This collection of materials for a 2-day workshop on collaborative teaching, cooperative learning, critical thinking, and critical assessment of resources includes an agenda for each day; workshop goals; guidelines for preparing an annotation; a letter to participants that accompanied four articles for them to read before the workshop; information on each of the presenters; bibliographies or lists of suggested readings on library and faculty collaboration in undergraduate teaching, library skills instruction and critical thinking, and ideas for library assignments and teaching; a workshop evaluation form; and copies of 21 overhead transparencies that are keyed to the workshop outline. (DB)
Collaborative Teaching and Critical Assessment of Resources: A Workshop for Faculty and Librarians

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University of Illinois at Urbana-Champaign

October 1991

BEST COPY AVAILABLE

Lizabeth Wilson
Research Strategies: Collaborative Teaching and Critical Assessment of Resources

Luther College
Decorah, Iowa
Wednesday, May 29, 1991
Thursday, May 30, 1991

Workshop Leaders:
Mary Jane Petrowski
Betsy Wilson

AGENDA

Introduction
Goals and Objectives
Logistics

Form Cooperative Groups
Three-Step Interview

Why Faculty - Librarian Collaboration?
Think - Pair - Share

Critical Thinking
Mini-Lecture

Student Research and Critical Thinking
Roundtable

BREAK

Research Process Model
Mini-Lecture

Student Research Problems
Group Brainstorming

Sample Critical Thinking Assignment
Annotated Bibliography

Overcoming Student Problems
Pass a Problem

Wrap-Up
Research Strategies: Collaborative Teaching and Critical Assessment of Resources

Luther College

May 29 and 30, 1991

Mary Jane Petrowski and Betsy Wilson

WORKSHOP GOALS

Workshop participants will:

* Reflect on the nature and value of collaboration between librarians and faculty;

* Gain an understanding of critical thinking and the process of research;

* Examine problems students experience with respect to critical thinking and the process of research;

* Focus on practical ways to enhance collaboration between librarians and faculty;

* Identify mechanisms to enhance student research and critical thinking.

Rationale: Librarians and faculty are partners in the educational enterprise. Through collaborative efforts, they can work together to enhance student research and critical thinking skills.
Faculty/Librarians
Thurs. AM: Open

1-2:45 (8-9:45)

I. Introduction
A. Goals/objectives
B. Agenda
C. Logistics/ground rules/quiet
D. Collaborative/group processing/feedback
E. MJP/BW introduce each other

II. Group formation (OH1)
   Famous pairs

III. Group introductions (OH1.1)
   3-step interview

IV. Why We Can/Need to Work Together? (OH15)
   Think/pair/share (OH15.1)
   Group process

V. Critical Thinking Approaches
   Define CT/bring in information literacy
   Mini-lecture/overheads (OH15.2-15.4)

VI. Perspectives on student research &
    critical thinking (OH16)
   Roundtable (OH16.1)
   Group process

BREAK
2:45-3:10 (9:45-10:10)

VII. Research Process Model (OH17)
    Mini-lecture
    Overhead (OH17.1-H17.8)
    Handouts

VIII. Critical Thinking Fix for One Problem Area
    Annotated Bibliography (work time)
    Group Process

IX. Ways to Integrate in Subject Classes

X. Overcoming Student Problems (OH19)
   Identify ways to improve assignments/instruction
   Pass a problem - take problem identified

100 min. of
105 min.
in (OH8)
Group process

XI. Closure (OH9)
Cooperative Learning
Summary
Evaluation
Cartoon
Thanks

10 min.

15 min.

100 of 110 min.
Preparing an Annotated...

The purpose of an annotation is to describe the cited material. It should provide sufficient information to enable the reader to determine whether the actual book or article should be consulted or not. Each annotation need not address all of the following points, but so far as that is possible, addressing them would improve decision making and simplify the reader's work. Annotations can be of any length, but usually are about 100 to 150 words.

1) Who is the author? What is his/her occupation, position, education, experience, etc.? Is the author qualified (or not) to write the article? What are the author's credentials?

2) What is the purpose for writing the article or doing the research? Is the purpose specifically stated or implied? Does the author have a particular message?

3) To what audience is the author writing? Is it intended for the general public, for scholars, interested laymen, students, policy makers, teachers, professionals, practitioners, etc.? Is this reflected in the author's writing style, subject matter or vocabulary?

4) Does the author have a bias or make assumptions upon which the rationale of the article or the research rests? Does the author express a particular point of view? Is this reflected in the author's writing style, vocabulary, choice of illustrations or supporting evidence? How so?

5) What method was used to obtain the data for the article? Is the article based on personal opinion or experience, interviews, original research, questionnaires, library research, laboratory experiments, empirical observation, standardized personality tests, etc.?
6) What conclusions does the author draw? Are the conclusions specifically stated or are they implied?

7) Are the conclusions justified from the research or experience? Are the conclusions in sync with the original purpose of the research and supported by the data, etc.? Are the conclusions skewed by bias?

8) How does this study compare with similar studies? Is it in agreement or in conflict with conventional wisdom, established scholarship, governmental policy, etc.? Are there specific studies or writings cited with which this one agrees or disagrees? Are there any opinions not cited with which readers should be aware? Is the evidence balanced or weighted in favor of a particular perspective?

9) Are there significant attachments or appendices such as charts, maps, bibliographies, photos, documents, tests or questionnaires? If not, should there be?

Special thanks to Eugene Engeldinger for permission to reproduce and use this exercise.
May 20, 1991

Dear Colleague:

We are looking forward to meeting you and working with you during the upcoming workshop "Research Strategies: Collaborative Teaching and Critical Assessment of Resources." The workshop is designed to actively involve all participants in what we hope will be stimulating, engaging, and fun sessions.

In order to help set the stage for the workshop, we are enclosing four readings we ask you peruse before the sessions. John Luban's "Chaos or Order" discusses faculty expectations and instructional realities of how students learn to use the library. Mona McCormick argues for the need for critical thinking in her article "Critical Thinking and Library Instruction." In "The Idea of Evidence in Bibliographic Inquiry," Jon Lindgren encourages use to instruct students to engage in a dialog with the evidence. And lastly, Carl Kuhlthau challenges us to consider the affective dimension of the information search process. We hope you find these articles stimulating.

Cordially,

Mary Jane Petrowski
and
Betsy Wilson
Workshop Co-Leaders

BW/jj

attachment
MARY JANE PETROWSKI

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* Assistant Undergraduate Librarian and Assistant Professor of Library Administration

* Directs one of the nation’s largest course-integrated bibliographic instruction programs, annually teaching over 6,000 students in classroom settings.

* Undergraduate Instruction Award winner.

* Co-author of Research Guide: Introduction to the Basics, a required text for freshmen composition classes.

* Received Apple Computer Seedling Award to develop more effective classroom teaching using desktop presentation software.

* Taught library skills to undergraduate students at military installations in Germany.

* Has designed library instruction for multicultural learners, including international and minority students.

* Has introduced collaborative learning techniques into bibliographic instruction at Illinois.

* Serves on numerous Association of College and Research Libraries Bibliographic Instruction Section committees.

* Has developed training programs for teaching librarians and graduate students to teach.
LIZABETH (BETSY) WILSON

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Urbana, IL 61801

Work Phone: (217) 333-3489
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* Head, Undergraduate Library and Associate Professor Library Administration.

* Eleven years teaching and instructional design experience.

* National leader and researcher in instruction in libraries.

* Elected chair of the Bibliographic Instruction Section of ACRL, an organization of over 4,000 librarians involved in excellence in library instruction.

* Author of books, chapters, articles, and papers on bibliographic instruction.

* Recipient of an Amoco Foundation Award for Improvement in Undergraduate Education.

* Undergraduate Instructional Award winner.

* Teaches a graduate course on instruction in libraries and has been cited on the "Incomplete List of Teachers Ranked Excellent by Their Students."

* Member of a national think tank on the future of bibliographic instruction.

* Commission on Higher Education consultant on integrating bibliographic instruction into the accreditation process.
Librarians and Faculty Members: Partnerships for Improving Undergraduate Instruction


Washington Center News 5 (Winter 1991). Entire issue explores innovative ways in which librarians and faculty are working together to integrate library instruction into the curriculum.
CRITICAL THINKING
Suggested Reading Bibliography


Betsy Wilson
Mary Jane Petrowski
May 1991
The following copyrighted bibliography was removed prior to filming:


Suggested reading dealing with applied work and research work in cooperative/collaborative learning at the college level.

Published by Forum Press, PO Box 876, Stillwater, OK 74076.
Ideas for Library Assignments and Teaching


Research Strategies: Collaborative Teaching and Critical Assessment of Resources

May 29 and 30, 1991

WORKSHOP EVALUATION

Please rank your opinion of the following workshop features:

1. OVERALL EVALUATION OF WORKSHOP
   Excellent Very Good Average Fair Poor
   5 4 3 2 1

2. PRESENTATION STYLE
   Excellent Very Good Average Fair Poor
   5 4 3 2 1

3. INSTRUCTORS' KNOWLEDGE OF THE SUBJECT
   Excellent Very Good Average Fair Poor
   5 4 3 2 1

4. HANDOUTS AND PACKET
   Excellent Very Good Average Fair Poor
   5 4 3 2 1

5. USEFULNESS OF CONTENT
   Very Somewhat Not Very Useless Don't Know
   5 4 3 2 1

6. MY EXPECTATIONS WERE MET
   Fully Mostly Somewhat Not At All Don't Know
   5 4 3 2 1

7. What I liked best about this workshop was...

8. What I liked least about the workshop was...

Comments?

Thank you!
OVERHEADS

* In Order of Use
* See Workshop Outline
* Designated by OH on Outline
3-Step Interview

Form pairs.
A interviews B (3.5 minutes).
B interviews A (3.5 minutes).
Review/rehearse.
Pairs form groups of 4 with same color dots.
Share introductions: "I'd like you to meet Karen. Something unusual about her is . . . ."
Each culture, industry, and organization has its own way of looking at the world. Often the best ideas come from cutting across disciplinary boundaries and looking into other fields. As journalist Robert Wieder put it, “Anyone can look for fashion in a boutique or history in a museum. The creative explorer looks for history in a hardware store and fashion in an airport.” In what outside areas can you look for ideas?
Why do librarians and faculty need to work together?

Think and write response (2 minutes)
Pair and discuss responses (3 minutes each)
Each one shares response within small group (1 minute each)
1. Weekly edition of the New York Times contains more information than the average person was likely to come across in a lifetime in 17th-Century England.


3. Over one million books are published annually; over 1000 per day worldwide.

4. The collections of large research libraries have doubled in the past 14 years.

5. The English language contains 500,000 words, five times more than in Shakespeare's time.
The person who does not know how to collect information, analyze it or synthesize it, is going to have trouble in the future.

Dr. Marvin Cetron
Forecasting International
"When we get into arguments that focus and fully engage our attention, we become avid seekers of relevant information. Otherwise, we take in information passively--if we take it in at all"

--Christopher Lasch
Finding new ideas is like prospecting for gold. If you look in the same old places, you'll find tapped out veins. But if you venture off the beaten path, you'll improve your chances of discovering new idea lodes. Remember: you can't see the good ideas behind you by looking twice as hard at what's in front of you. Where else can you look for ideas?
Roundtable

- Purpose: To identify problems students have with research.
- One person writes task at top of pad.
- Next person writes 1 idea, reads aloud, passes pad to left.
- Brainstorm until time is called.
Pause for a Bit
Find A Pattern

10 Much of what is called "intelligence" is our ability to recognize patterns. We recognize sequences (the order in which you put on your clothes), cycles (bird migrations), processes (how to convert flour, eggs, and milk into waffles), tendencies (if I smile at the checkout-counter girl, she'll smile at me), shapes (the stars that make up the constellation Leo), and probabilities (the likelihood of throwing a "seven" at a crap table). What patterns can you use to better understand your idea?
Use Good Ideas

“Don’t let your search for the great idea blind you to the merely good idea,” advises inventor Bob Metcalfe. “Reject everything except for the very best and you’ll end up with nothing.” Educator Donald Kennedy has similar feelings: “A lot of disappointed people have been left standing on the street corner waiting for the bus marked Perfection.” What good ideas can you use?


<table>
<thead>
<tr>
<th>Stages</th>
<th>Task Initiation</th>
<th>Topic Selection</th>
<th>Prefocus Exploration</th>
<th>Focus Formulation</th>
<th>Information Collection</th>
<th>Search Closure</th>
<th>Starting Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings</td>
<td>uncertainty</td>
<td>optimism</td>
<td>confusion/ frustration/ doubt</td>
<td>clarity</td>
<td>sense of direction/ confidence</td>
<td>relief</td>
<td>satisfaction or dissatisfaction</td>
</tr>
<tr>
<td>Thoughts</td>
<td>ambiguity</td>
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<td></td>
<td></td>
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<tr>
<td>Actions</td>
<td>seeking relevant information</td>
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</table>

**Figure 1. Kuhlthau Model of the Search Process**
**Fig. 2. Stages of the Search Process - Task Initiation**

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
<th>FEELINGS</th>
<th>ACTIONS</th>
<th>STRATEGIES</th>
<th>MOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGE 1 - TASK INITIATION</td>
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</tbody>
</table>

- To prepare for the decision of selecting a topic
- Contemplating assignment
- Comprehending task
- Relating prior experience and learning
- Considering possible topics
- Apprehension at work ahead
- Uncertainty
- Talking with others
- Browsing library collection
- Brainstorming
- Discussing
- Contemplating possible topics
- Tolerating uncertainty
- Primarily
- Invitational
### Fig. 3. Stages of the Search Process - Topic Selection

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
<th>FEELINGS</th>
<th>ACTIONS</th>
<th>STRATEGIES</th>
<th>MOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAGE 2 - TOPIC SELECTION</strong></td>
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<tr>
<td>• To decide on topic for research</td>
<td>• Weighing topics against criteria of personal interest, teacher's requirements, information available, and time allotted</td>
<td>• Confusion</td>
<td>• Consulting with informal mediators</td>
<td>• Discussing possible topics</td>
<td>• Primarily</td>
</tr>
<tr>
<td></td>
<td>• Predicting outcome of possible choices</td>
<td>• Sometimes anxiety</td>
<td>• Making preliminary search of library</td>
<td>• Predicting outcome of choices</td>
<td>• Indicative</td>
</tr>
<tr>
<td></td>
<td>• Choosing topic with potential for success</td>
<td>• Brief elation after selection</td>
<td>• Anticipation of prospective task</td>
<td>• Using general sources for overview of possible topics</td>
<td></td>
</tr>
</tbody>
</table>
Fig. 4. Stages of the Search Process - Prefocus Exploration

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
<th>FEELINGS</th>
<th>ACTION:3</th>
<th>STRATEGIES</th>
<th>MOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGE 3 - PREFOCUS EXPLORATION</td>
<td></td>
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<tr>
<td>- To investigate information with the intent of finding a focus</td>
<td>- Becoming informed about general topic</td>
<td>- Confusion</td>
<td>- Locating relevant information</td>
<td>- Reading to learn about topic</td>
<td>- Primarily</td>
</tr>
<tr>
<td></td>
<td>- Seeking focus in information on general topic</td>
<td>- Doubt</td>
<td>- Reading to become informed</td>
<td>- Tolerating inconsistency and incompatibility of information encountered</td>
<td>- Invitational</td>
</tr>
<tr>
<td></td>
<td>- Identifying several possible focuses</td>
<td>- Sometimes threat</td>
<td>- Taking notes on facts and ideas</td>
<td>- Intentionally seeking possible focuses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Inability to express precise information needed</td>
<td>- Uncertainty</td>
<td>- Making bibliographic citations</td>
<td>- Listing descriptors</td>
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</tbody>
</table>
Fig. 5. Stages of the Search Process - Focus Formulation

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
<th>FEELINGS</th>
<th>ACTIONS</th>
<th>STRATEGIES</th>
<th>MOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGE 4 - TASK INITIATION</td>
<td></td>
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</tr>
<tr>
<td>• To formulate a focus from the information encountered</td>
<td>• Predicting outcome of possible foci</td>
<td>• Optimism</td>
<td>• Reading notes for themes</td>
<td>• Making a survey of notes</td>
<td>• Primarily</td>
</tr>
<tr>
<td></td>
<td>• Using criteria of personal interest, requirements of assignment, availability of materials, and time allotted</td>
<td>• Confidence in ability to complete task</td>
<td></td>
<td>• Listing possible foci</td>
<td>• Indicative</td>
</tr>
<tr>
<td></td>
<td>• Identifying ideas in information from which to formulate focus</td>
<td></td>
<td></td>
<td>• Choosing a particular focus while discarding others or</td>
<td></td>
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<tr>
<td></td>
<td>• Sometimes characterized by a sudden moment of insight</td>
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<td></td>
<td>• Combining several themes to form one focus</td>
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</table>
**Fig. 6. Stages of the Search Process - Information Collection**

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
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<th>STRATEGIES</th>
<th>MOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGE 5 - INFORMATION COLLECTION</td>
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<tr>
<td>• It gather information which defines, extends, and supports the focus</td>
<td>• Seeking information to support focus</td>
<td>• Realization of extensive work to be done</td>
<td>• Using library to collect pertinent information</td>
<td>• Using descriptors to search out pertinent information</td>
<td>• Combination of indicative and invitational</td>
</tr>
<tr>
<td></td>
<td>• Defining and extending focus through information</td>
<td>• Confidence in ability to complete task</td>
<td>• Requesting specific sources from librarian</td>
<td>• Making comprehensive search of various types of materials, i.e. reference, periodicals, nonfiction, biography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Gathering pertinent information</td>
<td>• Increased interest</td>
<td>• Taking detailed notes with bibliographic citations</td>
<td>• Using indexes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Organizing information in notes</td>
<td></td>
<td></td>
<td>• Requesting assistance of librarian</td>
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</tbody>
</table>
## Fig. 7. Stages of the Search Process - Search Closure

<table>
<thead>
<tr>
<th>TASK</th>
<th>THOUGHTS</th>
<th>FEELINGS</th>
<th>ACTIONS</th>
<th>STRATEGIES</th>
<th>MOOD</th>
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</thead>
<tbody>
<tr>
<td><strong>STAGE 6 - SEARCH CLOSURE</strong></td>
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</tr>
<tr>
<td>• To conclude search for information</td>
<td>• Identifying need for any additional information</td>
<td>• Sense of relief</td>
<td>• Rechecking sources for information initially overlooked</td>
<td>• Returning to library to make summary search</td>
<td>• Indicative</td>
</tr>
<tr>
<td></td>
<td>• Considering time limit</td>
<td>• Sometimes satisfaction</td>
<td>• Confirming information and bibliographic citations</td>
<td>• Keeping books until completion of writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diminishing relevance</td>
<td>• Sometimes disappointment</td>
<td></td>
<td>to recheck information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increasing redundancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Exhausting resources</td>
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</table>
Pass a Problem

- Write group choice on envelope.
- Brainstorm and find consensus solution.
- Put idea in envelope.
- Pass to next group.
- Repeat process until envelopes rotate back to home group.
- Read and prioritize solutions.
Give Yourself a Pat on the Back

What have you done well lately? Where have you made progress? What have you accomplished? What obstacles have you overcome? Congratulations! Give yourself a pat on the back. Now go out and earn another one.