
- Are we implementing Information Literacy Instruction in our virtual reference services?



IL Alignment Taskforce Charge

The Virtual Reference Committee's IL Alignment Task Force will research how information literacy can potentially be integrated into our FAQs and virtual reference services.

Based on this research, the Task Force will make recommendations to the VRC that tie in with the Library's Operational Goals of "Educational Impact" and "Data Based Decision Making."

The Task Force will then lead the charge in implementing approved recommendations.



What we hope to achieve

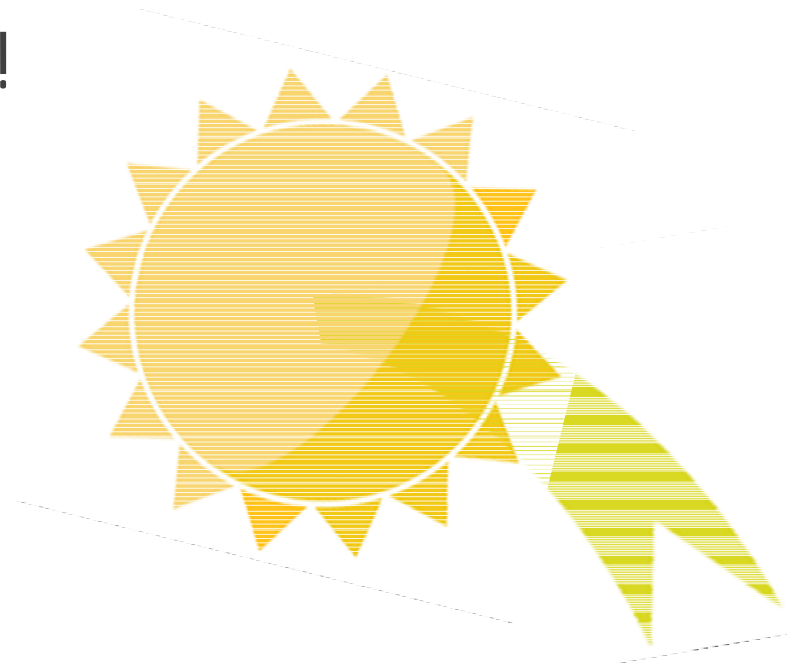
- ▶ Discover best practices when implementing Information Literacy in Virtual Reference
- ▶ Determine what we are doing well
- ▶ Determine where we can improve
- ▶ Develop training

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Literature Review

Literature Review

The Dawn of Virtual Reference!



Literature Review



...And Beyond!



Methodology

Authority is Constructed and Contextual

Information resources reflect their creators' expertise and credibility, and are evaluated based on the information need and the context in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.

Learners...

- Define different types of authority
- Determine credibility of sources
- Understand and recognize authoritative voices (including their own)

Searching as Strategic Exploration

Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.

Learners...

- Identify producers of information and then determine how to access that information
- Match information needs and search strategies to appropriate search tools
- Understand how information systems are organized

Information Has Value

Information possesses several dimensions of value, including as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world. Legal and socioeconomic interests influence information production and dissemination.

Learners...

- Give credit to original ideas of others through proper attribution and citation
- Recognize issues of access to information
- Decide where and how their information is published, making informed choices about their information actions

Research as Inquiry

Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.

Learners...

- Formulate questions for research based on gaps or reexamination of information
- Use varied research methods based on need, circumstance, and type of inquiry; organize information in meaningful ways
- Draw reasonable conclusions based on analysis and interpretation of information

Scholarship as Conversation

Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.

Learners...

- Cite contributing work of others in their own information production
- Contribute to scholarly conversation at an appropriate level
- Critically evaluate and recognize that given scholarly work may not represent the only or even the majority perspective

Information Creation as a Process

Information in any format is produced to convey a message and is shared via a selected delivery method. The iterative processes of researching, creating, revising, and disseminating information vary, and the resulting product reflects these differences.

Learners...

- Articulate the traditional and emerging processes of information creation and dissemination in a particular discipline
- Monitor the value that is placed upon different types of information products
- Accept that information creation begins initially through communication in a range of formats and modes

Searching as Strategic Exploration

Novices	Experts
Believe that information searching is limited and simple and may overlook context and experiences that shape the searcher	Realize that information searching is a contextualized, complex experience that affects, and is affected by, the cognitive, affective, and social dimensions of the searcher
Search a limited set of resources.	Search more broadly and deeply to determine the most appropriate information within the project scope.
Use few search strategies.	Select from various search strategies, depending on the sources, scope, and context of the information need.

Code ▾	Frame ▾	Definition ▾
1A	Authority is Constructed & Contextual	Explain how to research who the author is and what their credentials are
1B		Teach the student to evaluate the source critically, is it authoritative for the purpose of their research?
1C		Librarian provided authoritative source and did not instruct
2A	Information Creation as a Process	Explain the difference between databases and the web
2B		Explain the evolution of information: it appears in the news first, then journal articles, then books
2C		Librarian only points to resource without explanation
3A	Information Has Value	Define the purpose of embargos and other limitations on information
3B		Student is shown how/ why to properly cite sources OR pointed to instructional material on citing (libguide, CAS, etc.)
3C		Student is given citation
4A	Research as Inquiry	Librarian helps student develop research question/ narrow topic
4B		Librarian and student evaluate the search results and reassess search strategy
4C		Librarian shares search tips (boolean, etc.)
4D		Librarian performs the search without providing guidance to student
5A	Searching as Strategic Exploration	Librarian helps student develop research question/ narrow topic
5B		Librarian helps student identify quality sources
5C		Librarian and student evaluate the search results and reassess search strategy
5D		Librarian performs the search without providing guidance to student
N/A	Scholarship as Conversation	Not currently evaluating in chat

Which KPs can be measured in Virtual Reference?

Authority is
Constructed &
Contextual

Information Creation
as a Process

Information Has
Value

Research as
Inquiry

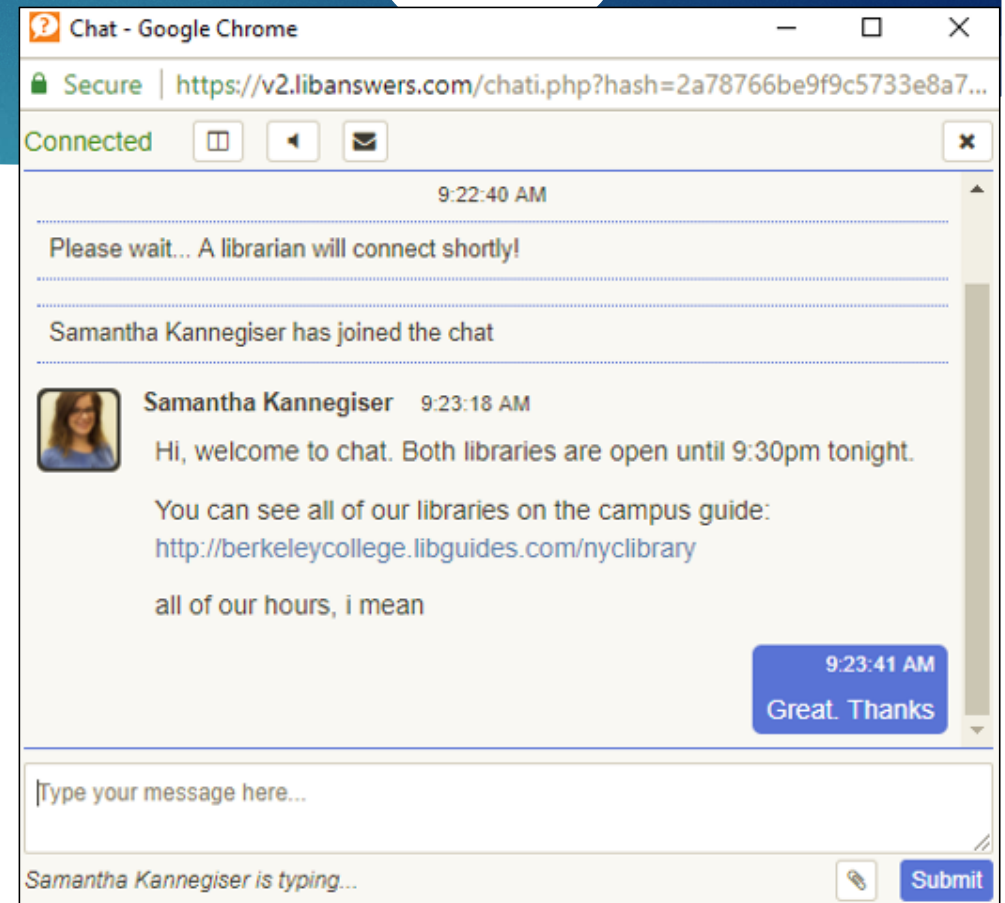
Searching
as Strategic
Exploration

Searchship
Conversations



What we did

- ▶ 364 chats from January 1st to April 15th 2017
- ▶ Sorted the chats by type -- Writing/Citing and Research Help



LibChat Dashboard

Don't forget to sign off of LibChat at the end of your session.

Chat Activity

Add to Reference Analytics

Add to Analytics

Reference Analytics

Question

Hi Dina Meky

Details

Answer

Student: Hi Dina Meky

Dina Meky: Hello! Welcome to LibChat! How may I help you?

Student: What are the hours for the NYC Library today?

Dina Meky: The hours are today are from 8 am to 9:30 pm.

Student: Great, thanks.

Question Type

Select One

Internal Note:

Save

Select One

Understanding Assignment

Research Help

Catalog Help

Technology Help (PC, Laptop, Mobile Device)

Technology Help (Scanner, Printer, etc)

Technology Help (Electronic Resources, Software, etc)

Writing and Citing

General Library Info (About, Hours, Contact, etc)

Directional Information

Other Departments

Admissions Tour

Filtered them by 'Research Help' and 'Writing and Citing.'

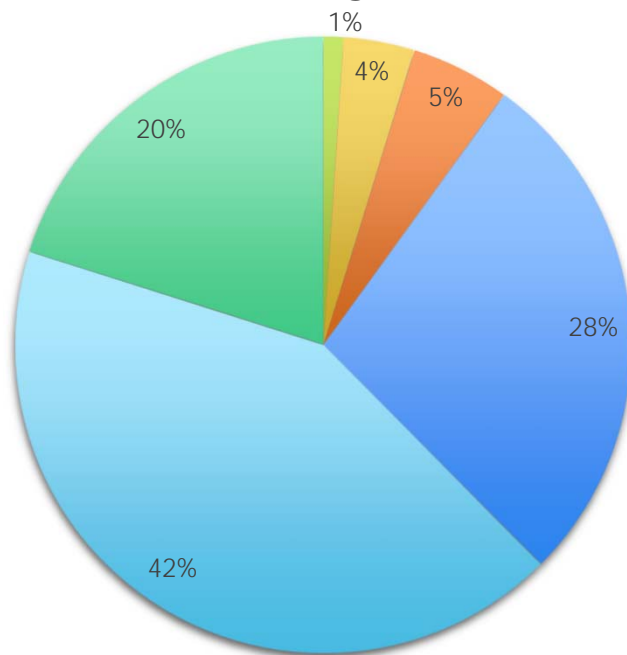
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Results

Which frames are being taught?

Information Literacy Instruction in Chat



- Authority is Constructed & Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Searching as Strategic Exploration
- No Instruction Given

Which KPs are being taught most?

Research as Inquiry

- ▶ formulate questions for research based on information gaps or on reexamination of existing, possibly conflicting, information
- ▶ determine an appropriate scope of investigation
- ▶ deal with complex research by breaking complex questions into simple ones, limiting the scope of investigations;
- ▶ deal with complex research by breaking complex questions into simple ones, limiting the scope of investigations

Searching as Strategic Exploration

- ▶ determine the initial scope of the task required to meet their information needs
- ▶ identify interested parties, such as scholars, organizations, governments, and industries, who might produce information about a topic and then determine how to access that information;
- ▶ utilize divergent (e.g., brainstorming) and convergent (e.g., selecting the best source) thinking when searching;
- ▶ match information needs and search strategies to appropriate search tool



Which KPs are being taught least?

Authority is Constructed & Contextual

- define different types of authority
- use research tools and indicators of authority to determine the credibility of sources

Information Creation as a Process

- recognize that information may be perceived differently based on the format in which it is packaged

Information Has Value

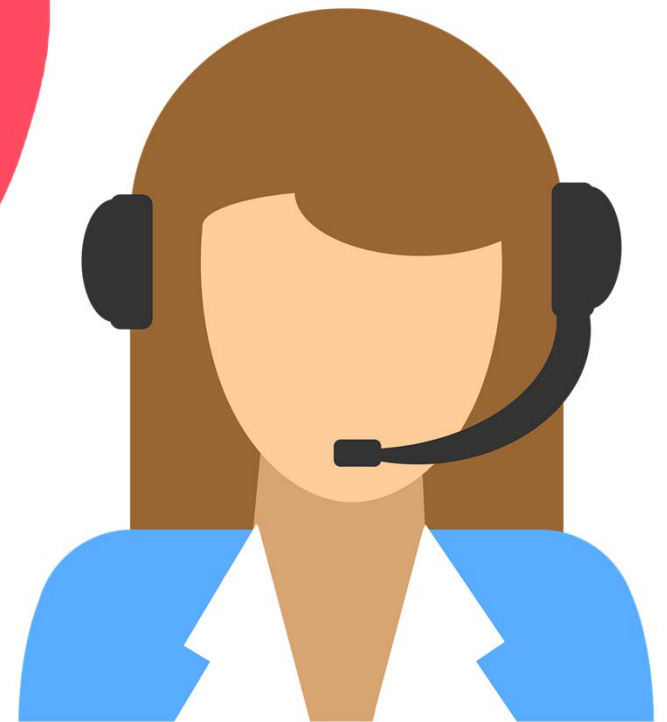
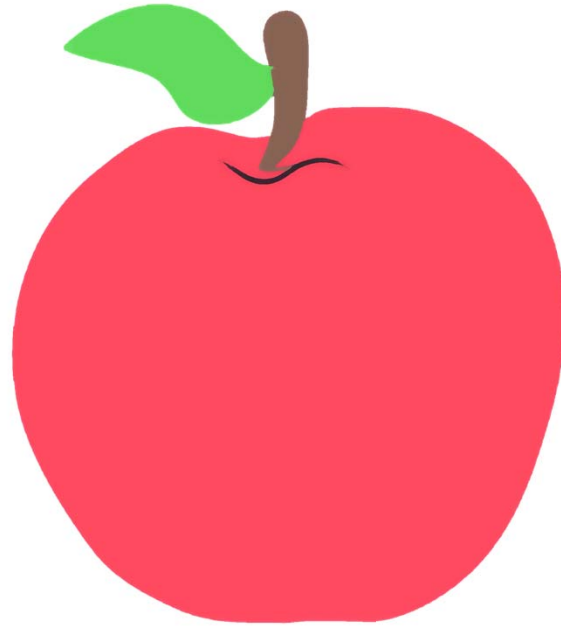
- give credit to the original ideas of others through proper attribution and citation

The image features a central rectangular area with a blue-to-teal gradient. This area is framed by a dark blue border. On the left side, a large white circle partially overlaps the gradient area, containing the word "Trends" in a lime green font. On the right side, another large white circle is positioned within the gradient area. In the top right corner, a small lime green rectangle is visible. The overall design is modern and minimalist.

Trends

Trend #1

Instruction and Customer Service



Instruction NOT welcome...

Librarian: Okay, have you considered which database may be best for your search?

Student: but i am not sure what you are suggesting

Student: No, that's why I am asking you.

Student: Unfortunately, I don't find this helpful

Student: Nor do I have the time to go through a couple of databases to see "what they offer, or don't offer"

Librarian: Okay, I don't mean to waste your time - I'm just making sure you have all of the information you need.

Librarian: I cannot guarantee that the information will be in the database

Student: I don't see how that helps me have the info I need

Librarian: we have to go in and check

Librarian: I assure you, I'm not withholding information - just showing you the steps to finding the answer - the research process.

Librarian: Among others. The question you should ask yourself is how to identify operations management when you see it - what traits are you looking for in these documents?

Student: nevermind, I will go to one of BC's campus library tomorrow



Giving away the answers...

Student: OK THANK YOU IM USING THE RESOURCES YOU GAVE AND ITS WORKING SO FAR

Student: THANK YOU, YOU HAVE BEEN A GREAT HELP TO ME

Student and librarian working together

Initial Question: Hi, I am new at using the library. I am trying to find articles, books, journals on the pros and cons of the united states capitalistic economic system. Can you please help me? Thanks.

Librarian: Great. So you should see a list of databases broken up by subject, and further down the page the list of databases listed alphabetically. Right now it sounds like you are looking for pros/cons on your subject, so you may want to start with the database called Opposing Viewpoints

Librarian: It is a popular database which collects pro / con arguments on different topics

Student: I clicked on it

Librarian: Ok. So you should see a search box on the top of the page. What keywords do you want to start with for your search?

Student: should I just write capitalistic economic system?

Librarian: try that and see what results come up

Student: It came up!

Librarian: great. you may need to continue trying variations of those keywords to see what else you can come up with. For instance, searching "capitalism" on its own may come up with broader results if you need more variety of articles

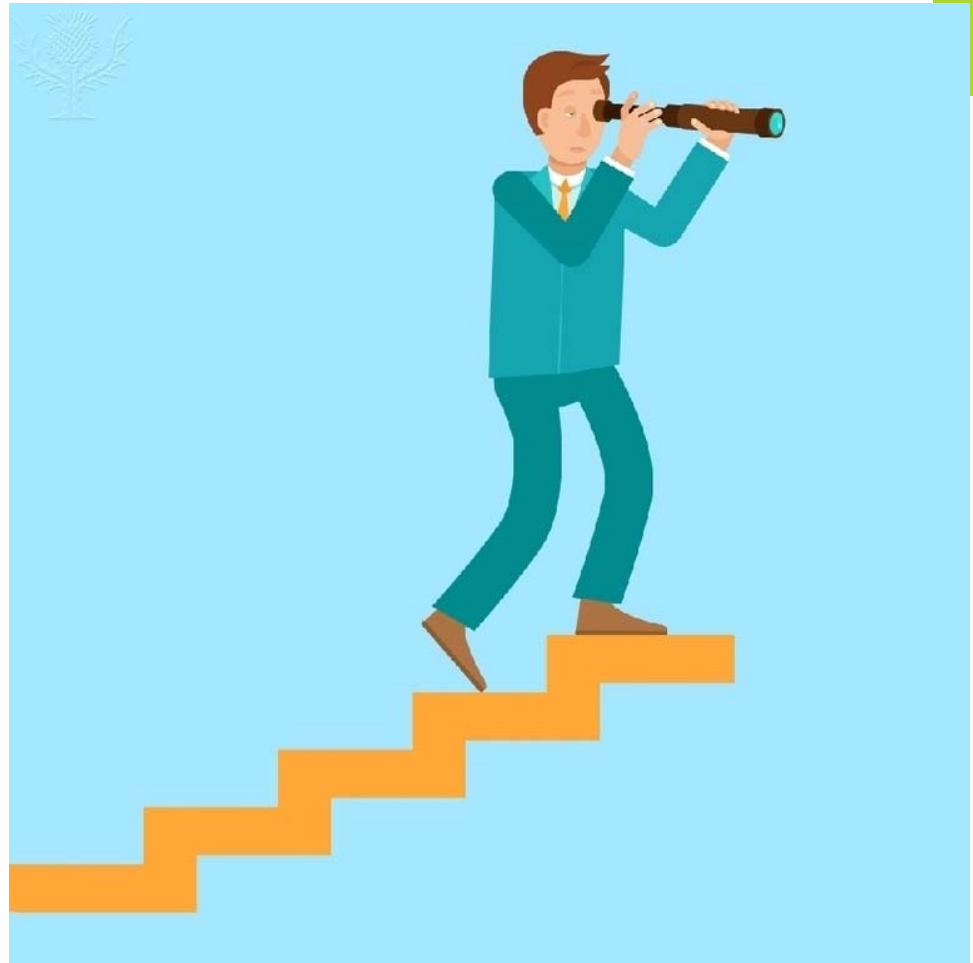
Librarian: You can also try searching the larger databases like ProQuest Central and Academic Search Premier

Student: Thank you so much!

Librarian: As you search in each database you will just have to review results and revise your search terms as you go so that you can find the information which works best for you.

Trend #2

Instructional Strategies



Techniques that work

- Step-by-Step
- Checking in frequently
- Asking for more time

Librarian: Notice that there are 8 subject areas in this database. The subject Capital Punishment could be in more than one. It could be in Law and Politics, National Debate, and/or Society and Culture. Let's click on National Debate and see if it's listed there.

Librarian: Click on View All to see a full list of subjects.

Librarian: Is this making sense so far?

Student: yes i clicked it

Librarian: Great. As it happens, I'm not seeing Capital Punishment listed there, so let's go back to that Opposing Viewpoints home page and click on Society and Culture.

Librarian: Notice the huge range of subjects listed!

Librarian: This is a great database - one of my favorites.

Student: yes

Librarian: I am seeing a link for Capital Punishment. Do you see it?

Student: yes i saw it

Librarian: Great. Click on that link please.

Student: i did

Librarian: Okay. Now notice on this page that there are different types of writing and resources listed by *type.* Academic Journals is the second one down on the left.

Librarian: The terms "academic" and "scholarly" are often used interchangeably.

Student: okay found it

Librarian: I want to show you a couple more ways to search for materials on your topic if you have time.

Student: sure

Trend #3

Dead End Techniques



Techniques that don't work...

- What is the student's assignment?
- Can the student find these databases?
- Does the student know how to search in a database?
- Why these resources?

Librarian: Hello! Welcome to LibChat. How may I help you?

Student: data base for critical thinking

Librarian: is this for an assignment?

Student: philosophy

Student: i got it

Librarian: as general research

Librarian: i would suggest using proquest

Student: opposing view points

Librarian: or academic search premier

Librarian: that is aslo a good one

Librarian: as well as cq research

Librarian: so opposting viewpoints and cq researcher are both good

Librarian: is there anything else i can help you with?

Student: Thank you

Techniques that don't work...

- Student cannot replicate search. What did librarian search for?
- Student asks for instruction ("IS this credible?") & never receives answer
- Student receives citation

Initial Question: Hello, I am trying to find information on Whole Foods Market's international endeavors. I looked at business insights global as well as Plunkett research but neither provided information re WFM's international business

Librarian: Hold on, I am searching Lexis-nexis

Librarian: <http://www.lexisnexis.com.ezproxy.library.berkeley.org/hottopics/lnacademic/?>

Librarian: This is whole food market SWOT but it is 2014

Librarian:

http://www.valueline.com/Stocks/Highlights/Whole_Foods_Market_A_Short_SWOT_Analysis.aspx#.WLH3X_IUnEI

Student: ok, I will take a look.

Student: This is from Value Line, is this a credible resource

Student: can you PDF me the article

Student: And is value line credible?

Librarian: Did you log into blackboard?

Librarian: If you give me your email, I can email to you

Student: I am not sure how I can sight the LN article you emailed me since it is now in PDF

Librarian: GlobalData - SWOT Analysis, 04/29/2014, Whole Foods Market, Inc.

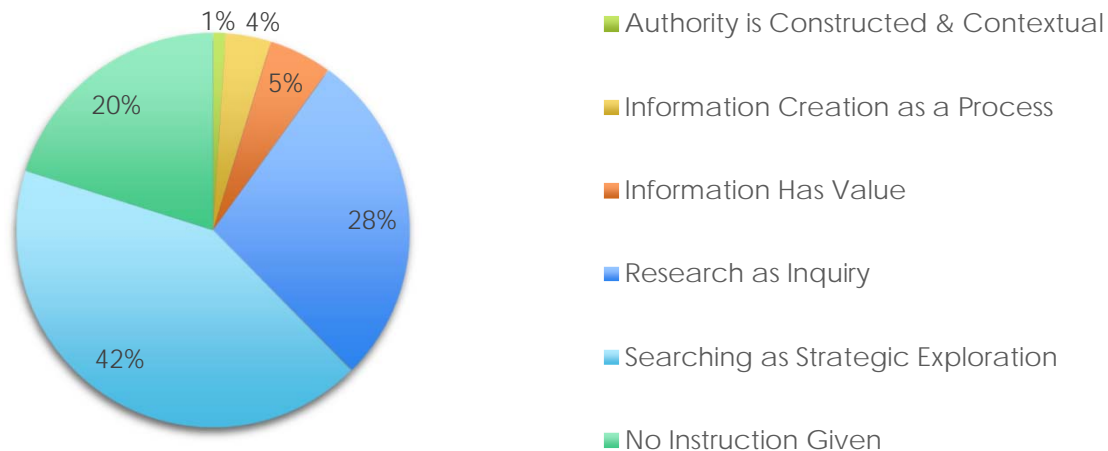
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Evaluation

Can we do better?

- Instruction was not given when possible 20% of the time

Information Literacy Instruction in Chat





Barriers to instruction

- ▶ Technology issues
- ▶ Student "ghosting"
- ▶ Instruction is not welcome
 - Student emotions
 - Students are rushing



Barriers to instruction

- ▶ Assignments require additional steps
- ▶ Librarians are multi-tasking



What we learned

- ▶ Instruction opportunities are easy to identify
- ▶ Define explicit instruction behaviors for coding
- ▶ Best practices help provide consistent, effective instruction



What we learned

- ▶ Difficult without non-verbal communication
- ▶ Students end chats prematurely before instruction can occur



Immediate Next Steps

- ▶ Re-evaluate rubric
- ▶ Perform another chat analysis
- ▶ Isolate best practices for virtual chat instruction
 - Use Oakleaf's best practices article to guide our behavior definitions



Goals for our findings

- ▶ Workshop during our Annual Librarian Training Week
- ▶ A tutorial for new librarians or a refresher course
- ▶ Statistics for stakeholders exhibit how we are meeting institutional goals of "Educational Impact" & "Data Driven Decision Making"

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Bibliography

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Questions?

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