

Create, Then Integrate: Teaching Undergraduate Research Skills Using WebCT



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Carleton University Library
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Slides: <http://www.inspyre.ca/>

Creating the Library Sandbox

Library Sandbox is:

- A series of research guides which can be downloaded into an instructor's WebCT space. Students complete a brief assignment to show they have grasped basic library skills.
- Motivated by desire to explore alternative means of instruction.
- Designed (with limited resources!) to appeal to faculty and improve student learning.

Presentation Outline

- Appeal to Faculty
- Improve Student Learning
- Description of Library Sandbox
- Assessment & Evaluation
- Future Goals & Applications

Create, Then Integrate: Faculty/Librarian Collaboration

Faculty/Librarian Collaboration

“There is an asymmetrical disconnection that exists between librarians and faculty. Although the two groups are mutually dependent, and are both necessary to the successful functioning of any academic institution...the two groups are generally separated”

Faculty/Librarian Collaboration

Faculty are:

- possessive and territorial about their class time, course credits and “their” students
- inflexible
- rude, “touchy”, and generally uncooperative
- emotionally detached from the teaching role
- in a “rut” or needing “renewal” in their approaches to classroom activities

Faculty/Librarian Collaboration

Librarians feel that faculty should:

“...know library resources, understand the structure of the library and its services, be familiar with library jargon – and be able to teach these things to their students.”

“...prepare feasible assignments that develop basic library skills.”

Faculty/Librarian Collaboration

Librarians see:

“...a faculty culture that privileges research, content and specialization, while undervaluing teaching, process and undergraduate students.”

Hardesty (1999) as cited in

Given & Julien (2005)

Faculty/Librarian Collaboration

A different approach:

- try to gain faculty members' trust... and treat faculty as clients of the library

Given & Julien (2005)

Faculty/Librarian Collaboration

A different approach:

- create a library skills assignment that can be customized for individual courses and instructors
- try a different method of instruction that does not require in-class time with students
- build on existing WebCT course materials, and encourage faculty members to customize the module to suit their needs

Create, Then Integrate: Improving Student Learning

Improve Student Learning

To improve student learning, we included the following concepts in the Library Sandbox:

1. Active Learning
2. Integration of Library Skills with Course Material
3. Online Library Instruction

Improve Student Learning

Active learning

- improves information retention and student engagement

■ Lecture format:

- “Students’ attention to what the instructor is saying decreases as the lecture proceeds;
- Lectures presume the listener is orientated towards auditory learning;
- Lectures tend to promote only lower-level learning of factual information;
- Students tend not to like lectures.”

Keyser (2000)

Improve Student Learning

- Active Learning:
 - “Students are involved in more than listening.
 - Less emphasis is placed on transmitting information and more on developing students’ skills.
 - Students are engaged in activities (e.g. reading, discussing, and writing).”

Improve Student Learning

Integrating library skills into courses improves

- Student motivation
- Reflection throughout the learning process

- “Active learning theorists encourage instructors to consider the motivational context for students during course design. The premise is that students learn best when they feel a need to know. Integrating exercises into the curriculum prompts this need to know.”

Smith (2007)

Improve Student Learning

“Reflection shapes the learning process.”

Bordonaro and Richardson (2004)

Improve Student Learning

Online instruction supports active learning

- “‘Active learning techniques’ in ARL tutorials:
 - Quiz at the end of a tutorial module
 - Questions integrated within the tutorial modules
 - Exercises used within tutorial modules
 - Quiz that requires use of a separate browser window
 - Option to send quiz results to an instructor”

Improve Student Learning

Online instruction appeals to Millennial undergraduates

- Millennials:
 - “are digital natives rather than digital immigrants
 - are gamers; enjoy gaming and media;
 - expect nomadic, anytime, anywhere communications;
 - are collaborative and multitask;
 - learn experientially and continuously; and
 - read less than other generations”

Improve Student Learning

Our approach:

Active Learning:

- Students actively seek answers to their assignments in the Library Sandbox

Integration into Course material:

- Library Sandbox integrated into course WebCT
- Assignment provides currency (i.e., marks), and makes research a clear step in completing class assignments

Improve Student Learning

Online Library Instruction:

- Designed/written for the Web, favoured medium of the Millennial generation.
- Immediate access: Available online 24/7
- Customized: Easily adapted to needs of course

Improve Student Learning

- Student-Centred: Students access just the guides they need, when they need them
- Interactivity: Capitalize on interactivity of the Web – self-tests, hyperlinked glossary of library jargon
- Online Help: Easy information on how to get help by e-mail & MSN (as well as “traditional assistance” by phone and Research Help Desk)



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Create, Then Integrate: Description of Library Sandbox



Table of Contents

- ▼ **Choosing a Topic and Writing a Thesis Statement**
 - 11 Ways to Select an Essay Topic
 - Narrow Your Essay Topic
 - Writing A Thesis Statement
 - Generating Ideas and Forming an Outline
 - Shaping Your Research Through Questioning
 - Test Your Knowledge: Topics and Thesis Statements
- ▼ **Using the Library**
 - Map of the Library
 - ▼ How To Write A Search Strategy
 - Choosing Keywords
 - Improve Your Search Results
 - ▼ How to Use the Library Catalogue
 - Physically Locating Materials in the Library
 - Scholarly vs. Popular Articles
 - Evaluating Internet Sites for Your Academic Essay
 - Access Library Resources from Off-Campus
 - Getting Books and Articles Not Available at Carleton
 - Test Your Knowledge: Using Library Resources
 - Test Your Knowledge: Evaluating Materials for Your Essay
 - ▼ How to Find Journal Articles
 - ▼ **Database Guides**
 - ERIC
 - PsycINFO
- ▼ **Writing**
 - Writing Guides
 - Avoiding Plagiarism
 - ▼ Bibliography and Formatting

Guides: Basic steps of the research process

Carleton UNIVERSITY myWebCT Resume Course Course Map Check Browser Log Out Help

Control Panel Library Sandbox

View Designer Options

- Course Menu - Homepage > Research Process > How To Write A Search Strategy > **How to Use the Library Catalogue**

Glossary | Search

https://webct.carleton.ca - WebCT Glossary - ...

Keyword: Library Catalogue

Definition: The Library Catalogue lets you look for books and other library material (except articles).

Back Forward Close

Done webct.carleton.ca

of this guide

Why Search the [Catalogue](#)?

The library catalogue lets you look for [books](#)

How Do I Search the Catalogue

Select [Catalogue](#) on the [Library's home](#)

Library Catalogue

Carleton Home Carleton A-Z Campus Map

Carleton UNIVERSITY LIBRARY

Catalogue Online Resources How Do I...? Borrow

Choose one of the following options:

Search by Title





Help!

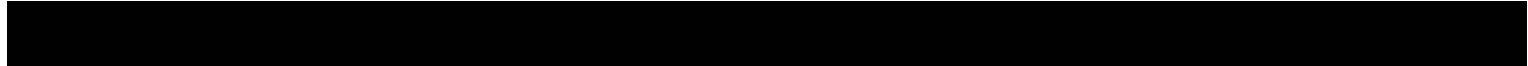
Here are links to people you can contact for help with your research papers. Remember, your instructor and teaching assistants are always there to help you too!

[Using the Library](#) | [Writing Your Project](#) | [Writing Your Bibliography](#) | [With Study Skills](#)



Using the Library

- ◆ Librarians and subject specialists are available to assist you at the **Research Help Desk** on the main floor of the Library. Click [here](#) to check when the Rese Help Desk is open. During these times, they can **also answer your questions by phone** at 613-520-2735.
- ◆ You can also **e-mail or phone** a librarian or subject specialist. You can also **make an appointment** with them for individual research assistance. Click [her](#) contact information for all of the librarians and subject specialists.



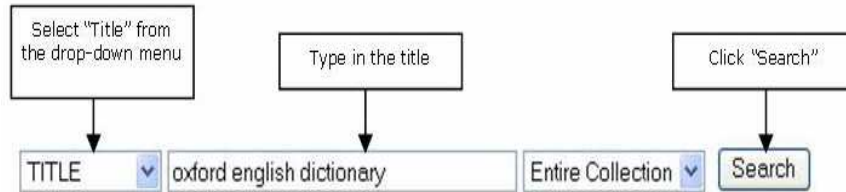
Carleton UNIVERSITY myWebCT Resume Course Course Map Check Browser Log Out Help

Library Sandbox

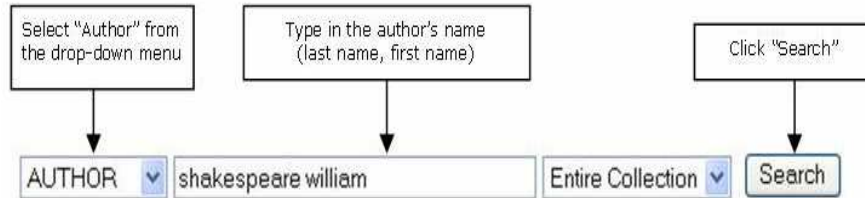
Control Panel View Designer Options

- Course Menu - Homepage > Research Process > How To Write A Search Strategy > How to Use the Library Catalogue

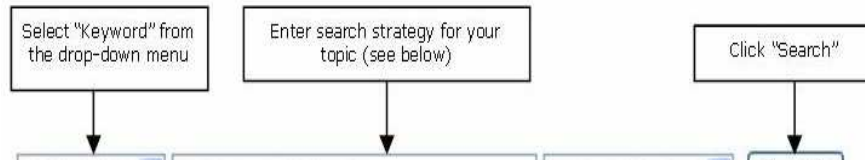
Glossary Search



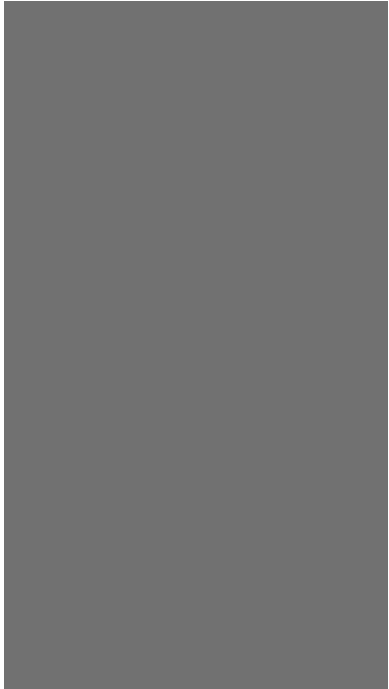
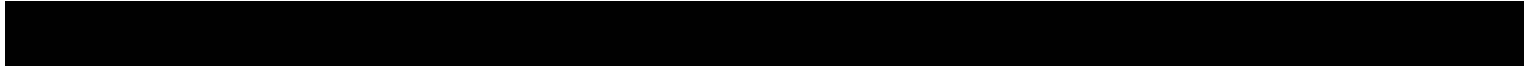
Search by Author



Search by Keyword



Guides were written with the undergraduate user in mind.



Shaping Your Research Through Questioning
Test Your Knowledge: Topics and Thesis Statements

▼ Using the Library

- Map of the Library
- ▼ How To Write A Search Strategy
 - Choosing Keywords
 - Improve Your Search Results
- ▼ How to Use the Library Catalogue
 - Physically Locating Materials in the Library
 - Scholarly vs. Popular Articles
 - Evaluating Internet Sites for Your Academic Essay
 - Access Library Resources from Off-Campus
 - Getting Books and Articles Not Available at Carleton
 - Test Your Knowledge: Using Library Resources
 - Test Your Knowledge: Evaluating Materials for Your Essay



▼ How to Find Journal Articles

▼ Database Guides

- ERIC
- PsycINFO

▼ Writing

- Writing Guides
- Avoiding Plagiarism
- ▼ Bibliography and Formatting
 - MLA Style
 - APA Style
 - Chicago Style
 - Turabian Style
 - Writing an Annotated Bibliography
 - RefWorks

▼ Help

myWebCT Resume Course Course Map Check Browser Log Out Help

Library Sandbox

Control Panel View Designer Options

- Course Menu - Homepage > Research Process > **Test Your Knowledge: Using Library Resources**

Self Test | Glossary | Search

Self Test

Multiple Choice Questions

- You're writing a paper on how media affects children. Select the best search strategy for this topic.
 - children and media
 - children
 - media
 - (children or teenagers or adolescents) and (media or television or film)
- If you search canad* instead of canada, how will your search results change?
 - You will get more results
 - You will get fewer results
 - You will get the same number of results
- You're doing a project on Chinese immigrants in Canada in the early 20th century. You tried searching Chinese and 20th century but got few results. Pick the best search strategy to try next.
 - Chinese
 - (Chinese or asian* or oriental*) and canad* and 20th century
 - immigrant* and canad* and 20th century
- You've gone to the shelves and found a great book on your essay topic. What's the easiest way to find similar books?
 - Look around the book on the shelves for similar material.
 - Go to Chapters
 - Ask your classmates what they've found.
- What information do you need to locate a book you found in the Library catalogue?
 - The author of the book (e.g.: Shakespeare, William)
 - The title of the book (e.g.: "Romeo and Juliet")
 - The location, call number, and status of the book (e.g.: Floor 3, PR2831.A2E94, In Library)
 - Where to find a Library staff member who can help you (e.g.: Research Help Desk)
- You've been searching an article database and have found an article that looks perfect for your essay. How can you get a copy?
 - Google
 - Wander around in the stacks until you find the correct journal.
 - Click "Get It!". If that doesn't work, try searching the Library Catalogue for the appropriate journal.
- You've found an interesting book in the Library Catalogue. How can you find similar books using only the record on the screen (the "record" is the screen you

Feedback

Correct

Right! This search strategy will find the most results that are r to your topic. It includes both l concepts with the word "AND" also includes synonyms added together with (OR). This is imp because the computer can't ge synonyms by itself. Thus, to fi relevant material, you must in synonyms.

Self Test

Multiple Choice Questions

1. You're writing a paper on how media affects children. Select the best search strategy for this topic.
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 - Chinese
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 - The location, call number, and status of the book (e.g.: Floor 3, PR2831.A2E94, In Library)
 - Where to find a Library staff member who can help you (e.g.: Research Help Desk)
6. You've been searching an article database and have found an article that looks perfect for your essay. How can you get a copy?



Feedback

Incorrect
Think about this carefully! Car find results with the words car canadian, canadians; whereas canada will only look for the w "canada". Use of the asterisk called truncation and it allows look for any variations after t of a word (as seen above). For tips, revisit the "How To Write Search Strategy" guide.

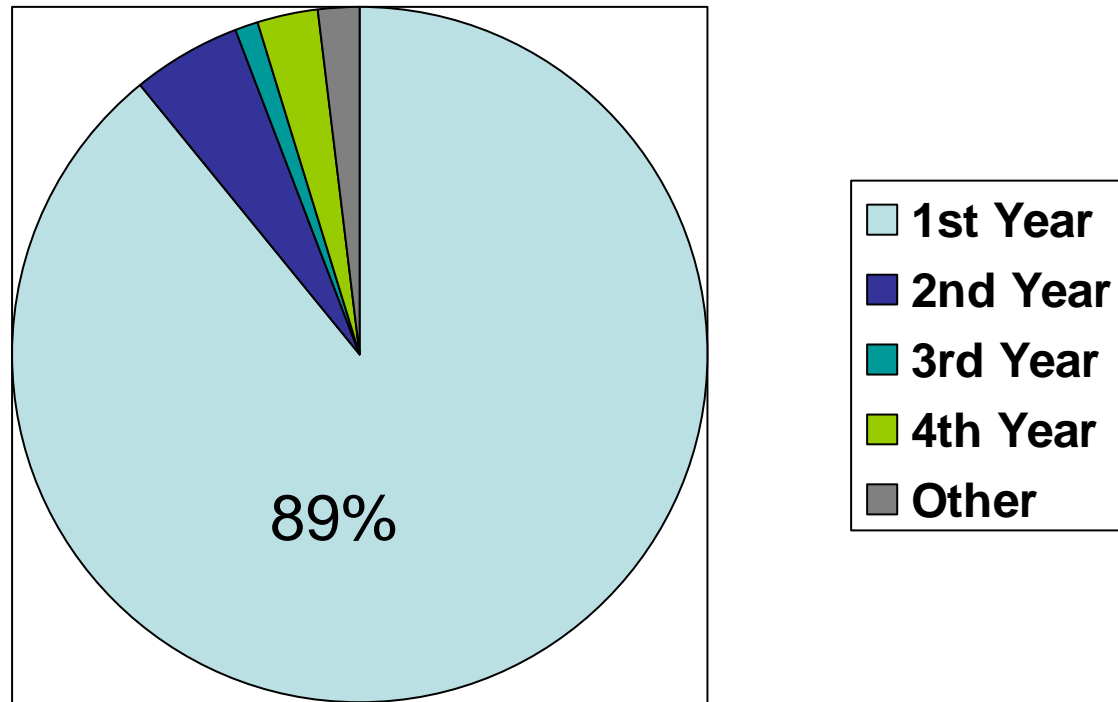
Description of Library Sandbox

Assignment targets key learning goals:

- Select a topic
- Write a Boolean search statement
- Find a book
- Find a scholarly article
- Cite & annotate the article

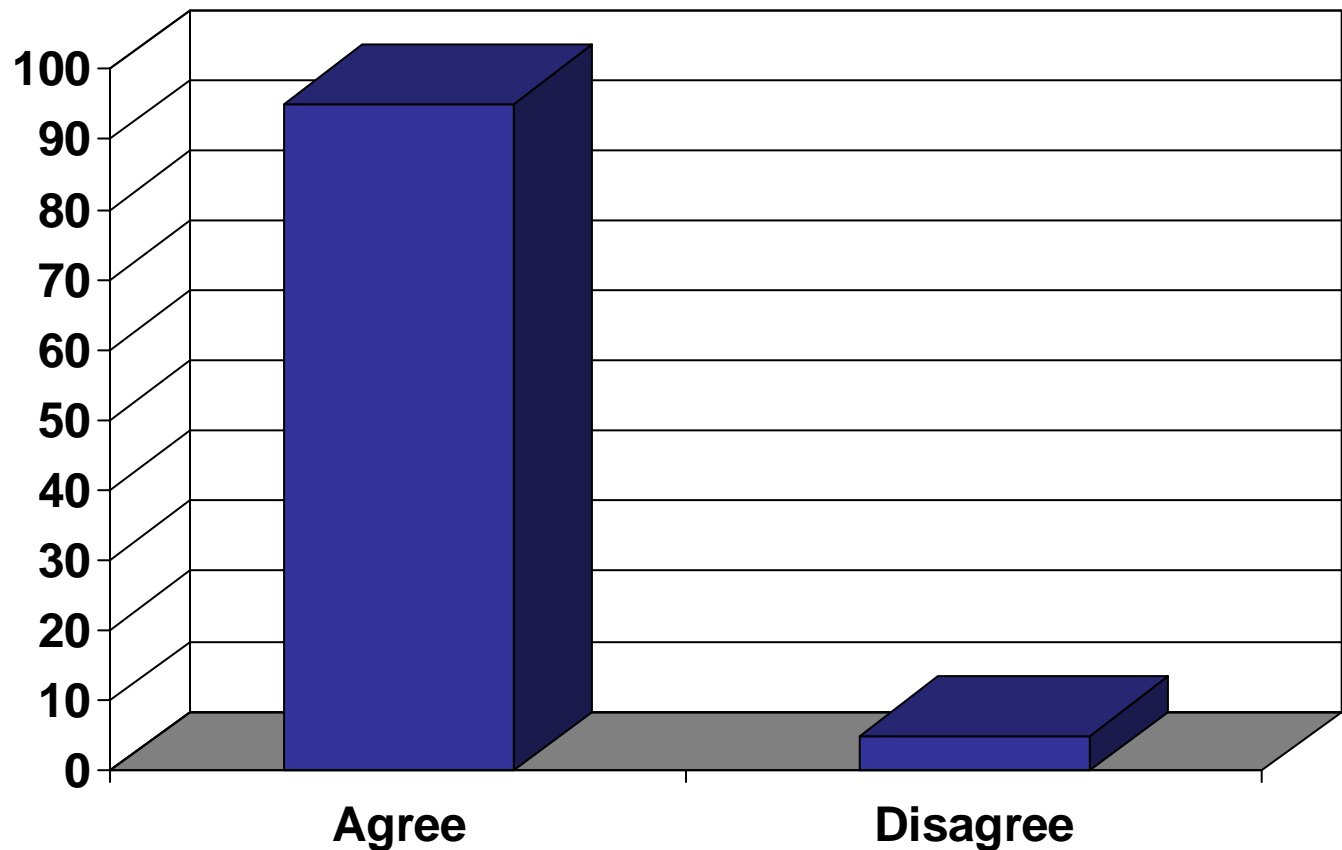
Create, Then Integrate: Results and Assessment

Results: Demographics

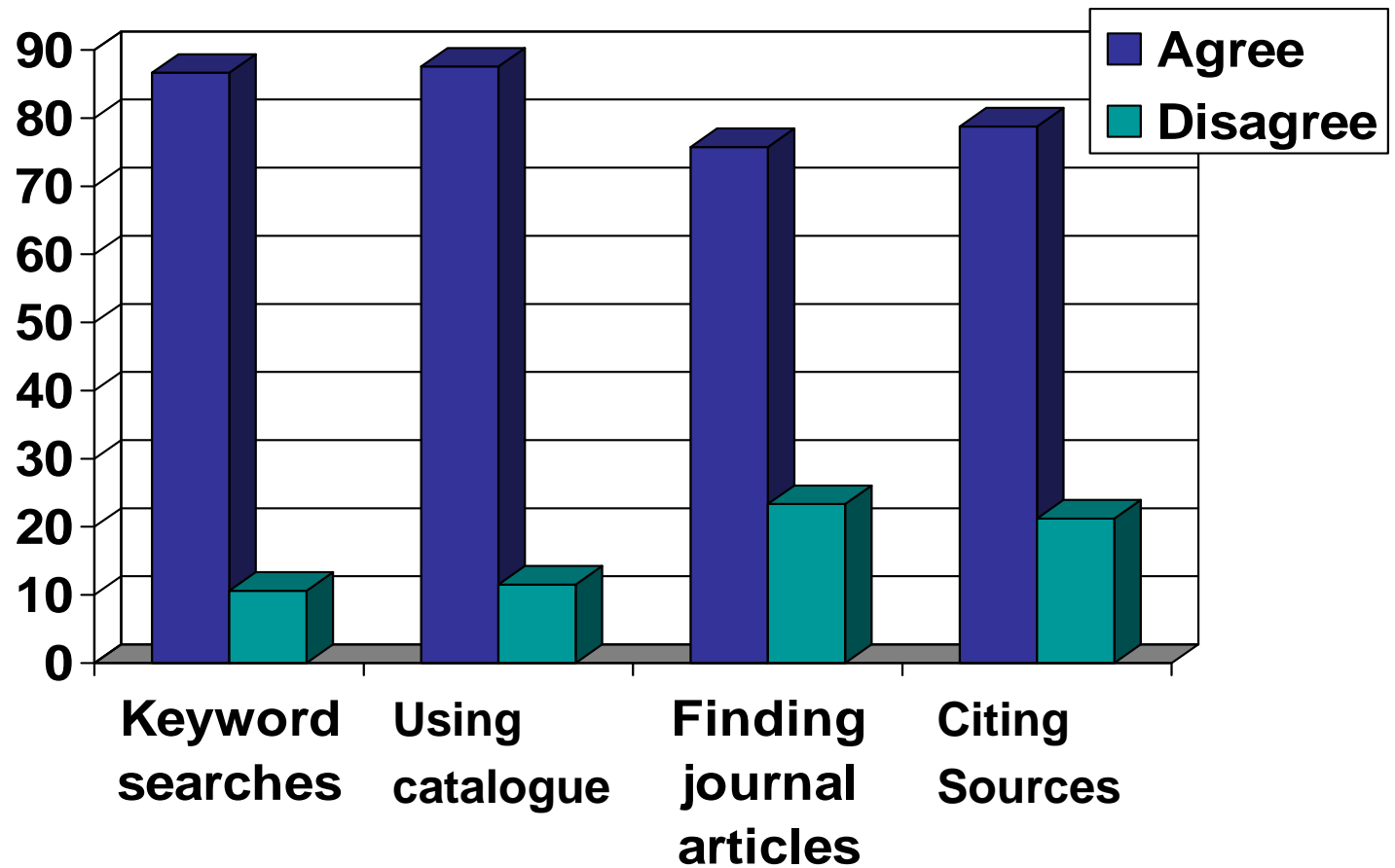


Results: Presentation

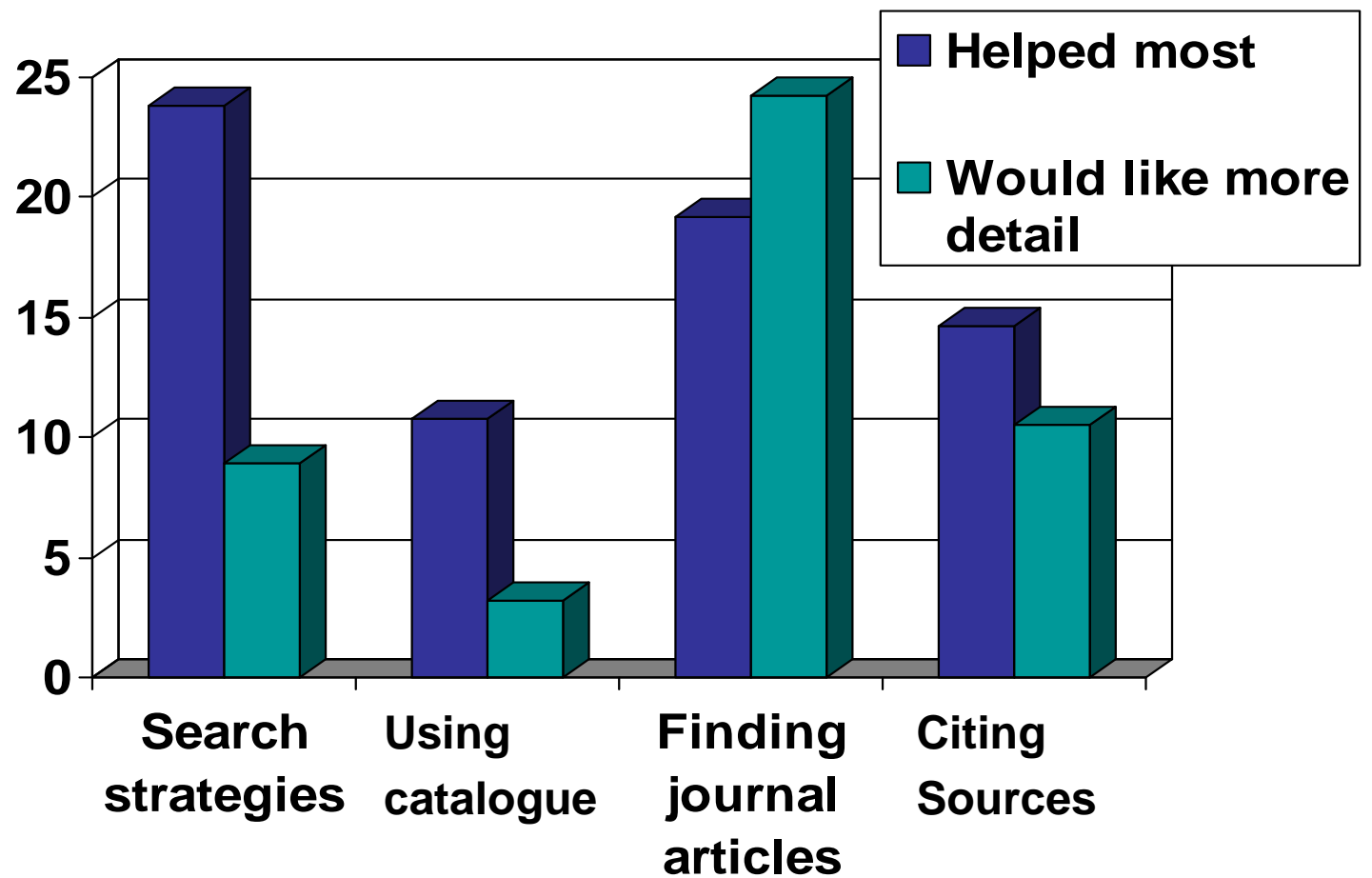
Material in the WebCT module was organized and clearly presented



Results: More comfortable...



Results: Qualitative Analysis



Results: The Human Factor

Studies comparing lecture and online instruction show that online instruction is at least as effective as lecture:

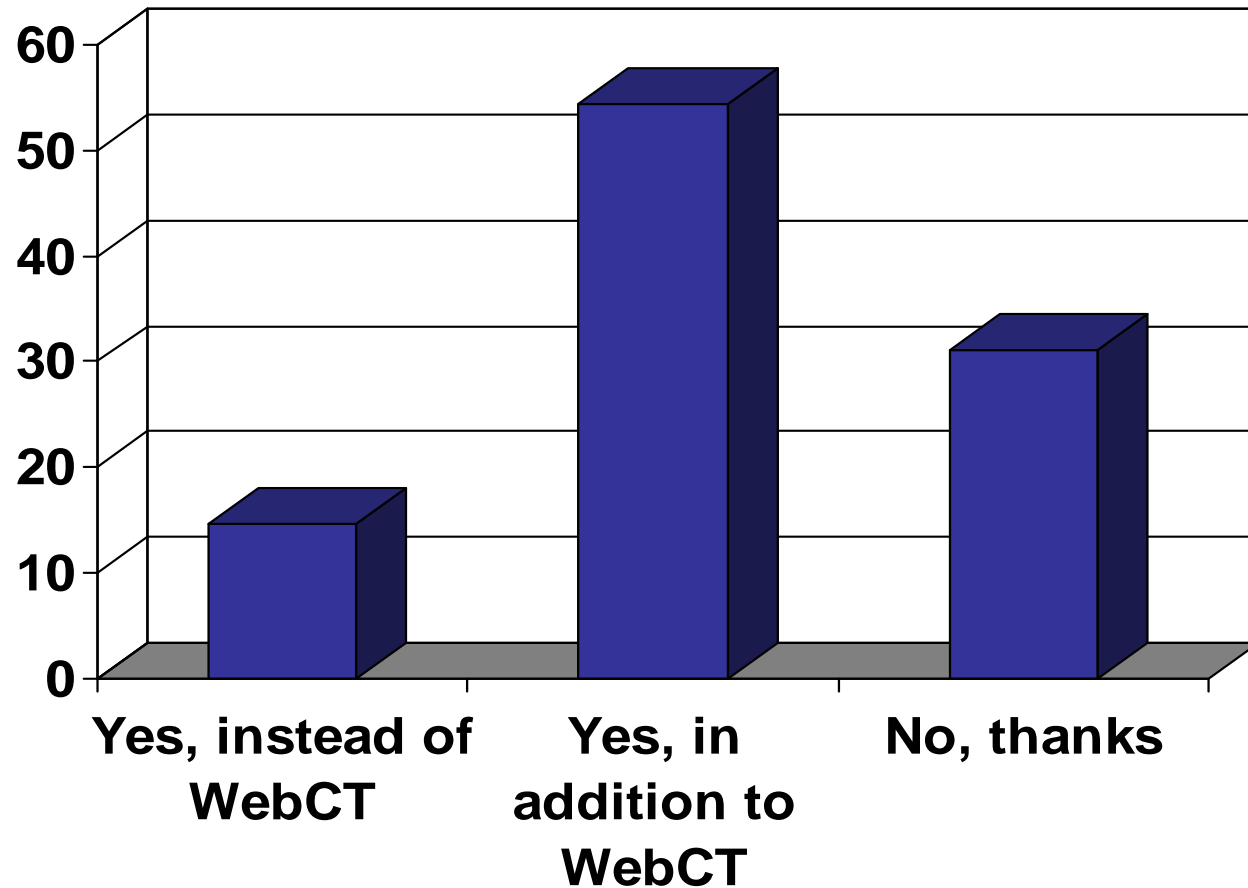
- Germain, C.A., Jacobson, T.E. & Kaczor, S.A. (2000)
- Holman, L. (2000)
- Kaplowitz, J. & Contini, J. (1998)
- Nichols, J., Shaffer, B. & Shockey, K. (2003)

Results: The Human Factor

1. Have you attended library instruction sessions in other courses?
2. Did you visit the Research Help desk or schedule an appointment with a subject specialist for help with your assignment?
3. Would you have liked a formal presentation on library resources?
 - Yes, instead of the WebCT module
 - Yes, in addition to the WebCT module
 - No, the WebCT module was sufficient

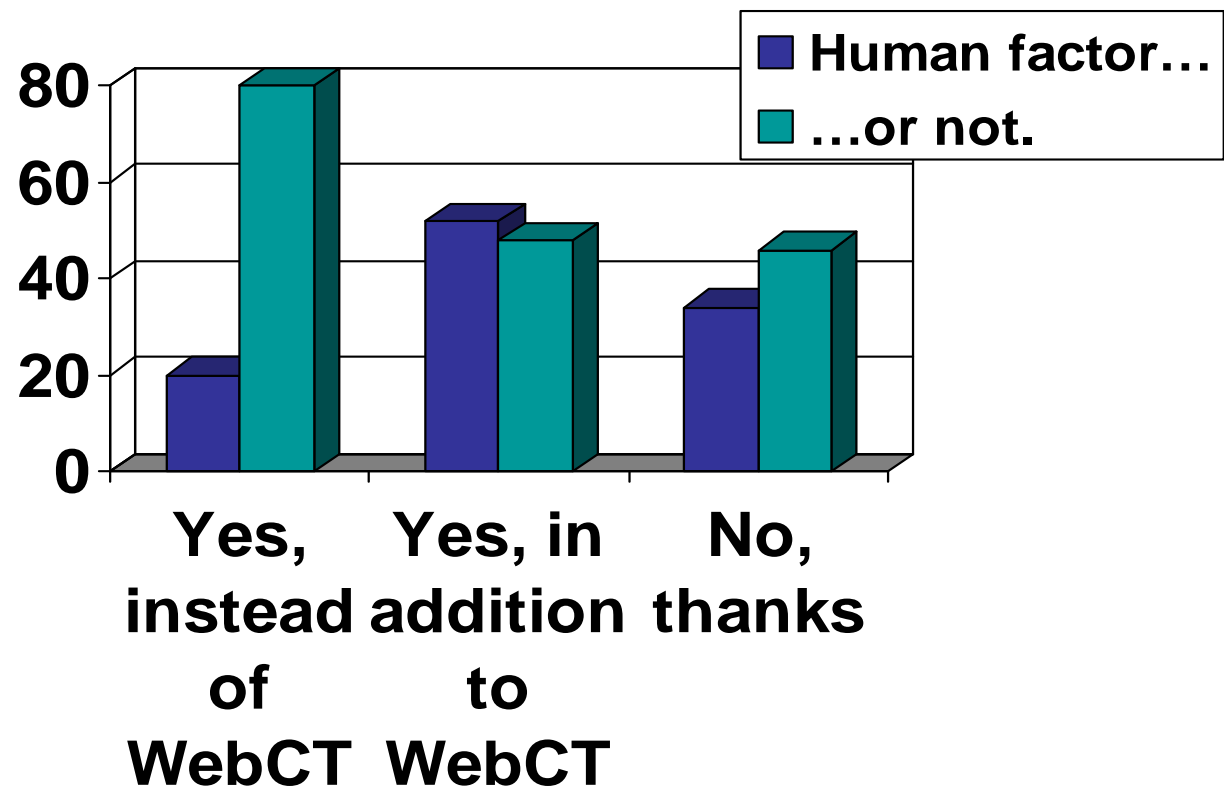
Results: The Human Factor

Would you have liked a presentation?

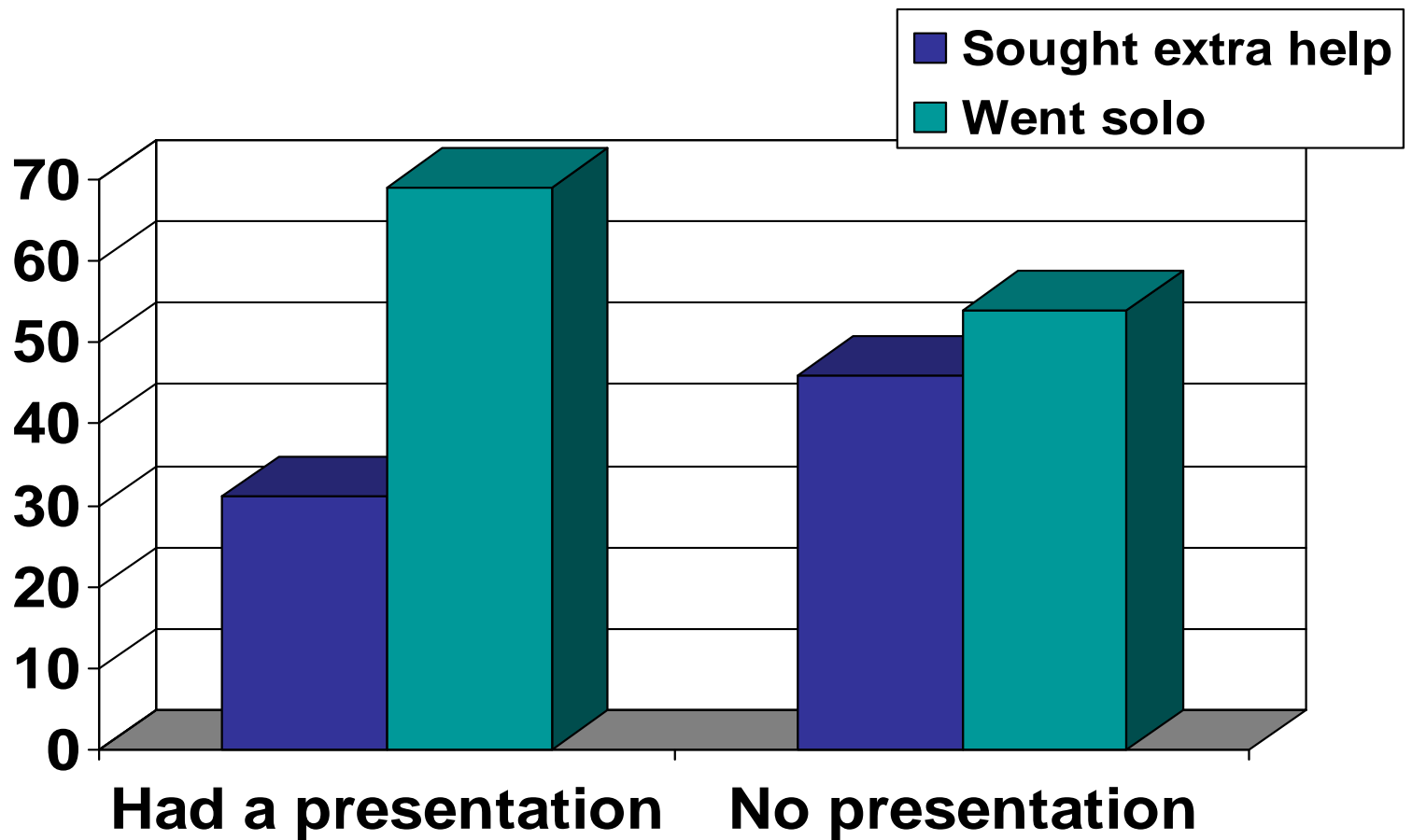


Results: The Human Factor

Would you have liked a presentation?



Results: The Human Factor



Results: Unexpected Issues

- Reading the module and guides (or failure to do so)
- Increase in advanced questions
- Excellent assimilation of material in follow-up questioning and peer instruction

Create, Then Integrate: Future Goals & Applications

Future Goals & Applications

- Summer 2007:
 - Improvements based on survey data
 - Training and support for Reference Services staff
 - Adapt to WebCT upgrade
- Fall 2007:
 - Available more widely on campus
- Include Captivate Videos

Future Goals & Applications

Investigate other uses for Library Sandbox

- Create discipline-specific material
- Customize for user groups
- Involve other Library departments

Encourage future collaboration:

- Faculty
- Between Departments in the Library
- University Services

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