

Information Literacy Evaluation: Fishing for answers with SAILS

Tom Adam
IL Coordinator
University of Western Ontario

Ilo-Katryn Maimets
Science Librarian
York University

Project SAILS

- **Why SAILS was chosen**
- **How the test was implemented:**
- **Promotion; recruitment**
- **Impact on partnerships and collaborations on campus**
- **What the results revealed**
- **How results were shared**

Group Exercise:

- **Using the information for refining and focusing IL instruction**

Why SAILS?

- **Information Literacy Explosion**
- **ACRL Standards**
- **Accountability**
- **Program assessment**
- **International participation**
- **Common language**
- **Standardized methodology**

Phase I - 2002-03

- **Small sample of 8 institutions**

Phase II - 2003-04

- **40 institutions**
- **4 Canadian schools**
 - **UBC, Alberta, Brandon, Western**

Phase III - 2004-05

- **67 institutions**
- **3 additional Canadian schools**
 - **UBC, Alberta, Brandon, Manitoba, Western, York, New Brunswick**

What is the term for an online resource that shows what materials a library owns?

CHECK ONLY ONE ANSWER.

- bibliography
- keyword
- library catalog
- research database
- subject heading

What is the term for an online resource that shows what materials a library owns?

CHECK ONLY ONE ANSWER.

ACRL Objectives 2.1.3.4 & 2.3.2.2

SAILS Skill Set 4

library catalog

What is the "invisible college"?

CHECK ONLY ONE ANSWER.

- a phenomenon that describes all the information sources that students don't know about
- collections of resources, such as archives, that are not open to the public
- method for taking classes through distance learning
- term used to describe all the informal ways which students learn
- unpublished communication among faculty, such as personal contacts, listservs, email

What is the "invisible college"?
CHECK ONLY ONE ANSWER.

ACRL Objectives 1.2.1.2

SAILS Skill Set 2

[] unpublished communication among faculty, such as personal contacts, listservs, email

You hear on a radio talk show that Mad Cow Disease may have been found in the United States. How might you determine the truth of this statement?

CHOOSE ONLY ONE ANSWER

- Call for a transcript or the program from the radio station
- Check the fbifiles.com web site for information the government itself might not release to the public
- Discuss the news with colleagues who might have heard the program
- Look up the topic in the American Council on Beef web site for current news
- Search for Mad Cow Disease on the U.S. Department of Agriculture web site.

Canadian Content

- **42 questions**
 - **Variant spelling for words**
catalog/catalogue
 - **Legal differences**
copyright
 - **Canadian context and examples**
College/University

You hear on a radio talk show that Mad Cow Disease may have been found in **Canada**. How might you determine the truth of this statement?

CHOOSE ONLY ONE ANSWER

- Call for a transcript or the program from the radio station
- Check the **CSISfiles.com** web site for information the government itself might not release to the public
- Discuss the news with colleagues who might have heard the program
- Look up the topic in the **Canadian Cattlemen's Association** web site for current news
- Search for Mad Cow Disease on the **Department of Agriculture and Agri-Food** web site.

You are assigned a report for your political science class on testimony given by the US Sec. of the U.N. 10 days ago at a congressional hearing. What research tools would be most helpful in finding information about the address?

CHECK ALL THAT APPLY.

- search for articles in Yahoo News Directory (online)
- search for articles in New York Times (online)
- search for articles in The Reader's Guide to Periodical Literature (reference room)
- search for articles in the Social Science Index (reference room)
- search for books in university library's catalog (online)

You are assigned a report for your political science class on an address to Parliament made by the United Nations Secretary 10 days ago. What research tools would be most helpful in finding information about the address?

CHECK ALL THAT APPLY.

- search for articles in Yahoo **Canada** News Directory (online)
- search for articles in **Canadian Newsstand** (online)
- search for articles in The Reader's Guide to Periodical Literature (reference room)
- search for articles in the Social Science Index (reference room)
- search for books in university library's catalogue **ue** (online)

Implementation Parameters

- **Multiple testing environments**
- **Multiple formats**
- **Testing twice a year**
 - **Corresponding to ALA reporting**

Context at Western

- **25,000 undergrads, 1,300 faculty**
- **Long tradition of teaching**
- **950 sessions, 31,000 student contacts**
- **Information Literacy Coordinator (2004)**
- **Teaching Support Centre (2004)**
- **Participation in SAILS Phase II and III**

Phase II

- **NMREB (research ethics) late 2003**
- **2 large first year classes**
 - **Politics & Biology**
- **February implementation**
- **Highly monitored test environment**
- **Electronic version of the survey**

Phase III

- **NMREB submission late 2004**
- **Spring implementation**
- **Unmonitored testing environment**
- **Entire undergraduate population**
- **Electronic test available 24/7**

Phase III



The screenshot shows the Western Libraries website interface. At the top left is the Western Libraries logo. The main header area contains the text "Western Libraries" in a large, purple, serif font. Below this is a navigation menu with buttons for "Home", "Contact Us", "Off-Campus Access", "Hours", "Libraries", "Catalogue", and "Help". To the right of the menu is a "Quick Links...." dropdown menu and a "Go" button. The main content area is divided into several sections. On the left, there is a "Research Resources" section with links to "Library Catalogue", "Resources by Subject", "Databases by Title", "New! Assignment Calculator", and "More Resources...". In the center, there is a circular image of three people walking on a path in a park-like setting. To the right of the image is a "My Library Account" section with links to "Renew Books", "Course Readings", and "More...". On the far right, there is a "What's New" section with links to "Service Quality - Information Resources", "My Reading History", "RefWorks", and "More News". Below this is a "Have a Question? Chat with Us Online..." button. A red box highlights a "Complete the survey..." button with a "project SAILS" logo. Below the survey button is a list of user groups: "Students", "Faculty and Staff", "Users with Special Needs", "Alumni", "Donors and Friends", and "Visitors". At the bottom of the page, there is a footer with links for "Site Map", "Search Western Libraries", "Search UWO", "Western Directory", and "UWO". The footer also contains copyright information: "©2004 Western Libraries at The University of Western Ontario", "Maintained by Western Libraries Webmaster, November 3, 2004", and a link to "View the Western Libraries Privacy Statement".

Western Libraries

Home Contact Us Off-Campus Access Hours Libraries Catalogue Help Quick Links.... Go

Research Resources
Library Catalogue
Resources by Subject
Databases by Title
New! Assignment Calculator
More Resources...

How Do I...
Get it @ UWO
Cite References
Connect to Wireless
More "How Do I" Topics...

My Library Account
Renew Books
Course Readings
More...

What's New
Service Quality - Information Resources
My Reading History
RefWorks
More News

Have a Question?
Chat with Us Online...

Complete the survey... project SAILS

Students
Faculty and Staff
Users with Special Needs
Alumni
Donors and Friends
Visitors

Site Map | Search Western Libraries | Search UWO | Western Directory | UWO

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Phase III



Consent

I have read the above information about the Project SAILS research project and I agree to participate. All questions have been answered to my satisfaction.

Click either:

- YES**
- NO** If you click NO you will not be able to complete the survey.

Please enter your STUDENT ID NUMBER:

Year

- 1
- 2
- 3
- 4
- Grad

Opt out of the draw for the Apple iPod mini.

Click to start the survey.

[Site Map](#)

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Phase III

[Text Only Version](#)



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Standardized Assessment of Information Literacy Skills Research Project

Phase III - 2004/05

Kent State University
Association of Research Libraries

You forgot to enter your current year in the programme.

Back to the survey

Please return to the information / consent page,
Enter all information.
Then click SUBMIT to advance to the survey.

Quit the survey

Thanks for your interest in Project SAILS.
You can return to complete the survey at a later time

[Site Map](#)

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Phase III

University of Western Ontario

Please answer all of the following questions. Do the best you can. Thank you for your time!

Page 1 of 5

1. Which of the following actions qualify as plagiarism?

CHOOSE ALL THAT APPLY.

- Including a paragraph from an article as long as you change a few of the words.
- Reporting statistics from the Census of Canada.
- Turning in a paper written by someone else.
- Using another person's ideas in your research paper without attribution.
- Using commonly known information without attribution.

2. Which of the following provide information?

CHOOSE ALL THAT APPLY.

- Folk art
- Personal stories
- Research reports

Phase III

Text Only Version

Text Only Version



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Quick Links.....



Standardized Assessment of Information Literacy Skills Research Project

Phase III - 2004/05

Kent State University
Association of Research Libraries

DATE: 2005/4/6

NAME: Homer Simpson

STUDENT NUMBER: 999999999

This certifies that this student completed the Project SAILS survey on the date indicated.

Thanks for participating in the SAILS research project. Return to [Western Libraries homepage](#).

[Site Map](#)

[Search Western Libraries](#)

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Promotion

- **Presentations to Faculty**
- **Integration into IL Programs**
- **Easy access from Library page**
- **Incentives**
- **“Splash” screens**

Promotional Materials



THERE IS ONLY ONE WEEK LEFT

... for you to complete a short library survey
and win a chance for one of three
iPod Minis ...

All Western undergrads are eligible.
It only takes about 30 minutes of your time and can be completed online.

Click the button  on the [Library homepage](#)
and follow the instructions.

You may win an **iPod mini** just by participating.
The draw will happen next week, at the end of the survey period.

SAILS Results

- **Number of Participants by April 22 2005**
 - YorkU - 276
 - UWO - 1,727
 - Canadian - 3,860
 - USA - 30,804
 - Total - 34,664
- **Number of Institutions by April 22 2005**
 - Canadian - 4 (YorkU, UWO, UM, BrandonU)
 - U.S. - 63
 - Total - 67

Demographic Picture

- **Data collected for each student:**
 - **U.S.: Gender, Year of study, Discipline, Ethnicity and GPA**
 - **Canada: Ethnicity data is never collected and GPA equivalent not available or not comparable in Canadian context –**
 - **More female participants, especially in Canada**
 - **Canadian results show participation across all 4 years of study**

Demographic Picture: Test Takers, Highest Representation by Discipline

	UWO	YorkU
Biological and Biomedical	8.6%	N/A
Business	11.7%	23.5%
Engineering	3.5%	N/A
English Lang & Lit	3%	5%
Health	22.4%	5%
Psychology	4.1%	13.5%
Social Sciences	21.9%	17.1%
Visual & Performing Arts	6.7%	3.9%



Western
Libraries

What the results revealed

Standard 1

Average Scores

The information literate student determines the nature and extent of the information needed

ALL	.55
UWO	.56
YorkU	.55

Standard 2

Average Scores

The information literate student accesses needed information effectively and efficiently

ALL	.52
UWO	.53
YorkU	.53

Standard 3

Average Scores

The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system

ALL	.55
UWO	.56
YorkU	.56

Standard 4

- **The information literate student uses information effectively to accomplish a specific purpose**
 - **Not Tested – multiple choice not appropriate format for testing**

Standard 5

Average Scores

The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally

ALL	.53
UWO	.53
YorkU	.53

Standard Level: No Significant Divergences with Cross-Institutional Data

- Cross-institutional results are grouped around the midpoint
 - Provide a consistent benchmark
 - Indication of soundness of the questions
- Question remains:
 - Do students actually understand what they are meant to understand at the midpoint?

12 Skill sets

1. **Developing a topic,**
2. **Scholarly communication / Structure of disciplines,**
3. **Identifying & Distinguishing among sources,**
4. **Selecting finding tools,**
5. **Selecting search terms,**
6. **Conducting the search,**
7. **Database mechanics,**
8. **Evaluating and revising search results,**
9. **Retrieving sources,**
10. **Evaluating and selecting sources,**
11. **Documenting sources,**
12. **Ethical legal and social issues around the use of information**

Significance of the Development of the 12 Skill Sets

- Translate the ACRL standards into more meaningful processes.
- More closely related to the work we do as instructors
- Provides guidelines on where to direct IL instruction

Skill Set Level: Trends & Observations

Strongest performance:

- 1. Developing a Research Strategy**
All: .56; UWO: .60; YorkU: .61
- 2. Scholarly Communication/Structure of Disciplines**
All: .63; UWO: .66; YorkU: .65

Weakest performance:

- 5. Selecting Search Terms**
All: .47; UWO: 48; YorkU: .47
- 7. Understanding Information Retrieval Systems**
All: .45; UWO: .45; YorkU: .47

Deeper Analysis of Results

Skill Set 6 - Constructing the Search

overall average scores:

All (.54) and York (.56)

Examples

SAILS Data Report

Skill Set 6: Constructing the Search

Difficult Items

1

2s 56

250

24

251b

1s

108 39
167

154a 247 253
21
249

York Average - 0.56

Across-Institutional Average - 0.54

0.5

M

154c 251d 283 59
15b 251a 252e
15g
154d 8
154e
163
15f
154b
251c

1s

252c
218
252d 32
15d
15e 246
15c
252a

0

Analysis of Results at Question Level

- **Results more meaningful**
 - Identify high to low competency
- **Colour coded on three levels of difficulty**
 - Red: most difficult – higher scores .60 - 1
 - Yellow: mid-level – mid-range scores .40 - .59
 - Green: easiest – lowest scores .00 - .39

Author Searching

US/CAN 7 If you want to find books that Charlotte Bronte wrote, which search would you do?

Choose only one answer

- a) Author: bronte
- b) Subject: bronte
- c) Title: bronte

Author Searching

US/CAN 7 If you want to find books that Charlotte Bronte wrote, which search would you do?

Choose only one answer

a) Author: bronte

**Score: .24
High Level of Competency**

Subject Searching

US/CAN 21. If you wanted to find books about the American poet Maya Angelou, which search would you do?

Choose only one answer.

- a) Author: angelou
- b) Subject: angelou
- c) Title: angelou

Subject Searching

US/CAN 21. If you wanted to find books about the American poet Maya Angelou, which search would you do?

Choose only one answer.

**Score: .59
Mid-Level
Competency**

b) Subject: angelou

Use of Boolean Operator “And”

US/CAN 32 When using a research database, which search is the most effective one for identifying articles on how weight affects self esteem?

Choose only one answer

- a) How weight affects self esteem
- b) Self esteem
- c) Weight
- d) Weight and self esteem
- e) Weight or self esteem

Use of Boolean Operator “And”

US/CAN 32 When using a research database, which search is the most effective one for identifying articles on how weight affects self esteem?

Choose only one answer

**Score: .39
Above Average
Competency**

d) Weight and self esteem

Use of Boolean “Or” Operator

US/CAN 39 If you wanted to search for a topic that has several synonyms (for example - young, people, adolescents, teenagers, teens), which operator would you use?

Choose only one answer

- a) Adj
- b) And
- c) Near
- d) Not
- e) Or

Use of Boolean “Or” Operator

US/CAN 39 If you wanted to search for a topic that has several synonyms (for example - young, people, adolescents, teenagers, teens), which operator would you use?

Choose only one answer

Score: .67
Low Level
Competency

e) Or

Nested Boolean Logic

US/CAN 250 Which of the following search statements best utilizes nesting search operators for a communication research paper on speech anxiety

Choose only one answer

- a) Speech and talk and (anxiety or fear)
- b) Speech or talk and (anxiety and fear)
- c) Speech or talk and (anxiety or fear)
- d) (Speech or talk) and anxiety or fear
- e) (Speech or talk) and (anxiety or fear)

Nested Boolean Logic

US/CAN 250 Which of the following search statements best utilizes nesting search operators for a communication research paper on speech anxiety

Choose only one answer

**Score: .77
Very Low
Level
Competency
Ranked as
Most Difficult
Item**

e) (Speech or talk) and (anxiety or fear)

Multiple Correct Answers:

US/CAN 251 You want to locate information on student plagiarism. If you type in the term “plagiarism” as a keyword search, what part of the record is being searched?

Choose all that apply

- | | |
|--------------------------------------|------------|
| a) <i>Abstract or contents field</i> | .51 |
| b) <i>Author field</i> | .70 |
| c) <i>Subject headings field</i> | .44 |
| d) <i>Title field</i> | .52 |

1 Developing a Research Strategy

Strongest Performance

- When asked what to do when you need help with library research the top ranked answer is “ask at the reference desk”

Weakest Performance

- Think browsing the shelves is highly efficient way to start research at the library in preparation for an assignment. Ranked above asking for help, using periodical indexes, and searching the catalogue.

6. Selecting Search Terms

Strongest Performance:

- Students have good understanding of how to break down a research question in to key search terms when formulating a search strategy

Weakest Performance:

- They don't understand how a search for “skin cancer” in a research database would retrieve an article with “melanoma” in its title.
- The concept of mapping to subject headings is not very well understood

9. Retrieving Sources

Strongest Performance:

- The library catalogue is the place to look when you want to determine whether the library has an item or not

Weakest Performance:

- Students have difficulty understanding that when searching for a journal article at the library, they need to locate the journal title in the library catalogue not the title of the article.

11. Documenting Sources

Strongest Performance

- Providing edition information in a citation assists in identification of a book citation
- When field tags are provided, a reference is more easily identified as a magazine or journal article

Weakest Performance

- Great difficulty in distinguishing between types of source from untagged citations such as newspaper article, book chapter, book, journal

SAILS Exercise – Guide for Teaching

- **What do the results tell you about the skill?**
- **One idea that would alter how you teach**

Reflections

- **Lessons Learned**
- **Next Steps at York**
- **Next Steps at UWO**

Lessons Learned

- **Gained deeper understanding of IL competencies of undergraduate students**
 - **Especially useful at individual question level**
 - **Information can help inform and enhance our teaching**
- **Allows comparison of York vis-à-vis other schools**
- **Can form one useful assessment tool in a suite of others**
 - **Generic umbrella assessment tool used in tandem with other home-grown assessment tools**

Lessons Learned cont'd

- **SAILS can help us to re-think and formulate learning objectives for our teaching**
- **Provides question databank with mapping to individual ACRL objectives and broken down by standard and skill set (skill sets unique to SAILS)**
- **Enables us to show faculty and administrators we engage in assessment**
 - **Can help to leverage support for information literacy instruction as SAILS shows conclusively that IL competencies are not well developed among students at York or at the cross-institutional level**

Next Steps at York – in the classroom

- As a generic tool, SAILS can be used to identify general gaps and areas of need within the ACRL Standards and Objectives that it measures.
- Liaison librarians can now address those gaps within our disciplines in an informed way
 - Directing the focus of our instruction in the classroom
 - Creating additional home grown assessment tools – pre-test and post-test survey are being developed
 - Developing additional instructional tools – e.g. tutorials that address the more mechanical aspects of searching to take the place of classroom instruction.
 - Librarians will be able to spend more time on ACRL Standards 3, 4 and 5 – evaluation, application and ethical and legal aspects of the use of information.
- Librarians will still need to address the specific needs of their user groups e.g. diversity, ESL etc.

Next Steps at York – winning support

- **SAILS results are already being cited as evidence of student IL skills**
 - incorporated into IL documentation and presentations along with the IL Manifesto to win faculty and administrative support for assessment, and as a rationale for IL instruction.
 - e.g. NFTY, Program IL statements

Next Steps at Western

- **We're not sure...**
- **Long range planning exercise**
- **Global vs. discipline specific testing**
- **One tool in our “assessment” kit**

Thank you

- **Comments??**
- **Questions??**