

WRITING IN THE DISCIPLINES: A CHANCE FOR DEEPER LEARNING

Schreiblabor Conference, 2013

Bielefeld University

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9:30-11:00 (Workshop 1) and 11:15-12:45 (Workshop 2)

Workshop Facilitator: John C. Bean, Seattle University

“It seems to me, then, that the way to help people become better writers is not to tell them that they must first learn the rules of grammar, that they must develop a four-part outline, that they must consult the experts and collect all the useful information. These things may have their place. But none of them is as crucial as having a good, interesting question.”

Rodney Kilcup, Historian, from a 1980s *Puget Sound Writing Project Newsletter*

“[Highly effective teachers confront students with] intriguing, beautiful, or important problems, authentic tasks that will challenge them to grapple with ideas, rethink their assumptions, and examine their mental models of reality” (p.18).

Ken Bain. *What the Best College Teachers Do*. Cambridge: Harvard University Press, 2004.

“I find it fascinating that in faculty discussions about curriculum and course structure . . . 90 percent of our discussion focuses on what material and ideas to cover in class. We pay far less attention to the details of homework assignments. So it is good for faculty to learn from students that the design of homework, and how we ask students to do that homework, matters a lot . . .” (51).

Richard J. Light. (2001). *Making the Most of College: Students Speak Their Minds*. Cambridge: Harvard U. Press

WORKSHOP 1 (9:30-11:00)

Engaging First-Year Students: Promoting Deep Learning and Disciplinary Expertise through Short, Low-Cost Writing Assignments or Small Group Tasks

Overview and Principles

Thinking about students’ thinking processes: Scenario for discussion	3
Some general principles for teaching academic writing in the disciplines	4

Incorporating Short Writing Assignments into Your Course

Identifying a difficult concept, thinking skill, “way of seeing,” or reading in your course	5
Creating strong writing assignments	6
Example assignments with rubrics	
History: How to view the European conquest of Amerindians	7
Environmental studies: Telling an energy story with words and graphics	9
Nine ways to create problem-based tasks that promote disciplinary ways of thinking	10

Handling the Paperload

A general rationale for assigning exploratory writing	12
Assigning and grading exploratory writing	13

WORKSHOP 2 (11:15-12:45)

Designing a Course Backwards: Scaffolding Short Assignments to Teach "Thinking Moves" for Disciplinary Analysis and Research

Opening exercise

Background: For your course, what is a typical final exam essay question or final paper assignment? To what extent does this exam question or final paper require students to make arguments employing disciplinary methods of thought and uses of evidence? To what extent does it ask students to think like a professional in your discipline? How is this question or assignment challenging or difficult for students?

Discussion prompt: Please write out some notes about what you ask for in a final exam essay question or final paper and then be ready to explain to a colleague what kinds of disciplinary thinking skills are required and what makes the question or paper challenging or difficult.

Understanding the "Thinking Moves" Needed for Disciplinary Analysis and Research

Brief review of general principles from workshop 1

Skills/knowledge needed to produce "expert insider prose" within a discipline 14

Teaching the "big picture" moves of academic argument 15

Using "Backward Design" to Sequence Course Assignments

Example of a backward-designed assignment sequence in literature 16

A skill-building (scaffolding) research assignment for literature majors (with rubric)

Example of a backward-designed assignment sequence in intermediate microeconomics 19

Easing students from well-structured to ill-structured problems: A scaffolded sequence of assignments in intermediate microeconomics

Concluding Exercises

Background: Look back at your opening description of your final exam question or paper assignment. In light of our workshop discussion, what are some of the sub-skills that students need to learn and practice in order to improve the quality of their final exams or papers? How might you develop one or more scaffolding assignments to help students develop these skills? **Discussion prompt:** Please jot down some ideas for how you might develop one or more early assignments that will help students do more powerful final work. Be prepared to share your ideas with colleagues.

Sequencing assignments to build expertise: "[These scholars] conclude, after extensive research in the nature of expertise in many domains of knowledge, that the single most distinguishing characteristic of those who gain expertise in a variety of skills domains are those who continually assign themselves more and more complex problems to solve. For educators this translates to a need for students to experience sequenced writing assignments within and across courses in which skills required to complete the task build upon previously acquired skills."

Anne Beaufort. *College Writing and Beyond: A New framework for University Writing Instruction*. Logan, UT: Utah State University Press, 2007: 184

THINKING ABOUT STUDENTS' THINKING PROCESSES: SCENARIO FOR DISCUSSION

Scenario [First-Year General Education Course—USA System]

Imagine that you are teaching an “Introduction to Psychology” course, primarily to first year students early in their college careers. For the next class session, you want students to read the textbook chapter explaining some of the important modern schools of psychology. How might students’ studying and thinking processes differ depending on the way you give the homework task?

1. Read Chapter 2.
2. Read Chapter 2 and be prepared for a quiz.
3. Read Chapter 2 and then write a one page thinking piece that addresses the following question: *Suppose you are a parent who goes to a child psychologist for advice on how to get your 10 year old child to practice the piano. It seems the child rushes out of the room screaming every time you insist he practices. What different advice would you get if the child psychologist were a behaviorist, a psychoanalyst, or a humanistic psychologist? Come to class with your completed thinking piece and be prepared to share your ideas with classmates.*

Discussion question: If you decided to try out Strategy 3, don’t worry for now what you would do with all those thinking pieces. We’ll deal with that question later. For now, just focus on how each of these strategies might alter the way students studied. *Please explore with colleagues how students would read and study and think differently depending on how the homework task was assigned.*

Suggested further reading on “powerful homework”

- Roberts, J. C. & Roberts, K. A. (2008). Deep reading, cost/benefit, and the construction of meaning: Enhancing reading comprehension and deep learning in sociology courses. *Teaching Sociology*, 36, 125-140.
- Yamane, D. (2006). Course preparation assignments: A strategy for creating discussion-based courses. *Teaching Sociology*, 34, 236-248.

SOME GENERAL PRINCIPLES FOR TEACHING ACADEMIC WRITING IN THE DISCIPLINES

1. Establish your course goals (often stated in syllabus as learning outcomes)

- subject matter goals—the new knowledge (facts, concepts, theories, methods) that you want students to learn
- goals for thinking within the discipline—new ways that you want students to see or think: disciplinary processes of critical thinking, inquiry, reading, analysis, and argument

2. Design critical thinking problems connected to your course goals.

- Problems should stimulate interest, require use of subject matter knowledge, and teach disciplinary ways of thinking, analyzing, and arguing
- Highest level of critical thinking typically comes from “messy,” “ill-structured,” or open-ended problems with no algorithmically attained “right answer”—problems that lead to a claim with supporting arguments.

3. Develop a repertoire of ways to give critical thinking problems to students

- Thought provokers for informal exploratory writing (in-class freewrites; short “thinking pieces”; posts to course discussion boards; blog posts; other kinds of informal, low stakes writing)
- Very short formal assignments (less than a page) –sometimes called microthemes
- Short (2-3 page) formal assignments, often used as scaffolding for longer assignments
- Longer, formal writing assignments often requiring research
- Tasks for small-group problem solving, debates, or whole-class discussion
- Essay exam questions or practice exam questions

4. Think of writing assignments as a crucial part of course design

- “Reverse engineer” your course by designing the final assignment first (“backward design”)
- Create earlier assignments that develop the skills needed for the final assignment (sometimes called “scaffolding assignments”)
- Consider adding informal low-stakes writing to help students explore ideas and promote learning
- When designing a formal assignment, create or simulate an authentic rhetorical context: purpose, audience, and genre (avoid “school genres” such as “research paper” or “lab report”)
- Help students understand the rhetorical function of titles and introductions by asking them to assume that their readers haven’t read the assignment

5. When assigning formal writing, treat writing as a process

- Provide opportunities for exploration of ideas prior to drafting (low stakes writing, class discussion, small group brainstorming)
- Encourage imperfect first drafts
- Stress substantial revision reflecting increased complexity and elaboration of thought and increased awareness of readers’ needs
- Where possible, allow rewrites; write comments that encourage revision and that emphasize the higher order concerns of ideas, thought content, organization, and development
- Consider instituting peer review workshops and encourage use of campus writing center

6. Develop scoring criteria and give them to students in advance

- simple numerical or +/check/- scales for exploratory writing
- rubrics for formal writing

IDENTIFYING A DIFFICULT CONCEPT, THINKING SKILL, “WAY OF SEEING” OR READING IN YOUR COURSE

Background: Think about particularly difficult aspects of one of your courses. For example, identify one or more concepts that students have trouble learning. At one level, students *seem* to learn the concept (e.g., they can say the language, they can repeat the right words, they have memorized its key features) but at a deeper level they don’t quite grasp it. Or identify particular kinds of thinking skills or ways of seeing you are trying to teach in your course or particular reading assignments that are difficult for students.

Task: Please write for five minutes about one or more aspects of your course that are particularly difficult for students—for example difficult concepts, thinking skills, ways of seeing, or readings. Be prepared to share your explanation with members of your group.

Examples:

Difficult Concept

Operant conditioning seems to confuse my students. They are so used to attributing behavior to internal motivation that they have difficulty understanding the real implications of behaviorism. They memorize the definitions of stimulus, response, contingency, ratios and schedules of reinforcement and so forth. But they still end up thinking that their dogs wag their tails because they are happy little dogs overjoyed to see their masters. They don’t like to imagine determinism. Perhaps it frightens them. At any rate, they seem to memorize the terms without fully understanding the implications of a world without freedom. –psychology professor

Difficult Thinking Skill

My students reach closure too rapidly. I give them a case problem with lots of variables and they won’t systematically look at each variable. [Provides an example.] They don’t think through the strengths and weaknesses of alternative approaches or solutions. They don’t want to wrestle with a problem and seem satisfied with the first answer they come up with. –business professor

Difficult Way of Seeing

Students don’t see the “unnaturalness” of socially constructed codes such as dress codes. They think they are making free choices without seeing how they have been culturally constructed to dress in a certain way but to believe they are making free choices. I want to help them start to undo the codes. I want them to see how advertising works not only to create particular consumer desires but also to construct a subject that sees consumption as natural. . . . –communication professor

Difficult Readings

My course is full of primary historical documents. Students don’t know how to read these through the lens of an historian. They can’t shift from reading textbooks (learning the facts) to entering historical debates using primary sources . . . --history professor

I want students to learn to read the scholarly peer-reviewed articles in my field, but these articles are often over my students’ heads. . . . –sociology professor

CREATING STRONG WRITING ASSIGNMENTS

1. Decide what kind of writing you want students to do. (Note that minimizing your work load may requires some tradeoffs)
 - Short assignments are easier to grade than long ones
 - Thesis-governed analysis/arguments are easier to coach/grade than more expressive or creative assignments
 - Giving all students the same problem-based assignment yields easier-to-grade papers than giving students free choice of topics and approaches. Giving all students the same assignment also allows for easier scaffolding via thinking pieces and in-class discussions and debates.

2. Create an assignment handout that includes the following elements:
 - **Your goals:** What you want students to learn by doing the assignment (sometimes just explained orally when giving out the assignment)
 - **Meaning-making task:** Set up the question, problem, or issue that you want the student to address. You can specify the problem or ask students to pose their own problems.
 - **Real or hypothetical rhetorical context:** Writers need to write for a purpose to an audience within a genre
 - **Writer's role or purpose:** The writer's purpose can often be described in terms of the effect the writing should have on the audience—what the writer wants the audience to know, believe, or do as a result of reading the paper
 - **Audience:** The targeted readers who will be potentially interested in the problem
 - **Genre:** Students need to learn the conventions of specific genres such as experimental report, memo, proposal, academic argument or analysis. Also specify your requirements for format, length, documentation style, and so forth.
 - **Evaluation criteria:** Create a rubric to show your grading criteria. Include the rubric in the assignment handout.
 - **Process:** For longer assignments, explain the process you expect: due dates for drafts, peer reviews, visits to Writing Center, and so forth

Note on Audience: When specifying an audience in an assignment, the instructor also needs to help students visualize the audience's initial stance toward the writer's subject. The instructor's goal is to move students toward a thesis with tension—what Graff and Birkenstein* call the “They say/I say” move: “Many people think X, but I am going to argue Y” or “Before reading my paper my reader will think X. After reading my paper, my reader will think Y.” The writer's goal is to change in some way the reader's initial stance or view.

- Your classmate is confused about X (or disagrees with you about X). Send him or her an email that . . .
- Your readers doubt that these data support the hypothesis. In your “Discussion” section, make your case but with appropriate hedges
- Scholars are divided about X. Write a formal academic paper presenting your position on this disciplinary problem. Imagine presenting the paper at an undergraduate research conference where listeners are apt to be skeptical of your thesis.
- You are a research assistant to Senator Smith who needs to decide X. Write a policy brief that . .

*Gerald Graff and Cathy Birkenstein. 2006. *“They Say/I Say”: The Moves that Matter in Academic Writing*. New York: Norton.

How to View the European Conquest of Amerindians?

One of the most prominent topics in the historiography of colonial Latin America has been the nature of the encounter between Amerindians and Europeans beginning in 1492. According to a recent review essay by historian Steve J. Stern, one of the three main paradigms or frameworks for interpreting the conquest has been that of the conquest as an “overwhelming avalanche of destruction,” characterized by the military defeat and demographic collapse of indigenous populations, the brutal treatment and ruthless economic exploitation of surviving natives by rapacious conquistadors, and the forced disappearance of pre-Columbian cultural, political, and social ways. Based on your reading of Inga Clendinnen, *Ambivalent Conquests: Maya and Spaniard in Yucatán, 1517-1570*, would you agree with this view of the conquest as one of extreme destruction and trauma? If so, why? If not, what is the best way to describe the nature of the encounter between Spaniards and Amerindians in colonial Latin America?

Using Clendinnen, *Ambivalent Conquests*, as well as the other readings, lectures, and discussions we have had in this course, write a **4-6 page (typed, double-spaced, stapled) essay** answering the above question. The assignment is due **October 10**. Assume that you are writing an academic paper for an undergraduate conference on Latin America. Also assume that your audience has NOT read this assignment and will attend your conference session because your title hooked their interest. Your introduction should explain the problem-at-issue before presenting your thesis. Because this is an academic paper in history, follow the manuscript form of the *Chicago Manual of Style* and Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*. I will grade your paper using the following rubric [see next page].

Source: Assignment for First-Year History Seminar from Dr. Marc McLeod, Department of History, Seattle University

Discussion Questions:

This assignment gives all students in the class the same intriguing or beautiful problem: “What is the best way to describe the nature of the encounter between Spaniards and Amerindians in colonial Latin America?”

1. What is the advantage of giving the assignment as a problem rather than as a topic? (“Write a paper on the topic of the Spaniards’ encounter with Amerindians in colonial Latin America.”)
2. What are the pros and cons of giving all students the same problem rather than a free choice of their own problems? (“Write a paper on any question or problem that you find interesting arising from Clendinnen’s book.”)
3. The professor creates a rhetorical context for this assignment by asking students to write an academic paper for an undergraduate conference on Latin America. He also asks students to assume that the reader does not know the assignment. How might this rhetorical context affect the way students compose their papers?

McLeod's Grading Rubric for Assignment

Introduction and Thesis Statement

10	9	8	7	6	5	4	3	2	1	0
Explains problem to be addressed; provides necessary background; ends with contestable thesis statement; thesis answers question			Problem statement missing; problem poorly focused; thesis unclear, not contestable, and/or does not fully answer question				Paper begins without context or background; paper lacks thesis statement; reader confused about what writer is attempting to do			

Quality of ideas and argument

20	18	16	14	12	10	8	6	4	2	0
Strong insights; remains focused on question; effectively links course materials to question; good historical reasoning			Some good insights; loses focus on question or gaps in argument; connections between question and course materials vague; unsupported generalizations				Fails to adequately answer question; contains no clear argument; descriptive rather than analytical; tends to summarize course materials			

Use of evidence

10	9	8	7	6	5	4	3	2	1	0
Excellent use of different course materials to support argument; effectively provides relevant examples, evidence, and appropriate quotes			Uneven use of evidence & examples; evidence not always directly relevant; over-reliance on a single source; significance of quotes not readily apparent				Lack of evidence & examples; evidence, if provided, not related to overall argument; limited reference to course materials			

Organization and clarity

10	9	8	7	6	5	4	3	2	1	0
Clear, well-organized paper; paragraphs begin with topic sentences related to thesis; topic sentences fully developed in each paragraph; paper flows logically, reader doesn't get lost			Generally sound organization; some topic sentences strong, others weak; some paragraphs not fully developed; reader occasionally confused by awkward organization, unclear sentences, fuzzy ideas				Poor organization, lacks clarity; paper not organized around coherent paragraphs; paragraphs lack topic sentences; prose is hard to follow and understand			

Editing and Manuscript Form (5 points each)

10	9	8	7	6	5	4	3	2	1	0
Flawless paper, or an occasional minor error. Looks like a professional history paper; notes follow assigned format; contains an academic title.			Distractions due to spelling, punctuation, grammar errors; writer seems a bit careless. Varies from assigned style and format in a few ways; contains non-academic title				Paper seriously marred by mistakes in grammar, spelling, and punctuation; lack of editing. Paper does not follow assigned style and format; papers lacks a title			

TELLING AN ENERGY STORY WITH WORDS AND GRAPHICS

The assignment: You are a technical writer for an environmental organization that advocates for a coherent national energy policy. Periodically this organization publishes one-page informational pieces aimed at the general public. (Typically, the organization buys newspaper space for the pieces, which are desk-top published in a two-columned format that wraps around one or more inserted visuals—see attached example.) You are asked to write one of these one-page informational pieces on some meaningful “story” related to energy production and consumption as shown in the Table 888, “Energy Supply and Disposition by Type of Fuel: 1960-2003” from the U.S. Census Bureau, Statistical Abstract of the United States: 2006. Your goal is to pull information from the table to raise public consciousness about an environmental problem. *Ideally, your information will be “surprising” to your intended readers, telling them something that runs counter to their current assumptions about energy use.*

Scoring Rubric

Quality of content (tells a significant energy story)	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Increases reader’s understanding of an environmental problem related to energy Has a clear informative purpose aimed at raising consciousness Uses “new” or “surprising” information to change reader’s original view about some aspect of energy production or consumption Tells an effective, significant story about energy 	Meets all criteria at high level; clear and easy to follow	Meets some criteria; uneven or has some lapses in clarity or development	Meets few criteria; often unclear or undeveloped
Quality of graphic(s)	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Graphics are visually appealing and easy to read Graphics have effective titles that refer to all pertinent dimensions of the graphic (both axes, legends) Graphics have effective labels, legends Graphics are effectively referenced in text 	Meets all criteria at high level; clear and developed	Meets some criteria; uneven; some lapses in clarity	Meets few criteria; often unclear or undeveloped
Quality of the interrelationship between graphics and words	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Follows principle of “independent redundancy” (tells in words the same story told by the graphic) Chooses effective details from the graphic to highlight the graphics’ message Is easy to follow—reader readily sees how graphic supports story and story supports graphic 	Meets all criteria at high level; clear, easy to follow;	Meets some criteria; uneven or has some lapses in clarity or development	Meets few criteria; often unclear or undeveloped
Overall effectiveness of writing (professional appearance, clarity, impact)	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Is clear, well-organized, concise, adequately developed, and graceful Is well-edited without errors in grammar, punctuation, usage, or spelling 	Meets all criteria at high level	Meets some criteria; uneven	Meets few criteria

Scaffolding for this assignment: Individual or Small Group Exercises for Class Discussion

1. Create a pie chart showing what percentage of total consumed energy in 2003 came from petroleum, natural gas, and the other sources identified in the table. Give your pie chart an effective title and label it clearly.
2. Create a line graph showing the change in net energy imports from 1960-2003. Title your graph and create effective labels.
3. What energy story in the table that might be best told with a bar graph? Make the graph

NINE WAYS TO CREATE PROBLEM-BASED TASKS THAT PROMOTE DISCIPLINARY WAYS OF THINKING

1. *Ask students to explain a course concept to a new learner (requires students to understand the concept at a level deeper than memory)*

- Explain to your literature friend that the word “significance” has a different meaning to statisticians than it does to the average person.
- Explain to a grade school child who has just been diagnosed with Type 1 diabetes what is meant by the glycemic index of foods.

2. *Give students a thesis to support or attack (teaches disciplinary use of evidence to make arguments)*

- The overriding religious view expressed in Hamlet is (is not) a stable medieval Catholicism.
- Prescribing Ritalin and other psychotropic medications is (is not) an appropriate treatment for behavioral problems of children.

3. *Give students a problematic question (teaches students to propose and support their own thesis)*

- What should Project Manager Hisako Hirai propose to her supervisor in response to the problems that have cropped up in Week Three? Role-playing Ms. Hirai, write a memo to your supervisor presenting and justifying your recommendations [part of a business management case]
- Now that we have discussed various design approaches for the circumference-mounted radiator fan, what do you recommend as the most optimal solution? Write an email message to the other members of your design team arguing for the approach you think your team should take.

4. *Give students a data set to analyze (teaches students to use quantitative data to make arguments)*

- To what extent do the attached economic data support the hypothesis "Social service spending is inversely related to economic growth"? First create a scattergram as a visual test of the hypothesis. Then create a verbal argument analyzing whether the data support the hypothesis. (Courtesy of Dr. Bridget Hiedemann, Economics, Seattle U)
- Your friend and you are looking over the attached table that shows the most recent mean and median income of U.S. households by age categories. You notice that for retired households, the mean income is substantially higher than the median income. Your friend, looking at the mean income, says that retired people in the US are surprisingly well off. You want to argue that the median income tells a quite different story, but then your friend has to rush off for a meeting. Send your friend an email message about one screen in length that explains the difference between “mean income” and “median income” and that argues that the income status of retired people is not so rosy if we focus on median rather than mean income.

5. *Give students a challenging reading to summarize and analyze (teaches students to summarize and speak back to difficult texts)*

- Write a 200-250 word summary of Kenneth Galbraith’s paper, “The Theory of Countervailing Power.” Your summary should accurately convey the content of the paper while being comprehensive and balanced.
- Should PomWonderful pomegranate juice be considered a food, a nutritional supplement, or a drug? Summarize the Federal Trade Commission’s argument against Pom Wonderful’s advertising campaign. Then assume that you are spokesperson for Pom Wonderful. Write a one-page reply that attempts to rebut the government’s argument.

6. Give students a peer-reviewed article to wrestle with (teaches students disciplinary ways of entering into conversation with other scholars)

- Read the assigned paper by Baron-Cohen et al. on fetal exposure to testosterone. To what extent do you think this paper supports or undermines the nature theory of gender identity?
- In the introduction to a conference paper, you want to show that critics disagree on how to regard Caliban in *The Tempest*. Using the two scholarly articles on Caliban that I have posted on our course site, write the section of your introduction that will show how these two scholars disagree on their reading of Caliban. Limit yourself to 350 words.

7. Have students write dialogs between real or fictitious characters with different points of view (teaches students to negotiate intellectual ambiguity and complexity)

- Recently, John Locke and Auguste Comte were strolling through downtown Seattle and came upon the Occupy Seattle protestors demonstrating in Westlake Park. Naturally, this sight stirred intense conversation between them. Drawing upon what you know of their distinct social philosophies, write a dialogue between them that reflects the conversation they would have had about the protest and its value and consequence for society. (Courtesy of Dr. Mark Cohan, Sociology, Seattle U)

8. Let students develop their own questions (teaches question-posing strategies in your discipline)

- Now that we have practiced asking interpretive questions about poems, consider Yeats' "Among School Children." Propose your own interpretive question about this poem, and then write an explication of the poem that tries to answer your question.
- Pose an empirical research question of the form "What is the effect of X on Y?" and then explore the way that you might design an experiment to try to answer this question.

9. Ask generic write-to-learn questions (promotes reflection and metacognition)

- What confused you in today's class or today's readings?
- How does your personal experience relate to what you studied today?
- What effect is this course having on your personal life, your beliefs, your values, your previous understanding of things?
- How does what we have been studying recently relate to your other courses or to other parts of this course?

Workshop Task: Earlier in the workshop, you identified some aspects of your course that were difficult for students—a difficult concept, thinking skill, way of seeing, or reading. Keeping these difficult aspects of your course in mind, peruse this list of nine suggested ways to create problem-based tasks. (You could use any of these tasks for small group problem-solving, for informal exploratory writing, or for short or long formal papers.) Think of possible ideas for tasks that might help students learn a difficult course concept, develop a valued critical thinking skill, learn certain disciplinary ways of seeing, or wrestle with a difficult reading.

On your own: Spend five minutes thinking of ideas and jotting down notes

With colleagues: Share ideas

A GENERAL RATIONALE FOR ASSIGNING EXPLORATORY WRITING

1. Continually presents students with high-order critical thinking problems
 - Allows instructors to create a questioning, problem-posing environment for the course
 - Immerses students in complexity without being threatening
2. Changes the way students approach reading assignments
 - Encourages students to read for meaning and then to "speak back" to texts
 - Promotes reading for high-level synthesis and understanding
 - Promotes an exploratory stance
3. Creates higher levels of class preparation and richer discussions
 - Students come to class ready to discuss readings
 - Students want to find out what others said in their thinking pieces
 - Generates ideas for discussion; during lull moments a student can be asked what he or she wrote in the thinking piece
 - Plants seeds and gives germination time for ideas; ideas first explored in thinking pieces often get developed in formal papers
4. Enjoyable to read
 - Changes the way you read student writing—you focus on ideas and forget your "red pencil" role
 - Can be read quickly--you can skim them, looking for insights, signs of life
 - Can be sampled--each day you need to read only random samples of the thinking pieces
 - Often lively with voice and personality
5. Let's you learn a lot more about each of your students
 - You'll see the characteristic ways their minds work
 - You'll learn about their backgrounds and values
 - You'll have insights into different kinds of problems they might have
6. Let's you assess learning problems on the spot
 - Will amaze you at the many ways students misunderstand what you say in class
 - Gives you a chance to re-explain something based on student confusion
 - Gives you a constant "reading" of student learning-in-progress

ASSIGNING AND GRADING EXPLORATORY WRITING

Explaining Exploratory Writing to Students

- *Explain your time or length requirements for an exploratory piece.* Some teachers say "15 minutes of freewriting" (or 5 or 10 minutes—whatever works best in your situation). Some specify a length limit: "one full page of single-spaced, typed freewriting using a 12-point font." It is easier to score a thinking piece if you specify a length limit rather than a time limit.
- *Explain that an exploratory writing means "thinking aloud on paper."* Tell students that you won't count off for organization, grammar, spelling, and so forth. The purpose of exploratory writing is to get thoughts down on paper—to use the discipline of freewriting to generate thought.
- *Explain that the best ideas in an exploratory piece often come late in a freewriting session.* At the start of an exploratory piece, writers often spill out the most obvious ideas. The writer's own voice and perspective often begin to emerge after a writer runs out of initial ideas. Therefore it is important to keep going—fill that page!
- *Explain that what you are looking for is engaged thought.* Explain that you will reward the process of thought rather than the product. The key question is not "How well written is this piece?" but "To what extent does this piece reveal engaged thinking about the topic?" Explain that you are looking for evidence of dialogic thinking—seeing issues, finding cruxes and puzzles, confronting inadequate explanations, wading into complexity.

Time saving strategies for scoring exploratory writing

- *Don't read everything your students write.* Just as piano teachers don't listen to their students' practice sessions, you don't need to read all your students' exploratory pieces. Work out a strategy of sampling.
- *Create incentives for doing exploratory writing other than grades.* Weave regular exploratory tasks into the fabric of the course so that students' explorations prime the pump for class discussions and help students generate ideas for formal papers or examinations. Make the tasks interesting and relevant.

Scales for scoring an exploratory piece

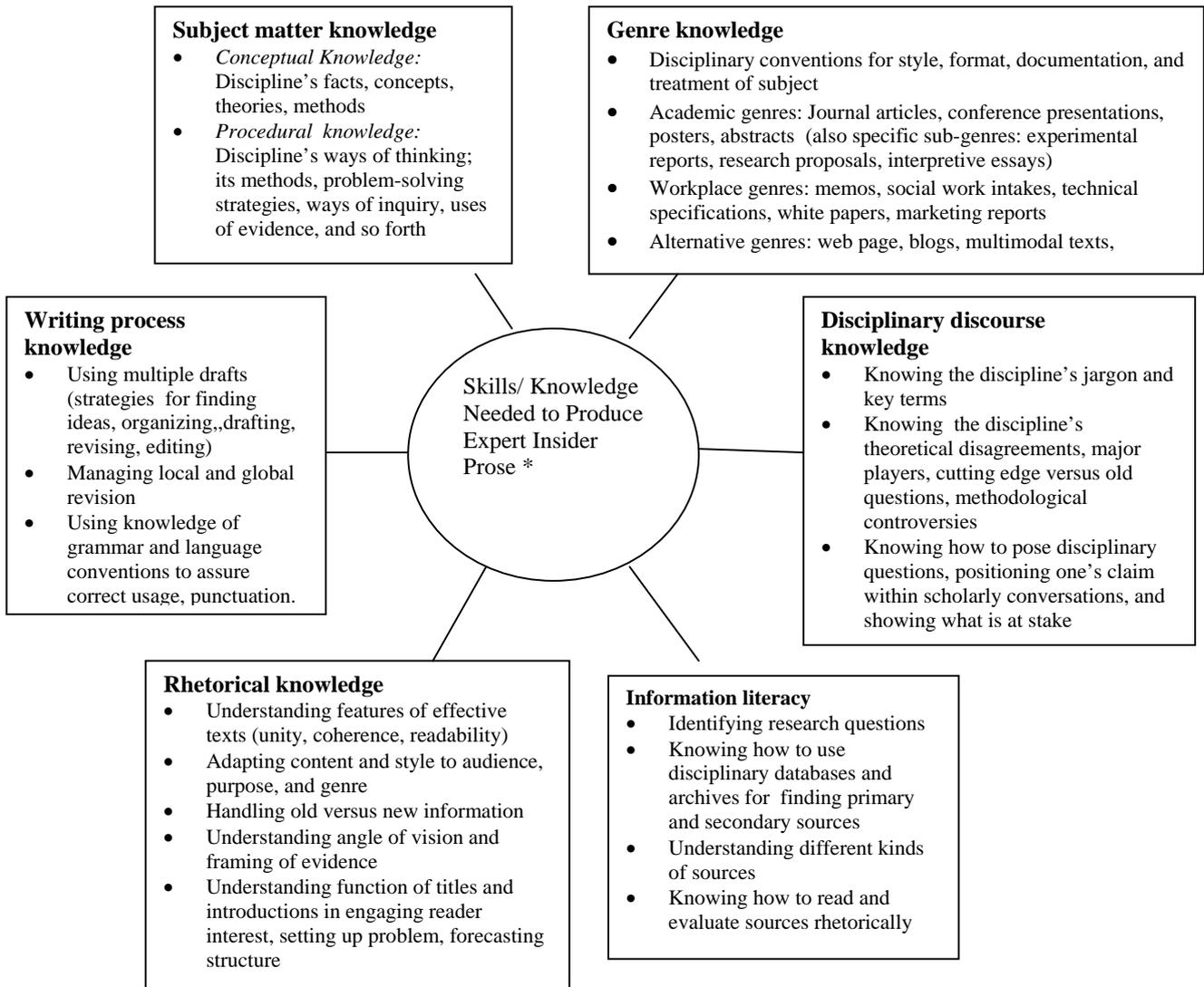
Check/plus/minus scale

- *Check:* Indicates the piece meets your expectations for length (or time on task) and for engagement.
- *Plus:* Indicates a strongly engaged, especially high quality exploration.
- *Minus:* Indicates that piece is too short or too superficial

Five-point numerical scale

- *Score of 5:* Meets or exceeds required length limit; strongly engaged, especially high quality exploration.
- *Score of 4:* Meets or exceeds required length limit; meets teacher's expectations for engagement
- *Score of 3:* Strongly engaged, high quality exploration, but too short; fails to meet length or time-on-task requirements. OR Meets required length limits but is too superficial.
- *Score of 2 or 1:* Too short and too superficial.

SKILLS/KNOWLEDGE NEEDED TO PRODUCE “EXPERT INSIDER PROSE” WITHIN A DISCIPLINE



This diagram is inspired by and adapted from Anne Beaufort in *College Writing and Beyond: A New Framework for University Writing Instruction*. Logan UT: Utah State University Press, 2007: p. 19

The term “expert insider prose” comes from Susan Peck MacDonald, *Professional Writing in the Humanities and Social Sciences*. Carbondale, Southern Illinois UP, 1994 (p. 187)

TEACHING THE“BIG PICTURE” MOVES OF ACADEMIC ARGUMENT

- Academic writing is initiated by a problem (either one assigned by the instructor or developed by the student)
- In a prototype academic paper in any discipline, the introduction explains the problem-at-issue, positions the paper in a conversation, and motivates the reader by showing the problem’s significance. (The length of an introduction is a function of how much the reader already knows about and cares about the problem)
- A thesis statement is in tension with some kind of counter-thesis, alternative viewpoint, or possibly different “answer” to the thesis-question: “Many scholars say X, but I am going to argue Y” (a move that Graff and Birkenstein call “They say/I say”*)

PROBLEM

THEY SAY	I SAY
<ul style="list-style-type: none"> • “They say” emerges from uncovering the critical conversation surrounding the problem <ul style="list-style-type: none"> ○ Who are these “they’s”? ○ How do I find them? (information literacy) ○ How do I read them rhetorically (angle of vision; <i>logos, ethos, pathos</i>)? ○ How do I evaluate them? ○ How do I position myself within this conversation • Prepares ground for writing discipline-specific literature review <ul style="list-style-type: none"> ○ “gap in knowledge” literature reviews ○ “state of the art” literature reviews ○ “Identify a controversy” literature reviews 	<ul style="list-style-type: none"> • “I say” emerges from my own critical thinking. (It is a meaning-constructing activity that represents my own contribution to the conversation.) • Evidence to support my thesis depends on discipline and nature of the question <ul style="list-style-type: none"> ○ May come from my own analysis of an artifact or phenomenon ○ May come from my own field or lab research ○ May come from library/web/database research • Students need lots of practice in finding and using disciplinary evidence

*Gerald Graff and Cathy Birkenstein. 2006. *“They Say/I Say”: The Moves that Matter in Academic Writing*. New York: Norton.

Example of a “Backward Designed” Assignment Sequence in Literature

Beginning of term → End of term

Major Research Project

Frequently assigned low-stakes “thinking pieces” along with in-class discussions and small group tasks	Skill-Building Research Assignment on <i>Paradise Lost</i>	Prospectus for Major Researched Literary Paper	Annotated Bibliography of Peer Reviewed Articles	Major Researched Literary Paper
<p><i>One of the most heated early debates on Hamlet—when critics focused on character—was why Hamlet delays. Try entering this debate. What is your theory on why Hamlet doesn’t swoop to his revenge as he promises?</i></p> <p><i>Play the believing and doubting game with this thesis: Hamlet is one of Shakespeare’s “evil” heroes, like Macbeth.</i></p> <p><i>What do you admire about Milton’s Satan? What do you think Milton admired?</i></p> <p><i>Play the believing and doubting game with the following thesis: Milton’s view of Eve is misogynistic</i></p>	<p>To what extent is Milton’s view of Eve misogynistic? Within your paper incorporate the views of one scholarly source on this issue (Gilbert and Gubar). [See assignment next page. Students can revise this paper for a new grade.]</p>	<p>Submit a one-page (single-spaced) prospectus that describes the interpretive problem or question that you plan to address. Explain why you are personally interested in and invested in this question. Show how the problem or question is rooted in your chosen literary text. Show why the question is both (1) problematic and (2) significant</p>	<p>Produce an annotated bibliography of the peer reviewed scholarly articles or books you expect to cite in your major paper. The annotations for each entry should include a summary of the article’s argument, an evaluation of the argument’s strength, and an explanation of how you might use the source in your paper.</p>	<p>Write an 8-12--page literary argument addressing significant question related to any of the texts we have read this term.. The introduction to your paper should pose the question or problem that your paper will address and engage your reader’s interest in it. Within your paper, you must join in conversation with other scholars who have addressed your interpretive problem. Your proposed answer to this question (summarized in a single sentence) will serve as the thesis statement for your paper. Imagine this paper will be delivered at an undergraduate research conference. Assume that your audience has NOT read this assignment and will attend your conference session because your title hooked their interest.</p>

Frequent “thinking pieces” throughout the course for generating ideas

Draft workshops, conferences, peer reviews

A Skill-Building (Scaffolding) Research Assignment (Literature)

Was Milton a Misogynist?

Situation: Renaissance misogynist writers typically tell the Adam and Eve story to justify patriarchy and warn men about women's seductive and deceitful nature. You wonder whether Milton in *Paradise Lost* has similarly misogynistic views of Eve. To extend your thinking, you have read "Milton's Bogey: Patriarchal Poetry and Women Readers" from Sandra Gilbert's and Susan Gubar's classic feminist study of 19th Century women novelists, *The Mad Woman in the Attic*.

Your Task: Write a 3-4 page paper (double-spaced) that provides your answer to the question "*Does Paradise Lost reproduce the misogynist view of Eve frequently encountered in Renaissance anti-feminist discourse?*" Besides providing your own well-supported argument addressing this question, your paper must be in conversation with Gilbert and Gubar's views about Milton's misogyny in *Paradise Lost*. (You can either disagree with Gilbert and Gubar, or you can incorporate and extend their views in some way.) Your paper should thus include the following three features: (1) An introduction that sets up the question you are going to address (assume that your audience has not read the assignment); (2) a summary of Gilbert and Gubar's arguments about the view of Eve in *Paradise Lost*; and (3) your own argument addressing the assigned question. Place your thesis statement at the end of your introduction.

Audience and Genre: This should be a short academic paper in MLA style addressed to peer English majors wrestling with the problem of Eve in *Paradise Lost*. Assume your audience has read *Paradise Lost* but not "Milton's bogey." Assume that your readers are either still confused about Eve or inclined to disagree with your view

Purpose of This Assignment: This assignment will help you develop the following skills needed for your major research project.

- The ability to make your own argument about a literary question and to bring your argument into conversation with another critic.
- The ability to summarize the other critic's views, to integrate those views purposefully into your own argument, and to distinguish the source's ideas from your own through attributive tags such as "according to Gilbert and Gubar" and "these authors claim further that"
- The ability to cite the source in your text itself (using MLA's parenthetical style) and to give complete bibliographic information (using MLA conventions) in a separate "Works Cited" page.

Scoring Rubric for Paradise Lost Paper

Title and introduction

Criteria	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Has complete academic title forecasting content Presents and develops the problem of the poem's presentation of Eve Briefly summarizes a view being "pushed against" Ends with contestable thesis showing your position on the problem 	Meets all criteria at high level; clear	Meets some criteria; uneven; less clear	Meets few criteria; unclear

Overall quality of ideas, argument, effective evidence

Criteria	30 27 24	21 18 15 12	9 6 3 0
<ul style="list-style-type: none"> Has well supported argument that addresses question while anticipating and responding to alternative views Uses "textually dense" evidence (frequent references to specifics in PL including brief quotations, paraphrase, or summary of scenes) Has strong insights; shows clear wrestling with complexity 	Meets all criteria at high level; clear	Meets some criteria; uneven; less clear; thinner; less precise use of evidence	Meets few criteria; unclear

Integration of Gilbert and Gubar

Criteria	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Accurately summarizes Gilbert and Gubar's arguments about Eve and misogyny in PL Integrates summary smoothly into writer's argument Uses summary intentionally either as an opposing view to push against or as support for the writer's own position Uses attributive tags effectively to differentiate writer's view from G&G's 	Meets all criteria at high level; clear	Meets some criteria; uneven; less clear	Meets few criteria; unclear

Organization and Development

Criteria	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Has clear, easy-to-follow structure (reader doesn't get lost) Has sufficient development so that ideas are fully explored Follows old/new contract Has points connected to thesis and developed with textual particulars to form unified/coherent paragraphs Uses effective transitions between paragraphs 	Meets all criteria at high level; clear	Meets some criteria; uneven; less clear	Meets few criteria; unclear

Sentence Clarity and Grace

Criteria	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Has clear, graceful, grammatically correct sentences Maintains focus through effective subordination and coordination Concise (non-wordy) easy-to-follow style 	Meets all criteria at high level; clear	Meets some criteria; uneven; less clear	Meets few criteria; unclear

MLA conventions

Criteria	10 9 8	7 6 5 4	3 2 1 0
<ul style="list-style-type: none"> Looks like a professional critical argument in literature Follows MLA conventions for citation and documentation Follows MLA formatting for Works Cited and page design 	Meets all criteria at high level	Meets some criteria; uneven; some deviation	Meets few criteria

Penalty for editing errors

+ 5	0	-2	-4	-6	-8	-10	-15	-20
Flawless paper (+5) or an occasional but minor error. Strong professional ethos.			Some distracting noise via spelling, punctuation, or apostrophe errors or occasional grammar mistakes (subject-verb agreement; fragments; non-parallel constructions). Writer seems careless.			Paper seriously marred by editing errors or grammatical mistakes; professional "ethos" of writer is destroyed by errors.		

EASING STUDENTS FROM WELL-STRUCTURED TO ILL-STRUCTURED PROBLEMS: A SCAFFOLDED SEQUENCE OF ASSIGNMENTS IN INTERMEDIATE MICROECONOMICS

Illustration of Well-Structured Versus Ill-Structured Microeconomic Problems

Algorithmic (well-structured) problem asking for right answer	Argumentative (ill-structured) problem asking for claim with reasons and evidence
<p>“Calculate the own- and cross-price elasticities of demand for turkey based on the following demand curve, $Q = 23 - 2P_T + 1.5P_C$. The price of turkey is $P_T = \\$2.50$ per pound, the price of chicken is $P_C = \\$2$ per pound and the quantity of turkey is 21 thousand tons per year.”</p>	<p>You are an economics intern for state Representative Jane Smith to provide economics expertise on legislative issues. Faced with budget deficits, Representative Smith is considering proposing an increased state gasoline tax as a new source of state revenue. She asks you to write a two-page recommendation memo for or against raising the gas tax based on your economic analysis of the potential revenue that could be raised through such a tax as well as on your evaluation of the pros and cons of the tax. Include at least one graph (not counted toward the two-page limit.) Representative Smith is not an economist and is EXTREMELY busy. All writing has to be clear, concise, accurate, and understandable to a lay audience..</p>
<p>Questions students seldom ask:</p> <ul style="list-style-type: none"> • Why use this particular demand curve? Where did this formula come from? • How did they get these price and volume numbers? • Who cares about the elasticity of demand for turkeys? 	<p>Questions this assignment forces students to ask:</p> <ul style="list-style-type: none"> • What algorithms/formulae/graphs from our course apply to this kind of problem? • How do I find the data/numbers to plug into the formulae, construct the graphs, and do the calculations? • What would be the positive and negative consequences of an increased gas tax?

Assignment Design and Sequencing for New Course

Throughout Course	Mid-course	After Memo #1	End course	
Algorithmic homework problems from textbook	“Bridging” homework problems based on economic news stories	Policy Memo 1 (fully guided by instructor)	Library session	Policy Memo 2 (less guided)
Microeconomics theory and tools requiring algebra and calculus scaffold all assignments \Rightarrow	Low stakes policy problems blend well-structured and ill-structured elements; combine calculations with free writing; spark class discussion; serve as scaffolding for policy memos \Rightarrow	High stakes graded assignment; instructor provides all research sources; annotated bibliography serves as scaffolding for library session \Rightarrow	Librarian teaches students how to find own sources in business/economics databases; serves as scaffolding for last assignment \Rightarrow	High stakes graded assignment; students pose own problem and rhetorical context; use databases to find all their own sources

Assignments used with permission from Dr. Gareth Green, Department of Economics, Seattle University

Example of a “Bridging” Homework Problem Based on Economic News Story

[The assignment is based on a news article about parking in downtown Seattle. Specific data in this assignment is either hypothetical or based on the instructor’s own research knowledge].

City-provided public parking is often priced much lower than private parking lots and garages because the private lots pay close attention to what price consumer are willing to pay. Unfortunately, the low price of publicly provided parking encourages consumers to “hunt” for low priced parking, which leads to increased traffic congestion, accidents, and increased pollution. The City of Seattle is considering increasing parking meter fees to increase revenue and reduce the negative impacts of low priced parking. Currently, the estimated quantity and price is 105% of capacity at \$2.00 per hour. Several studies have indicated that the optimal level of demand is 85% of capacity. Further, a recent study showed that the own-price elasticity of demand for parking is -0.2. Seattle currently has 8,586 metered parking spaces.

- a. What are the current equilibrium quantity, price and revenue from city metered parking in Seattle?
- b. Discuss the likely "shape" of the public supply curve and what that indicates about the impact of an increase in parking meter fees for the city and consumers.
- c. Explain and draw a graph indicating how increasing parking meter fees would impact the market for public parking. What is the new parking meter fee that will lead to the desired quantity of parking?
- d. What is the new revenue for the city from the new parking meter fee?
- e. Discuss who bears the burden of the parking meter fee increase?
- f. List and discuss the additional benefits and costs of this policy that are not included in the previous calculations.
- g. Do you think the City of Seattle should proceed with the policy to increase parking meter fees? Why or why not?

Students answer these questions outside of class in preparation for in-class discussion: Questions are a mixture of algorithmic calculations, drawing of graphs, and freewrites to stimulate. Instructor collects their homework but only spot checks it.

Student Handout Explaining Annotated Bibliography

Your boss, Rachel Leeds, wants to know what research you did for this project. The annotated bibliography will tell her what you read and what you found useful. She is interested in why you chose to use or not to use each of the articles provided for this assignment.

What is an annotated bibliography?

An annotated bibliography lists alphabetically the sources you read for this task. Each entry has two parts:

- (1) The bibliographic citation—author(s), name of article, source of article (name of magazine, peer-reviewed journal, website, blog, newspaper), and publication data (date, cumulative page numbers)
- (2) Your annotation (evaluative summary of the article)

What goes into the annotation (evaluative summary)?

Each annotation should be 100 - 150 words. It should include three elements:

- *Your analysis of the source's rhetorical context:* What was the author's purpose in writing the article? Who is the intended audience? What is the article's genre (peer reviewed journal article? Newspaper story? Op-ed piece or editorial? Magazine article? Blog?) Is the article primarily informative or does it advocate a position?
- *Your summary of the source:* What does the article say? Summarize its argument for your boss, who hasn't read it. Focus only on the article's main points.
- *Your evaluation of the source.* How useful was this source for your purposes? If you did not use this source, why? If you did use this source, what did you use and why?

Example of an annotated bibliography entry

Bauman, Y. "Carbon pricing in Washington." *Sightline Institute*, Seattle, WA. June, 2010.

This article is original research published and provided by the environmentally oriented research and advocacy group, *Sightline Institute*. The author Yoram Bauman is a Ph.D. economist who is a fellow of the *Sightline Institute*. Bauman develops the economic theory showing how a carbon tax is designed to reduce the use of carbon generating energy and how the tax revenue can be used to offset and reduce other taxes. This process is referred to as tax shifting so that the state taxes "bads" that cause pollution, not "goods" that provide benefits. While the article is primarily informative, it does assume that carbon emissions are causing climate change and that government policy is necessary to stop it. The article also discusses how tax revenue from the carbon tax should be spent to keep the tax revenue neutral and offset the increased expense of the tax. The article was useful in helping me understand how to use taxes to reduce externality generating activity. I used the idea of tax shifting in my report to counter arguments about the tax causing an overall increase in spending, but did not discuss how tax revenues ought to be spent.