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Crossing Boundaries: Collaborating to Assess Information Literacy [AAC&U Conference]

Carolyn Sanford
Carleton College

Jackie Lauer-Glebov
Carleton College, Office of Institutional Research and Assessment

David Lopatto
Grinnell College

Jo Beld
St. Olaf College

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Crossing Boundaries: Collaborating to Assess Information Literacy

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That Matter in a Changing World

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Panelists

- ## Carolyn Sanford

  Head of Reference & Instruction
  Carleton College, Northfield, MN

- ## Jackie Lauer–Glebov

  Assistant Director of Institutional Research and the
      Coordinator of Educational Assessment
  Carleton College, Northfield, MN

- ## David Lopatto

  Professor of Psychology
  Grinnell College, Grinnell, IA

- ## Jo Beld

  Professor of Political Science, Director of Academic
      Research & Planning
  St. Olaf College, Northfield, MN

Program

- ## Project Overview

  Carolyn Sanford

- ## Content and Development

  Jackie Lauer-Glebov

- ## Preliminary Results

  David Lopatto

- ## Users and Uses

  Jo Beld

- ## The Future

  Carolyn Sanford

FYILLAA Colleges

Participating Colleges

Eight Colleges

- – Carleton College
- – DePauw University
- – Grinnell College
- – Lake Forest College
- – Macalester College
- – Ohio Wesleyan College
- – St. Olaf College
- – The College of the University of Chicago

The Idea

- The recent phenomenon of abundant surveys in our regional colleges
  - Several focus on the entering first year students

- A need for individual college data

- An interest in comparative data
  - Inter-institutional
  - Longitudinal

- The value in increasing librarians' expertise in survey creation, implementation and analysis

- Our awareness of a funding agency

Bigger Reasons Why

- Accrediting Agency Requirements

- ACRL / Association of College & Research Libraries Information Literacy Standards

- Limitations of Existing Information Literacy Assessment Tools
  - Local surveys
  - Project SAILS
  - ETS / Educational Testing Service

MITC

- **M**idwest **I**nstructional **T**echnology **C**enter
  - An initiative to enable small liberal arts colleges in the Midwest to collaborate in the use of technology to enhance teaching and learning
- NITLE
  - **N**ational **I**nstitute for **T**echnology and **L**iberal **E**ducation
- ACM
  - **A**ssociated **C**olleges of the **M**idwest
- GLCA
  - **G**reat **L**akes **C**olleges **A**ssociation

Planning

- MITC funded a "roadwork" meeting

- Discussed assessment needs

- Investigated other assessment tools, especially Project SAILS

- Submitted a proposal to MITC; reviewed by their advisory group

The FYILLAA Proposal

- Develop a shared Web-based assessment tool to measure first-year students' information literacy

- Use the MITC Team model:

    librarians, faculty, academic technologists, and institutional research staff

- Approach information literacy holistically, assessing not only skills, but also attitudes and approaches to information sources

Proposal - continued

- The assessment instrument will be customizable, allowing participating colleges to add campus-specific questions

- Comparative group norms and performance measures for individual schools

The Survey

- Pilot
  - Developed by the four "I-35" colleges
  - Instrument created by the Questionnaire Subcommittee
  - Implemented spring of 2005

- Full Implementation
  - All eight colleges participated
  - Implemented fall of 2005

Content and Development

Jackie Lauer–Glebov

Carleton College

FYILLAA Development Process

Development and administration of the pilot instrument:

1. Developing a shared definition of "Information Literacy"

Defining Information Literacy

Students who are information literate can:

- ✓ Ask intelligent and creative questions
- ✓ Identify information sources
- ✓ Locate and access information sources successfully
- ✓ Judge the quality, relationship, and relevancy of information sources to their questions
- ✓ Determine the strengths and weaknesses of information sources
- ✓ Engage critically with information sources to interpret and integrate divergent points of view
- ✓ Use information sources ethically

FYILLAA Development Process

Development and administration of the pilot instrument:

1. Developing a shared definition of "Information Literacy"

2. Constructing dimensions of information literacy

The Five Dimensions

Experience: *What can/do students do?*

Attitude: *What do students value?*

Epistemology: *What do students believe?*

Knowledge: *What do students know?*

Critical Capacities: *How do students evaluate?*

FYILLAA Development Process

Development and administration of the pilot instrument:

1. Developing a shared definition of "Information Literacy"

2. Constructing dimensions of information literacy

3. Drafting survey items

Drafting Survey Items

At your table is a worksheet with each of the 5 dimensions listed. Working as a table, develop 1 – 2 survey questions for the dimension highlighted on your sheet. Keep in mind the questions:

What do we want to know?

Why do we want to know it?

FYILLAA Development Process

Development and administration of the pilot instrument:

1. Developing a shared definition of "Information Literacy"

2. Constructing dimensions of information literacy

3. Drafting survey items

4. Consolidating items and preparing collective draft

FYILLAA Development Process

Development and administration of the pilot instrument:

1. Developing a shared definition of "Information Literacy"

2. Constructing dimensions of information literacy

3. Drafting survey items

4. Consolidating items and preparing collective draft

5. Revising the draft and converting to web format

FYILLAA Development Process

Development of the "final" instrument:

1. Adjusting scoring procedures and reviewing pilot results

FYILLAA Development Process

Development of the "final" instrument:

1. Adjusting scoring procedures

2. Incorporating suggestions from students who participated in the pilot

FYILLAA Development Process

Lessons we took away from the process:

- The importance of developing a shared vocabulary

- The importance of negotiating/agreeing on curricular goals

- The importance of defining what a "correct" answer is

Preliminary Results

David Lopatto
Grinnell College

Survey Participants
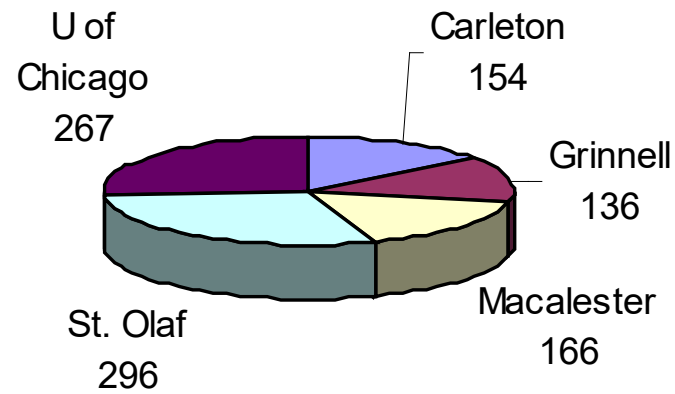
Ethnicity of Respondents

Ethnic Category	Frequency
Caucasian/White	826
African American/Black	32
American Indian/Alaska Native	12
Asian American/Asian	117
Native Hawaiian/Pacific Islander	8
Hispanic	49
Other	43
Total	1087

A few respondents marked multiple items.

Dimension Performance: Percent Correct

Dimension	Overall	Men	Women
Experience	47%	47%	47%
Attitude	73%	72%	73%
Epistemology	44%	43%	45%
Knowledge	65%	66%	65%
Critical Capacities	75%	75%	76%

Features of the Dimensions

Dimension	Number of Items	Cronbach's alpha
Experience	27	0.69
Attitude	16	0.81
Epistemology	7	0.36
Knowledge	13	0.62
Critical Capacities	11	0.56

Cronbach's Alpha is a measure of consistency or inter-item reliability. The low values here suggest more than one construct within our ostensible dimensions.

Features of the Dimensions

	Attitude	Epistemology	Knowledge	Critical Capacities
Experience	0.23	0.21	0.06	0.08
Attitude		0.08	0.35	0.25
Epistemology			0.08	0.10
Knowledge				0.44

Correlations between dimensions.

Level of Experience

Percent of respondents who…	
Did not use a college library in the past year.	58.6%
Never had a librarian talk to their class about research.	32.7%
Never asked for research help at a library reference desk in the past year.	29.5%
Never sought help from a librarian on a research project in the past year.	27.8%
Did not use a public library in the past year.	18.5%
Did not use a high school library in the past year.	10.8%
Were never required to use a style sheet to complete an assignment.	7.4%
Had no school assignments that included 3 sources in a bibliography, etc.	2.5%

Level of Challenge

| Item	% Easy
Learning new information	92.0
Finding information on the Internet	90.6
Determining appropriateness	87.4
Physically locating sources in the library	83.4
Developing a list of sources	82.5
Finding articles in electronic index	73.4
Specifying the question	70.0
Identifying the main argument of an article	67.7
Knowing when to document a source	67.2
Using Interlibrary Loan	36.1

Percent of respondents characterizing the item as Somewhat Easy or Very Easy to perform. The top 5 have the highest percentage of easy. The bottom 5 have the lowest.

Enjoyment of Research

	Men		Women	
Response option	Frequency	Percent	Frequency	Percent
Very little	62	17%	96	15.7%
Some	91	25%	190	31%
Quite a bit	184	50.5%	283	46.2%
Very much	27	7.4%	44	7.2%

In general, how much do you enjoy doing research?

Research Enjoyment and Dimension Scores
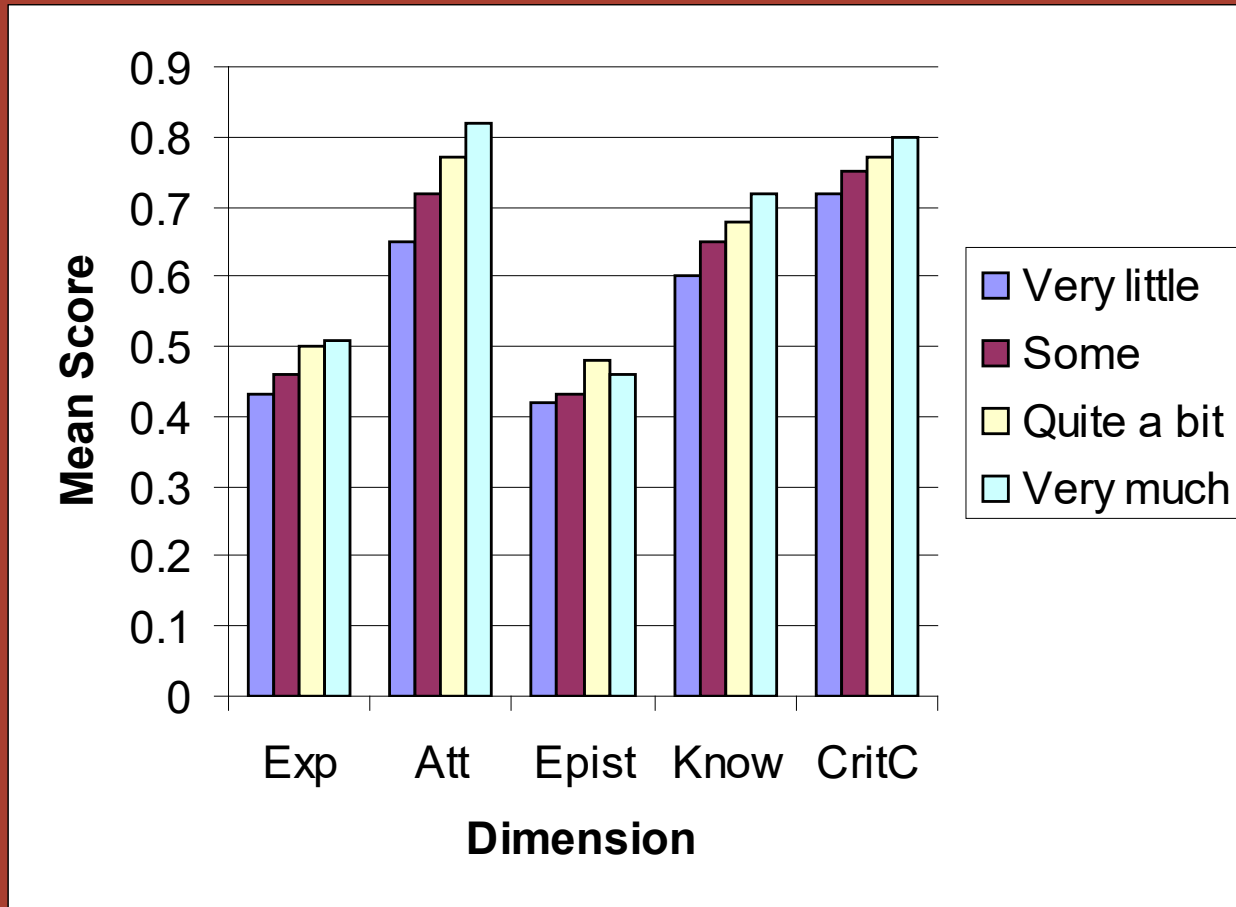
Epistemological beliefs

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
There is one best way to conduct research	138 (13.6%)	700 (69.1%)	170 (16.8%)	5 (0.5%)
Good researchers don't need help from librarians	263 (26%)	624 (61.7%)	117 (11.6%)	8 (0.8%)
If researchers are persistent they can find answers	38 (3.7%)	305 (30.3%)	556 (55.3%)	107 (10.6%)
Useful resources make sense the first time you read them	92 (3.7%)	629 (62.3%)	264 (26.2%)	24 (2.4%)
Research findings can be refuted by subsequent research	7 (0.6%)	65 (6.5%)	683 (68%)	249 (24.8%)
Successful researchers under-stand source material quickly	71 (7%)	530 (52.6%)	380 (37.7%)	27 (2.7%)
Good research yields clear results	78 (7.7%)	365 (32.2%)	438 (43.5%)	126 (12.5%)
People need instruction to become skillful researchers	25 (2.5%)	208 (20.6%)	620 (61.6%)	154 (15.3%)

After Schommer (1995, etc.)

Performance on Knowledge Items

Item	% Correct
Find article from database search	89%
Distinguish between primary and secondary sources	82%
What is a citation	60%
Characteristics of a peer reviewed journal	50%
Indicate book or journal	46%
Distinguish between Academic Journals and Popular Mags	43%
Which of the searches would retrieve the most results	37%

Performance on Critical Capacities Items

Is the source scholarly?	Scholarly	No	Either	Don't Know
Is available online	1.2%	9.5%	87.1%	2.1%
Written by a journalist	16.5%	23.1%	56.5%	3.8%
In peer reviewed journal	67.2%	3.9%	13.7%	15.2%
Posted on a blog	0.5%	81.1%	12.8%	5.6%
Was recently published	7.2%	1.6%	88.8%	2.4%
Lengthy list of references	67.0%	0.4%	30.5%	2.1%
Published in *Time*	30.5%	29.4%	35.2%	4.9%

Women and Men

Women are more likely to…

Use low tech organizational tools	**90%** vs **76%**
Divide work across available time	**26.2%** vs **19.8%**

Men are more likely to…

Use electronic organizational tools	**30%** vs **21.6%**
Work just before the due date	**7.2%** vs **3.7%**
Agree that good researchers don't need help from librarians	**16.8%** vs **9.6%**
Agree that successful researchers find and understand materials quickly	**44.6%** vs **36.7%**

Users and Uses

Jo Beld
St. Olaf College

A Theoretical Framework

Utilization-Focused Assessment

(adapted from Patton, 1997)

Principles of Utilization-Focused Assessment

1. Identify *potential uses* by *potential users*

2. Engage users in every phase of the inquiry

3. Track uses of the data

4. Adapt the inquiry in response to user feedback

Identifying Potential Users

✓ Reference and instruction librarians

✓ Classroom faculty

✓ Institutional/educational researchers

✓ Curriculum decision-makers

✓ Faculty development decision-makers

✓ Students

Identifying Potential Uses

- ✓ Improving the "fit" between what, how, and whom we teach

- ✓ Strengthening collaboration between library and classroom instructors

- ✓ Informing curriculum decisions

- ✓ Shaping faculty development programs

Engaging Users

- ✓ In designing the instrument

- ✓ In setting the agenda for data analysis

- ✓ In determining the format for presenting results

- ✓ In identifying audiences and venues for dissemination

Tracking Uses

✓ By librarians

  ❖ Content of instruction

  ❖ Process of instruction

✓ By disciplinary faculty

  ❖ Requirements for assignments

  ❖ Resources provided to students

Adapting the Inquiry

✓Revisiting instrument content

✓Planning future administration

✓Re–focusing data analysis in response to curriculum or pedagogical changes

The Future

- Evaluation by our campuses

- Funding for year two

- Sustainability:
  - Staff expertise
  - Survey usefulness
  - Costs: comparative data location; survey software

- Availability of survey to other institutions