

Washington State University
Critical Thinking Project

Resource Guide

Index

	Page
Section 1: Washington State University Critical Thinking Project	3
WSU Critical Thinking Rubric	4-5
WSU Critical Thinking Project Background Information	6-13
WSU Critical Thinking Project Objectives Evaluation Chart	14
Section 2: Adaptations of WSU Critical Thinking Rubric	15
French 350/450: Quebecois Literature and Culture	16-17
Geology	18
Thinking About Shakespeare	19-22
Entomology 401	23
Physics 102	24
Characteristics of Successful Threaded Discussions	25-26
Math 107	27-28
Evaluation: Place Setting	29
Philosophy 103 Intro to Ethics	30
Section 3: Documents Supporting Assignments & Course Design	31
Assignment Heuristic	32-34
Designing Course-Embedded Assessment Tasks	35
Development Outline	36-37
Course Generator	38-40
Formative Assessment Rubrics	41
General Education Goals and Outcomes within WSU's Baccalaureate Programs 1996	42-44
Section 4: Sample Assignments	45
Gen Ed 111: World Civilizations, 1500-Present	46-47
French 350/450: Quebecois Literature and Culture	48-49
Economics 198: Economics in the Arts	50

Washington State University Critical Thinking Project

- I. WSU Critical Thinking Rubric
- II. WSU Critical Thinking Project
Background Information
- III. WSU Critical Thinking Project
Objectives Evaluation Chart

Guide to Rating Critical Thinking
Washington State University
2001

- 1) Identifies and summarizes the **problem/question at issue** (and/or the source's position).

Scant

Substantially Developed

Does not identify and summarize the problem, is confused or identifies a different and inappropriate problem.

Identifies the main problem and subsidiary, embedded, or implicit aspects of the problem; and identifies them clearly, addressing their relationships to each other.

Does not identify or is confused by

- 2) Identifies and presents the **STUDENT'S OWN perspectives and positions** as it is important to the analysis of the issue.

Scant

Substantially Developed

Addresses a single source or view of the argument and fails to clarify the established or presented position relative to one's own.

Identifies, appropriately, one's own position on the issue, drawing support from experience, and information not available from

- 3) Identifies and considers **OTHER** salient **perspectives and positions** that are important to the analysis of the issue.

Scant

Substantially Developed

Deals only with a single perspective and fails to discuss other possible

Addresses perspectives noted previously, and additional diverse perspectives drawn

- 4) Identifies and assesses the key **assumptions**.

Scant

Substantially Developed

Does not surface the assumptions and ethical issues that underlie the issue, or does so superficially.

Identifies and addresses the validity of the key assumptions and ethical dimensions that underlie the

- 5) Identifies and assesses the **quality of supporting data/evidence** and provides additional data/evidence related to the issue.

*Scant**Substantially Developed*

Merely repeats information provided, taking it as truth, or denies evidence with out adequate justification.

Confuses associations and correlations with cause and effect.

Does not distinguish between fact, opinion, and value judgments.

Examines the evidence and source of evidence; questions its accuracy, precision, relevance, and completeness.

Observes cause and effect and addresses existing or potential consequences.

- 6) Identifies and considers the influence of the **context*** on the issue.

*Scant**Substantially Developed*

Discusses the problem only in egocentric or sociocentric terms. Does not present the problem as having connections to other contexts i.e. cultural, political, etc.

Analyzes the issue with a clear sense of scope and context, including an **assessment of the audience** of the analysis. Considers other pertinent contexts.

- 7) Identifies and assesses **conclusions, implications, and consequences.**

*Scant**Substantially Developed*

Fails to identify conclusions, implications, and consequences of the issue or the key relationships between the other elements of the problem,

Identifies and discusses conclusions, implications, and consequences considering context, assumptions, data and evidence. Objectively

*Contexts for Consideration

Cultural/Social

Group, national, ethnic behavior/attitude

Educational

Schooling, formal training

Technological

Applied science, engineering

Political

Organizational or governmental

Scientific

Conceptual, basic science, scientific method

Economic

Trade, business concerns, costs

Ethical

Values

Personal Experience

Personal observation, informal character

Washington State University Critical Thinking Project
Diane Kelly-Riley, Gary Brown, Bill Condon, Richard Law

Fostering critical thinking skills in undergraduates across a university's curriculum presents formidable difficulties. Making valid, reliable, and fine-grained assessments of students' progress in achieving these higher order intellectual skills involves another set of obstacles. Finally, providing faculty with the tools necessary to refocus their own teaching to encourage these abilities in students represents yet another formidable problem. These, however, are precisely the problems Washington State University is addressing through one concerted strategy. Washington State University has received a three-year, \$380,000 grant from the U. S. Department of Education FIPSE Comprehensive Program to integrate assessment with instruction in order to increase coherence and promote higher order thinking in a four-year General Education curriculum at a large, Research-I, public university, and to work with our two- and four-year counterparts in the State of Washington. As a result of a Washington State HEC Board funded pilot study, we have substantial evidence that we can significantly improve student learning, reform teaching, and measure the critical thinking gains of students at Washington State University. This project represents a collaboration among WSU's Campus Writing Programs, General Education Program, and Center for Teaching, Learning, and Technology, and it builds upon WSU's nationally recognized leadership in assessment in writing and learning with technology.

When WSU began a General Education reform in the late-1980s, we proposed to achieve these desired goals through General Education curriculum and writing-across-the-curriculum initiatives. While Washington State University has fully integrated writing into all aspects of its undergraduate curriculum, particularly General Education,

recent self-studies indicate that the writing-to-learn and learning-to-write strategies have not translated into well-developed, higher order thinking abilities, in spite of demonstrable progress in improving the quality of students' writing abilities.

In 1996, the Center for Teaching, Learning and Technology (CTLT), the General Education Program, and the Writing Programs collaborated to develop a seven-dimension critical thinking rubric derived from scholarly work and local practice and expertise to provide a process for improving and a means for measuring students' higher order thinking skills during the course of their college careers. Our intent has been to develop a fine-grained diagnostic of student progress as well as to provide a means for faculty to reflect upon and revise their own instructional goals, assessments, and teaching strategies. We use the rubric as an instructional guide and as an evaluative tool using a 6-point scale for evaluation combining holistic scoring methodology with expert-rater methodology (Haswell. & Wyche, 1996; Haswell, 1998). Early studies conducted by CTLT and the Writing Programs indicated an atmosphere ready for implementation of a critical thinking rubric within the WSU curriculum.

The instrument itself identifies seven key areas of critical thinking. The dimensions include

- problem identification
- the establishment of a clear perspective on the issue
- recognition of alternative perspectives
- context identification
- evidence identification and evaluation
- recognition of fundamental assumptions implicit or stated by the representation of an issue, and
- assessment of implications and potential conclusions.

A fully developed process or skill set for thinking critically will demonstrate competence with and integration of all of these components of formal, critical analysis. The

instrument was developed from a selection of literature, including Toulmin (1958), Paul (1990), Facione (1990) and others, as well as the expertise and the experience of educators at WSU. The instrument and methodology has sustained a cumulative inter-rater reliability in our formal studies of 80%.

The 1999 Progress Report on the WSU Writing Portfolio showed that 92% of student writers received passing ratings or higher on junior-level Writing Portfolios, indicating that an overwhelming majority of upper-division students demonstrated writing proficiency as defined by WSU faculty. However, a pilot critical thinking evaluation session conducted in the summer of 1999 on papers from three senior-level courses revealed surprisingly low critical thinking abilities (a mean of 2.3 on a 6 point scale). This phenomenon, in which writing deemed acceptable in quality despite lacking obvious evidence of analytic skills, was also discerned among other General Education courses. In one workshop session in 1999, twenty-five instructors of the World Civilizations core courses evaluated a freshman paper in two ways-- in terms of the grade they would give (they agreed on a B- to B+ range) and in terms of critical thinking (a score of 2 on a 6-point scale). The conclusion they arrived at informally was that as an instructor group, they tended to be satisfied with accurate information retrieval and summary and did not actively elicit evidence of thinking skills in their assignments.

In December 1999, several WSU units working collaboratively on these issues sought funding from the Washington State Higher Education Coordinating Board (HECB). We received \$65,000 from the Fund for Innovation in Quality Undergraduate Education to explore the usefulness of the critical thinking rubric developed at Washington State University both to foster student higher order thinking skills and to

reform faculty practice. With these funds, we explored the relationship between WSU's writing assessment instrument, which evaluates student writing at entry and at mid-career, with the critical thinking rubric and the skills we were trying to measure with it. Furthermore, we compared data collected from courses specifically designated to integrate the rubric into their evaluative and instructional methods with courses that did not.

These initial studies yielded interesting results. First, we discovered an inverse relationship between our current scoring of student work in our writing assessment program and our assessment of the same work in terms of the critical thinking rubric. Our assessment practice, in other words, tends to elicit and reward surface features of student performance at the expense of our reported highest priorities—higher order thinking. Second, we found that integrating the WSU critical thinking instrument and methodology into teaching practices and assignments makes a significant difference in students' higher order thinking abilities over the course of the semester. In the HECB-funded pilot study, we ascertained that students' critical thinking scores:

- Increase three and a half times as much in a course that overtly integrates the rubric into instructional expectations, compared with performances in a course that does not.
- Improved more in one semester in those courses than students not in those courses demonstrate in the two years from freshman to their junior year, as established by comparison of entry and junior level performances in WSU's writing assessment data.

As we expanded our pool of faculty participants in the HECB study, we found that some instructors demonstrated a substantial need for support in revising their

practices of instruction and evaluation. That is, their habitual teaching approaches did not elicit critical thinking from their students, and it was not easy for them to change to a mode that would. On the positive side, we found that faculty from all areas of the university, from the sciences as well as from the arts, humanities, and social sciences, found the rubric applicable to their definitions of critical thinking and usable in their disciplines. We had anticipated that definitions of critical thinking would be discipline specific or politically charged. In order to avoid unproductive ideological conflicts, we introduced the rubric as a diagnostic guide for faculty to freely adapt to their own pedagogical methods. Faculty were invited to make revisions and alterations relevant to their specific contexts. Evaluation of course papers is conducted using the more general critical thinking rubric.

From these initial studies we concluded the following: as a faculty, we are not eliciting systematically the kinds of higher order thinking skills that we have defined as our desired program and course outcomes. We, therefore, need to make a shift in our academic culture, so that we focus consciously and collectively upon our agreed upon goals and use effective means to move our students to the desired levels of achievement. In the WSU critical thinking rubric, we have an instrument capable of helping us achieve that shift in our teaching practices. The rubric has proven useful as a diagnostic tool for faculty in evaluating their own practices and testing the outcomes of different approaches objectively.

In our comparison of the writing assessment exams and the critical thinking rubric, for instance, we evaluated 60 samples of writing, representing pairs of entry-level

Writing Placement Exams and junior-level timed writing portions of the WSU Writing Portfolio, using the critical thinking rubric to gather general baseline data regarding the critical thinking abilities of students at WSU. This population represented students who wrote on topics that required them to analyze a subject, but students in this sample population had no prior exposure to the critical thinking rubric. We found that a surprising inverse correlation existed between the writing assessment rubric and the critical thinking rubric. The higher the Writing Placement Exam score, the lower the critical thinking score at a statistically significant level ($r = -.339, p = .015$).

The same inverse correlation phenomenon appeared in the rating of the junior-level timed writings, though the results were not statistically significant ($r = -.169, p = .235$.) Overall, students writing at the entry-level received a mean critical thinking score of 2.59 (SD = .738). At the junior-level, the mean critical thinking score increased to 3.05 (SD = .791). This indicates that students' critical thinking between the freshman and junior year improves significantly ($p = .001$), though not to a generally appreciable level. The .458 overall increase reflects significant gains on all dimensions of critical thinking identified in the rubric. Yet the mean of 3.0469 nonetheless is barely half the ideal critical thinking score. In addition, the inverse correlation points out the need for our assessments to extend beyond the mechanics of academic writing and to address more fully and aggressively the critical thinking competencies desired.

A further outcome of the HECB study demonstrated the success of the critical thinking rubric as faculty integrated it into undergraduate classroom expectations. To assess the gains within an individual course attributable to the integration of the critical

thinking course, papers were rated from two different semesters of Entomology 401, Biological Thought and Invertebrates, representing a single course and instructor, one semester when the rubric was not used ($n = 14$), and from the following semester when the rubric was used ($n = 12$). The overall mean score in the semester without the rubric, 1.867 ($SD = .458$), increased significantly to 3.48 ($SD = .923$, $p = .001$) the semester when the rubric was used.

These gains were further supported in studies observing courses that implemented the rubric as opposed to courses that did not. One hundred and twenty-three student essays were assessed for critical thinking from several lower and upper division undergraduate courses. In the four courses where the rubric was used variously for instruction and evaluation ($n = 87$), the papers received significantly higher critical thinking ratings than in the four courses in which the rubric was not used ($n = 36$). The mean score for courses in which the rubric was not used was 2.44 ($SD = .595$) compared to 3.3 ($SD = .599$, $p = .001$) in courses which employed the rubric.

Over the three years of the FIPSE CT project, we will enlist 120 faculty in the General Education core courses representing a variety of disciplines to adopt the new assessment instrument, revise their own pedagogies in terms of the program goals and outcomes, and develop innovative combinations of teaching and assessment based on the instrument. In addition, these faculty will give presentations to their campus colleagues regarding their instructional innovations, and they will be encouraged to write up their findings for an edited, book length edition on successful teaching methods using these methodologies.

In addition to targeting the core General Education courses—a combination of lower- and upper-division classes that span the disciplines—we will also revise the WSU writing assessment instrument to elicit higher order thinking more overtly as one of its aims. This instrument will be used for all incoming freshmen in the Writing Placement Exam and for undergraduates across the disciplines for the junior-level Writing Portfolio. A cadre of faculty will be trained to think in terms of learning outcomes and equipped with a set of tools for making valid assessments for these exams and for evaluation of critical thinking gains in the General Education courses.

Dissemination efforts will focus on collaboration with state organizations, the Washington Assessment Group and the Washington Center for the Improvement of Undergraduate Education, to promote student learning, reform teaching, and develop and implement a means to measure the gains in critical thinking of students at other institutions regionally and nationally.

References

Facione, P.A. (1990) Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction. research findings and recommendations.

Haswell, R. H. (1998). Multiple inquiry in the validation of writing tests. *Assessing Writing*, 5 (1), 89-108.

Haswell, R. H. & Wyche, S. (1996) A two-tiered rating procedure for placement essays. In T. W. Banta, J. P. Lund, K. E. Black, & F. W. Oblander (Eds.), Assessment in practice: Putting principles to work on college campuses (pp. 204-207). San Francisco: Jossey-Bass.

Paul, R. (1990) Critical thinking: How to prepare students for a rapidly changing world. Santa Rosa, CA: Foundation for critical thinking.

Toulmin, S. E. (1958) The uses of argument. New York: Cambridge University Press.

**Fostering Critical Thinking and Faculty Practice in a Large, Public University
Evaluation Chart**

Objective	Evaluation Measure
A replicable model for assessing the outcomes of broad General Education goals at a <i>large, public university</i> .	<p>Successful startup projects at Washington's five other public universities.</p> <p>Implementation of Critical Thinking as a General Education end-of-program assessment.</p> <p>Incorporation of Critical Thinking Rubric into The Bridge, WSU's native Online Learning Environment.</p> <p>Incorporation of Critical Thinking Rubric into at least 80% of newly developed Distance Degree Program courses.</p>
A set of courses distributed horizontally and vertically throughout Washington State University's General Education curriculum which are designed both to promote the development of a shared definition of critical thinking skills and to provide assessments of effective teaching and learning related to those skills.	<p>Revised assignments, syllabi, rubrics, etc. from classes across WSU's General Education Curriculum.</p> <p>Number of General Education courses incorporating the Critical Thinking Rubric or an adaptation thereof.</p> <p>Number of faculty introducing rubric into the non-General Education courses they teach.</p> <p>Gains in student performance, based on blind ratings of student learning outcomes and comparisons of courses in which the Rubric is used with courses in which it is not used.</p> <p>Comparisons of results from classes with baseline data gathered by analyzing writing samples already collected as part of WSU's Writing Placement Exam and Junior Writing Portfolio.</p>
An objective means of faculty self-assessment of their teaching effectiveness based on their students' progress in reaching learning goals.	<p>Number of faculty revising their assignments, class materials, syllabi, etc. in response to feedback from Critical Thinking study.</p> <p>Assessment of faculty members' teaching values, goals, and strategies in order to determine the kinds of change resulting from using the rubric.</p>
Dissemination efforts that reach statewide in order to articulate critical thinking expectations between two- and four-year institutions.	<p>Positive evaluations of four regional workshops for 2-year college faculty and administrators.</p> <p>Substantial presence of Critical Thinking sessions and presentations from partner institutions—2-year and 4-year—at annual Washington Higher Education Assessment Conferences.</p> <p>Collaborate with Washington Center for Improvement of Undergraduate Education and State Board of Community and Technical Colleges to offer conference centered on infusing critical thinking throughout college curricula.</p>
A book-length edited collection, written by faculty engaged in this project, of successful, assessment-friendly teaching methods and setting out the assessment data that establish the effectiveness of those methods.	<p>Book contract leading to publication of collection.</p>

Adaptations
of
Washington State University
Critical Thinking
Rubric

(All material included has been adapted from the Washington State University Critical Thinking Rubric to suit the needs of the individual courses.)

Joan Grenier-Winther
Associate Professor of French
Department of Foreign Languages and Cultures

Rubric for Writing and Assessing Research Paper
FREN 350/450 – Spring 2003

The following criteria should be used in writing the research paper. It also constitutes the criteria on which papers will be graded.

1. **INTRODUCTION/THESIS:** Identifies/summarizes the paper’s thesis and states an arguable opinion about it.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Does not identify the issue, is confused about the issue, or represents the issue inaccurately. Lacks an introduction that takes an overview and that states the objectives of the paper. The thesis statement is absent, unfocused or very weak.	Identifies not only the basis of the issue, but recognizes nuances. Begins with a strong introduction that lays out the thesis, as well as the sequence of what follows clearly enough that even a person unfamiliar with the topic will clearly understand what the problem is and why it is important.
---	--

2. **RESOURCES:** Supports his/her opinion with evidence from outside and textual sources.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Evidence does not adequately support the thesis. Lists evidence but doesn’t explain how it does or doesn’t support a point. Lacks organization or transitions. Evidence of plagiarism. Does not completely or correctly identify sources of information through in-text citations and/or list of works cited.	Provides appropriate and sufficient evidence to effectively support all parts of the thesis. Smoothly synthesizes evidence from sources and clearly ties it to the point being made, or assesses the source as not being appropriate. Logically organizes ideas. Uses transitions to connect one idea to the next. No evidence of plagiarism. Correctly identifies all sources of information through in-text citations and/or list of works cited.
---	---

3. **BODY:** Formulates a coherent, logical, and thoughtful argument in support of thesis.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Shows little understanding of the issue and cannot explain it. No discussion at all of any complexities or nuances related to the issue. No integration of source information.	Shows good understanding of the issue discussed. Identifies and explains the issue, as well as the complexities and nuances associated with the issue (for example, other perspectives and confounding factors). Discusses how the source information is relevant.
--	--

Joan Grenier-Winther
 Associate Professor of French
 Department of Foreign Languages and Cultures

4. **CONTEXT:** Analyzes the issue in context.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Discusses the theme only in egocentric and/or sociocentric terms. Does not present the problem as having connections to other contexts – cultural, economic, ethical, gender, racial, historical, political, religious, social, etc.	Analyzes the issue with a clear sense of scope and places it in one or more contexts – cultural, economic, ethical, gender, racial, historical, political, religious, social, etc.
--	--

5. **CONCLUSION:** Identifies and assesses conclusions, implications, and consequences; develops critically aware perspective.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Only restates verbatim what has already been said. Conclusion is not related to the support in the paper or new information is presented. Feels abrupt, unconnected, or changes the focus. Is not persuasive. No position taken on issue.	Goes beyond summarizing your main points or restating the thesis. Encourages the reader to think or to read the text differently. Reader feels a sense of closure in the paper and is persuaded by the argument. No new information is presented. Identifies one's own position on an issue based on a thorough understanding of the issues.
---	--

6. **MECHANICS:** Sentence and paragraph structure, grammar, word choice, punctuation, and spelling.

1	2	3	4	5
---	---	---	---	---

DEVELOPING.....DEVELOPED

Sentence and paragraph structure, grammar, word choice, punctuation, and spelling is lax and prevents the reader from understanding your ideas or changes the meaning of what you are trying to say. Unnecessary duplication of ideas or information.	Sentence and paragraph structure, grammar, word choice, punctuation, and spelling are fluid and sophisticated and facilitate the expression of ideas. No unnecessary duplication of ideas or information.
---	---

SCALE

30 A+	28-29 A	27 A-	26 B+	25 B	24 B-
23 C+	22 C	21 C-	20 D+	19 D	18 & lower F

This rubric is based on the “Guide to Rating Critical Thinking” (2001) developed by the Center for Teaching, Learning & Technology (CTLT), General Education Program, and the Writing Program at Washington State University.

Guide to Rating Critical Thinking in a Scientific Report

Joan Grenier-Winther
Associate Professor of French
Department of Foreign Languages and Cultures

*Thor A. Hansen, February 5, 2002
(Adapted from WSU "Guide to Rating Critical Thinking", 2001)*

1) Identifies and summarizes the **problem/question at issue**.

Low	1	2	3	4	5	6	High
Does not identify and summarize the problem, is confused or identifies a different and inappropriate problem to the one addressed in the report.				Clearly identifies the specific problem and places the problem into a wider context in order to explain its significance. Report appropriately addresses the problem.			

2) Identifies and assess the **quality of supporting data/evidence** and provides additional data/evidence related to the issue.

Low	1	2	3	4	5	6	High
Does not distinguish between observations and interpretations. Merely repeats information provided or denies evidence without adequate justification. Does not distinguish between personal and outside observations and interpretations. Confuses associations and correlations with cause and effect.				Clearly distinguishes between observations and interpretations. Examines the evidence and source of evidence; questions its accuracy, precision, relevance, completeness. Clearly distinguishes between personal and outside observations and interpretations. Observes cause and effect.			

Comment: How about a sharper point: Does not distinguish between observation and interpretation or confuses observation with interpretation. (By the way, this is a terrific and critical construct.)

Comment: I'm a bit confused by this. There must be a pithy way to distinguish between observation and interpretation, and evidence that is intrinsic to the phenomenon and that which is projected—if that's what you are getting at.

3) **Identifies patterns in the data** and **proposes hypotheses** to explain them. Suggests or conducts experiments to test/choose between the hypotheses.

Low	1	2	3	4	5	6	High
Merely describes data without searching for the presence or absence of patterns. Does not create hypotheses to explain patterns or creates poorly conceived, inappropriate hypotheses. Does not attempt to design or conduct a test appropriate to the hypothesis.				Describes presence or absence of patterns in data. Creates plausible hypotheses to explain the data. Designs or conducts experiments to test the hypotheses. Explores other factors that could be responsible for observations.			

Comment: Again, I wonder how this is separate from the earlier distinction "between observations and interpretations" in this cell? Should this isolate the personal and outside observations and be moved to follow the first sentence?

Comment: Excellent and vital distinction. The occasion for addressing this created by this addition will be a powerful tool.

Comment: ??? I'm searching for a word that connotes the reporting of plausible alternate explanations

4) Identifies and assesses **conclusions, implications and consequences**.

Low	1	2	3	4	5	6	High
Fails to identify conclusions, implications, and consequences of the issue. Does not take a stand.				Identifies and discusses conclusions, implications and consequences of the issue. Takes a clear stand that is consistent with the stated aims of the report.			

Comment: This distinction opens a world of its own—the fun we have. Very nice.

Thor Hansen, Dept. of Geology
Western Washington University
thorenet@cc.wvu.edu

THINKING ABOUT SHAKESPEARE

Before factions in the late 1980s vilified the term "liberal," it was widely understood that the "liberal arts" were valuable in the process of "liberating" us from the shackles of ignorance and illiteracy, from leading lives of mere Pavlovian gratification. The "humanities" function identically, seeking to cultivate what is best in us as humans, as opposed to the animalistic consumers that corporations want us to be or the mechanized automatons that our employers, the corporations, want us to be. One of the reasons Shakespeare is respected still is that his works seem ideal in the cultivation of a humanizing sensitivity and sensibility.

Towards this kind and quality of education, Washington State University is currently taking an impressive lead in finding and fine-tuning ways to improve critical thinking skills. The WSU Critical Thinking Rubric, a variation of which you may have already encountered in other classes, provides a framework and vocabulary for identifying many of the elusive features that teachers seek in their students' work and classroom contributions but sometimes find difficult to convey to students clearly as expectations. Here is an adaptation of the rubric to our Shakespeare class.

1) Identifying and summarizing the **problem/question** at issue (and/or the source's position).

This sounds basic but it's not a cinch, and I for one certainly had my share of college English classes that never encouraged us even getting to this rung of critical thinking. A "report" on the Globe theater, for example, does not reach even this first step. Neither does a "compare/contrast" discussion of individual characters from two different plays. You want to tackle

Michael Delahoyde
Washington State University
<http://www.wsu.edu/~delahoyd>

an authentic issue, not just carry out an arbitrary exercise of blab. So instead of simply following a theme through or describing a complex character or relationship, realize that Shakespeare's works are riddled with ambiguities and quirks in need of interpretation and explanation. Recognize that there are ongoing critical debates about living issues embedded in the texts. The Christopher Sly frame in *The Taming of the Shrew* lends itself better to being cast as a problem or question to be wrangled with. The depiction of Henry V as a hero or a war criminal could work too, or the issue of "comedy" in *The Merchant of Venice*, or why *Timon of Athens* does or doesn't work as effective drama.

Good critical thinking of this type "identifies the main problem and subsidiary, embedded, or implicit aspects of the problem, and identifies them clearly, addressing their relationships to each other. [It] identifies not only the basics of the issue, but recognizes nuances of the issue."

2) Identifying and presenting the student's own perspective and position as it is important to the analysis of the issue.

Students facing their first formal written assignment for a class often ask me, "How much of this should be my opinion?" I'm afraid there's only a long answer to this question. You certainly do not want to write a "report" -- a regurgitation of well-researched but dry and pointless factoids. On the other hand, neither should a writing serve as an editorial spewing of "opinion." Somewhere between these extremes, and yet transcending them both, comes what teachers really seek -- your "perspective" -- that is, a well-articulated indication that you have brought some sophisticated worldview of your own to the subject, or that the

Michael Delahoyde
Washington State University
<http://www.wsu.edu/~delahoyd>

subject has contributed somehow to the development of that worldview.

Therefore, this item in the rubric needs considerable tweaking for our context. Indeed, even within the wording of this component of the rubric, one might take issue with the blurring of the terms "perspective" and "position." Someone with a ferocious "position" on an issue may desperately *need* some "perspective"! Most teachers have read, for example, many term papers that are impressively researched, superbly organized, excellently written, and utterly pointless. They fall dead because the conclusion merely concludes and readers are left asking "so what?"

So "perspective" is a significant and usually sophisticated accomplishment, and teachers in many disciplines who have adapted the entire WSU rubric, as a sequence, to their courses have relocated this step to a place much later in the schematic. I recommend thinking of this component as relocated before or after what is listed as #6: context.

3) Identifies and considers OTHER salient *perspectives and positions* that are important to the analysis of the issue.

If you cannot see that multiple angles or possibilities are inherent in the subject, then it's likely that you aren't conceptualizing the subject as a problem or question to begin with. Return to step #1.

Weak critical thinking here offers "only ... a single perspective and fails to discuss other possible perspectives, especially those salient to the issue." Much better to address "perspectives noted previously, and additional diverse perspectives drawn from outside information."

Michael Delahoyde
Washington State University
<http://www.wsu.edu/~delahoyd>

 4) Identifies and assesses the key **assumptions**.

This means that you are perceiving the subject somewhat three-dimensionally, or at least reading between the lines. *Questioning* the widely-held assumption that, in accordance with Elizabethan bigotry, Shylock is a bloodthirsty villain is a good sign of the critical thinking process.

Weak critical thinking "does not surface the assumptions and ethical issues that underlie the issue, or does so superficially," whereas better critical thinking "identifies and questions the validity of the assumptions and addresses the ethical dimensions that underlie the issue."

 5) Identifies and assesses the quality of **supporting data/evidence** and provides additional data/evidence related to the issue.

The distinction here is between merely regurgitating others' work or reporting from research and truly incorporating the valuable findings. Besides marshalling other critics' assertions, show your readers *primary* source material -- lines from the play -- in a new light.

Poor critical thinking "merely repeats information provided, taking it as truth, or denies evidence without adequate justification. [It] confuses associations and correlations with cause and effect [and] does not distinguish between fact, opinion, and value judgments." Much better critical thinking

Michael Delahoyde
 Washington State University
<http://www.wsu.edu/~delahoyd>

"examines the evidence and source of evidence; questions its accuracy, precision, relevance, completeness."

6) Identifies and considers the influence of the **context** on the issue.

An appendix to the Critical Thinking Rubric lists possible contexts (cultural, political, ethical, educational, etc.) for consideration. This is not a matter of praising the mighty Shakespeare in general in a conclusion, nor dismissing your entire analysis because "everyone has his or her own interpretation." Nor is it excusing Shakespeare finally because in Renaissance England supposedly everyone was a racist sexist jingoistic bastard. Instead, considering Elizabethan stage practices might serve as a context for the issue of Rosalind's epilogue in *As You Like It*.

Good critical thinking here "analyzes the issue with a clear sense of scope and context, including [perhaps] an assessment of the audience of the analysis."

7) Identifies and assesses **conclusions, implications, and consequences**.

Move beyond concluding with simply a reassertion of the thesis, or a limp summary of the preceding discussion. Here too readers are asking, "So what?" and the best signs of critical thinking are those indications that you have activated the subject by showing its importance. After showing your readers what a fink Henry V is, speculate on the implications that the play

Michael Delahoyde
Washington State University
<http://www.wsu.edu/~delahoyd>

can come across to its audience in two polar opposite ways.

Good critical thinking of this type reflects objectively on the significance of the prior material.

Not every assignment demands your success in demonstrating all the above skills with anything like equal emphasis. Rather, the Critical Thinking Rubric is designed to lend us some framework and/or some language with which to help pinpoint some ways to evaluate not writing strictly, but thinking. Texts and materials in the humanities exist not to be "appreciated" reverentially, but rather to encourage critical thinking themselves. I think Shakespeare would agree.

Michael Delahoyde
Washington State University
<http://www.wsu.edu/~delahoyd>

Rubric for Entomology 401 Term Paper: Spring 2000

(Note that, except for #7, the bullets beneath each numbered item represent an incremental improvement in performance)

- 1) **Identifies and explains issue / topic at hand**
 - Does not ID nor explain main issue/topic at hand; is confused
 - IDs main issue, does not explain clearly
 - IDs main issue/topic clearly, explains in limited fashion
 - IDs main issue/topic clearly, explains fully by discussing subsidiary and/or other relevant issues
- 2) **Identifies and uses a primary, historical source**
 - Does not identify a primary, historical source, or cites an inappropriate one
 - Cites an appropriate primary, historical source, but merely repeats the information or does not engage it
 - Cites an appropriate source, presents / engages the information in a limited fashion
 - Cites an appropriate source, presents and engages the information, examines and assesses it
- 3) **Identifies and considers other salient perspectives / analyses regarding issue / topic at hand**
 - Does not cite nor utilize sufficient (or any) perspectives / analyses regarding the topic / issue
 - Cites and utilizes perspectives / analyses that are of limited value
 - Cites and utilizes salient perspectives / analyses, but does so in a limited fashion
 - Cites and utilizes salient perspectives / analyses, and brings them to bear on the issue / topic at hand
- 4) **Identifies and presents the student's own perspective / analysis regarding the issue at hand**
 - Fails to ID and state his / her own perspective / analysis on the issue / topic at hand
 - IDs and states own perspective / analysis, but fails to clarify own perspective vs. other salient perspectives
 - IDs and states own perspective / analysis, but does so in a limited fashion
 - IDs and states own perspective / analysis, and considers it in light of other salient perspectives
- 5) **Identifies and considers the influence of context* on the issue / topic at hand**
 - Does not present the issue / topic as having connections to other contexts
 - Presents the issue / topic largely within a single context (*e.g.*, scientific)
 - Presents the issue / topic as having connections to other contexts, but in a limited fashion
 - Presents the issue / topic as having connections to other contexts important for the issue / topic at hand
- 6) **Identifies conclusions and implications of the issue / topic at hand**
 - Fails to ID conclusions / implications of the issue / topic
 - IDs conclusions / implications, but within a single context
 - IDs conclusions / implications as having connections to other contexts, but in a limited fashion
 - IDs conclusions / implications relative to the contexts important to the issue / topic at hand
- 7) **Follows "Peer Review Guidelines" regarding usage, composition, style, etc.**
 - Fails to follow established guidelines for usage, composition, style, and / or other requirements
 - Fails to provide list of references, or list is incomplete, or citations in text and reference list do not match
 - Fails to meet minimum page length required for term paper
 - Generally follows the guidelines listed in Entom 401 Coug Prints under "Peer Review Guidelines"
 - **Contexts for consideration:** scientific, technological, social / cultural, economic, political, ethical

Carol Sheppard, Dept. of Entomology
 Washington State University
carol_sheppard@wsu.edu
 509-335-1432

Student Guide to Rating Physics 102 Homework Problems

- 1) Identifies and summarizes the problem/question.

Weak

Strong

Does not identify the issue, is confused about the issue, or represents the issue inaccurately or incompletely.	Identifies not only the basics of the issue, but recognizes nuances of the issue.
---	---

- 2) Identifies the law(s) of physics that are applicable to the problem.

Weak

Strong

Does not identify the law(s) of physics applicable to the problem.	Identifies applicable law(s), and clarifies distinctions at many levels.
--	--

- 3) Demonstrates how the law(s) of physics apply to the problem.

Weak

Strong

Fails to describe how the relevant law(s) are at work in the problem. Does not attempt to apply the law(s) to the specific circumstance by creating a specific representation of the more general law.	Clearly articulates how the general law can be applied to the specifics of the problem. Sees multiple ways of approaching the problem.
--	--

- 4) Identifies and applies other supporting definitions or relationships.

Weak

Strong

Fails to identify or apply any supporting definitions or relationships which would allow the student to completely apply the laws.	Identifies and applies all supporting definitions and relationships to the problem solution.
--	--

- 5) Uses information above to get a physically consistent solution.

Weak

Strong

Merely repeats information previously provided, taking it as absolute truth, or denies the information provided. Restates the laws rather than providing specific applications. Does not engage the supporting data or evidence critically in any way.	Examines the information provided previously, questioning its applicability and completeness. Considers differences between theory (general) and application (specific) and evaluates the information sources.
--	--

Lisa Morris, Dept. of Physics
Washington State University
lisa_morris@wsu.edu
509-335-4138

Characteristics of Successful Threaded Discussions
Washington State University
 2002

1. Presentation of Discussion

<i>Does not encourage critical engagement</i>	<i>Does encourage critical engagement</i>
<ul style="list-style-type: none"> • Does not articulate goal(s) for the discussion clearly or does so vaguely. • Does not relate goal(s) for the discussion to the activity/course goals. • Invites a yes/no answer • Ignores students' personal knowledge base and/or experiences • Encourages students to repeat contents of resources • Does not encourage students to interact with one another. • Does not encourage students to apply evaluation criteria to one another's or their own comments. • Does not integrate evaluation criteria 	<ul style="list-style-type: none"> ▪ Articulates goal(s) for the discussion clearly. ▪ Relates goal(s) for the discussion to the activity/course goals. ▪ Is open-ended ▪ Encourages students to draw on personal knowledge and experience ▪ Encourages students to synthesize information, experiences, perspectives, etc. ▪ Encourages students to engage each other, perhaps applying evaluation criteria to theirs and others contributions to the discussion ▪ Encourages students to present and support their own values on the issues. ▪ Integrates evaluation criteria

2. Evaluation Criteria

<i>Does not encourage critical engagement</i>	<i>Does encourage critical engagement</i>
<ul style="list-style-type: none"> • Does not clearly state expectations in advance • States expectations but these expectations are not clear • Does not relate expectations to the discussion goal or does so only vaguely. • Does not encourage critical analysis of key issues/concepts. • Is rigid, not allowing enough flexibility for creative brainstorming, synthesis, and analysis. 	<ul style="list-style-type: none"> ▪ Provides clear and explicit expectations for the discussion ▪ Relates expectations clearly to the stated goals for the discussion. ▪ Encourages critical analysis of key issues/concepts ▪ Provides enough flexibility to allow for creative brainstorming, synthesis, and analysis

3. *Nature of facilitator's contributions*

<i>Does not encourage critical engagement</i>	<i>Does encourage critical engagement</i>
<ul style="list-style-type: none"> • Pronounces answers right or wrong; caps discussion extensively. • Does not invite further questioning. • Does not encourage elaboration of thoughts. • Establishes primarily student/facilitator dialogue. • Does not allow time for discussion and/or tangents to develop. • Does not intervene to keep discussion on-topic when necessary. 	<ul style="list-style-type: none"> • Challenges view presented or invites further questioning. • Invites expanded elaboration. • Invites students to dialogue with others. • Allows time for the discussion to develop. • Allows elaboration of ideas, even those that may initially appear to be off-topic, yet later prove to be highly relevant, to develop without intervening too early. • Does intervene to keep discussion on-topic when appropriate and does so in a way that is supportive.

4. *Content of posts*

<i>Does not encourage critical engagement</i>	<i>Does encourage critical engagement</i>
<ul style="list-style-type: none"> • Does not meet criteria for activity or discussion. • Tends to consist of non-substantive comments such as "I agree." • Tends to espouse personal opinions and does not demonstrate a willingness to engage in a critical examination of alternative views. • Is self-contained with little or no reference to other posts. 	<ul style="list-style-type: none"> • Meets or exceeds criteria for activity or discussion. • Demonstrates thoughtful and substantive analysis of either the topic at issue or other posts. • Demonstrates a willingness to listen to and consider other viewpoints. • Encourages further interaction by challenging or offering/requesting further elaboration. • Includes references to other posts.

5. *Development of threads*

<i>Does not encourage critical engagement</i>	<i>Does encourage critical engagement</i>
<ul style="list-style-type: none"> • Develops no threads. • Develops short threads (few responses to posts). • Contains subject lines that are either blank or unchanged from parent posting. • Contains a discussion that is dominated by one or two participants. • Contains a discussion in which participants tend to interact with a narrow group of their peers in the class. 	<ul style="list-style-type: none"> • Develops threads with multiple responses to original posts and other responses. • Makes informative use of subject line. • Contains a discussion in which multiple voices appear in multiple roles. • Contains a discussion in which participants engage with each other broadly by responding to posts by different members of the course.

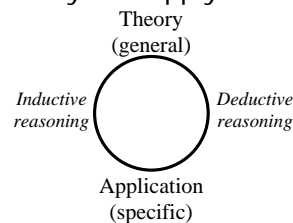
**Rubric for reviewing and evaluating work in
Math 107**

Fall 2002

Condensed version

1. **Identifies the specific situation, problem, or question.**
 - a. To accomplish this, you need to classify the problem, create a plan for the solution, be aware of assumptions, and correctly interpret the information given. If the problem is a word problem, you also need to define all of the variables and their relationships.

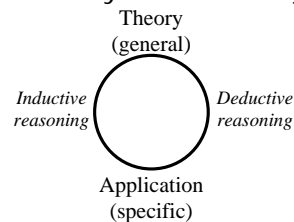
2. **Identifies (and notes) the mathematical the properties applicable to the specific situation, problem, or question.**
 - b. To accomplish this, you need to be able to identify all of the properties that allow you to manipulate the equation or expression leading to your planned solution. You also need to make sure that the properties that you choose are verifiable and appropriate to the circumstance. This step and the one below are completed together as a cycle of "identify and apply."



3. **Demonstrates how the mathematical properties apply to the specific situation, problem, or question.**
 - c. To accomplish this, you need to apply each property that you identified above to the problem correctly. This step and the one above are completed together as a cycle of "identify and apply."

4. Identifies (and notes) the mathematical definitions and notations applicable to the specific situation, problem, or question.

- d. To accomplish this, you need to be able to identify all of the definitions and notations that allow you to manipulate the equation or expression leading to your planned solution and allow someone else to make sense of your work. You also need to make sure that the definitions and notations that you choose are verifiable and appropriate to the circumstance. This step and the one below are completed together as a cycle of "identify and apply."



5. Demonstrates how these definitions and notations apply to the specific situation, problem, or question

- e. To accomplish this, you need to apply each definition or notation that you identified above to the problem correctly. This step and the one above are completed together as a cycle of "identify and apply."

6. Synthesizes the information above into a mathematically consistent solution to the specific situation, problem, or question

- f. To accomplish this, you need to combine all the parts above to arrive at a consistent solution, check for reasonableness and appropriateness of your solution, check your computations, check your units, and make sure that you display your solution appropriately.

**The Built and Furnished Environment
Evaluation: Place Setting**

	Excellent	Acceptable	Needs Improvement	Points
	9-10 points	7-8 points	0-6 points	
Overall Arrangement/ Design of Presentation	<ul style="list-style-type: none"> • Presentation is balanced. • Two boards relate to each other • Typeface, colors, and images reflect designer/style 	<ul style="list-style-type: none"> • Most elements reflect designer/style 	<ul style="list-style-type: none"> • Presentation chaotic • Few elements of period/style represented in presentation 	
Relationship of place-setting design to designer/period	Motifs, lines, shapes, colors fully reflect designer/ period.	Some motifs, colors or shapes, but limited application	Design inappropriate, fully or in part	
Research	Research focuses on appropriate portion of designer's work or period and fully represents it.	Research reflects period/designer, but only one facet of the total work, or facets from different periods/designers.	Research scattered or too limited	
Craftsmanship	Crisp, clean, precise and well put-together	Overall good workmanship, but some elements need refining	Sloppy workmanship	
Originality/ Creativity	Characteristics of the designer/ period applied in new, yet appropriate setting,	Design reflects designer/period, but application is not original	Design is inappropriate for designer/ period	
			Total Points	

Robin Jeffers, Dept. of English
Bellevue Community College
rjeffers@bcc.ctc.edu

Assessment Rubric – Philosophy 103: Intro to Ethics

Have you read the assignment and understood what you're being asked to do?

No: Nothing you've written reflects an understanding of the assignment.

Developing: You're on the right track but you need to clarify some of your ideas. You may want to reread parts of the assignment.

Absolutely: You've understood all that is being asked of you.

Have you recognized and summarized the problem?

No: You have not recognized the problem and are possibly confused by the issue.

Developing: Your summary shows that you have recognized the problem but only in its most basic form. You should consider the complexity of the problem.

Absolutely: Your recognition of the problem is clear from your detailed summary and you consider some of the subtleties of the issue.

Where are you in the paper?

Nowhere: You've simply repeated what you've heard in class without thinking about what you're saying.

Hiding in there somewhere: You have something to say but it's hiding among direct quotes. Think about the problem, consider what others have said and then tell me what YOU think.

BANG! Right in the middle: You have considered both your own experience and your research to draw your own conclusions. You present your conclusions clearly.

What have you done with your research?

Very little: You've regurgitated fact, opinion and value judgments without taking the time to think about your research and what it means to the problem.

Developing: You're doing a good job but you need to do more work to separate fact from opinion.

A lot: You examined your research and questioned its accuracy and relevance to your analysis.

You've done the thinking, now how's your writing?

Not so good: There's a lack of complete sentences and paragraphs. You have neither proofread nor revised your work. As a result you have way too many errors. You **must** take future work to the Writing Center.

Good (with room for improvement): Some silly errors and some sentence structure problems detract from what you're trying to say. Proofread more carefully in future and think about taking your work to the writing center.

Excellent: Very well written with very few errors. Carefully proofread and your thoughts are communicated clearly at all times.

So where are you headed?

Wrong direction: We should talk sooner rather than later.

Right direction: Keep working hard and you'll get to a good place.

Developed from Washington State University's *Guide to Rating Critical Thinking*,
June 2003 by Jason Johnstone-Yellin (jasonjy@wsu.edu)
Washington State University Critical Thinking Project

In a good place: Enjoy the moment but don't stop working hard.

Developed from Washington State University's *Guide to Rating Critical Thinking*,
June 2003 by Jason Johnstone-Yellin (jasonjy@wsu.edu)
Washington State University Critical Thinking Project

Documents Supporting Assignments And Course Design



This document intends to guide the assignment design process by prompting you to clarify your expectations and values as they pertain to aspects of the critical thinking rubric and the writing process. It does not provide an evaluation rubric—it does not qualify or quantify the degree to which a student must adhere to each category of expectation in order to be successful in their written response to your assignment. Consequently, in addition to clarifying what you want students to do, you will want to consider the degree to which students have flexibility within the different categories of your expectations. The results of this second process will yield your evaluation rubric.

What is the name of the assignment, when is it due and how does the assignment fit in with the goals and objectives of your course?

What is the main purpose of the assignment?

To demonstrate:

- Critical Thinking skills,
- Innovative or creative thinking,
- Content knowledge
- An understanding disciplinary conventions
- Other

What types of student perspective or opinion can be incorporated into this assignment?

- None
- Changes since starting course
- Personal values
- Values synthesized with facts and sources

How pervasive should student opinion be in this assignment?

- It should not be included
- It should frame the assignment
- It should be present only as an addition to other perspectives

What kinds of perspectives and positions might be integrated into the analysis of the issue?

- Expert perspectives in the field of study
- Popular opinion
- Other

How do you want the student to integrate perspectives and positions into the analysis of the issue or problem solution?

- Not at all
- Through referencing
- As examined through a predetermined structure
- As examined through a student-determined structure
- As examined through one or more overt theoretical frameworks

What kinds of assumptions do you want students to recognize with regard to this issue or in their approach to the problem?

- None needed
- Student's personal bias
- Predominant Cultural biases
- Awareness of views of different sub-groups
- Awareness of evidence
- Different theoretical frameworks
- Limits or constraints to the observation of the problem or issue

What do you want students to do with their recognition of assumptions?

- Nothing
- Describe
- Analyze
- Explain relevance

What kinds of supporting evidence is appropriate

- Personal anecdote
- Interview
- Researched materials
 - Books
 - Internet materials (limits?)
 - Scholarly periodicals
 - Popular culture materials
 - Newspapers
 - Other

How do you want students to use their evidence?

- Summarize to compare it with evidence from other sources
- Synthesize evidence from various sources to support generalizations and prove a point
- Extrapolate issues to draw conclusions (inductively or deductively).

What do you want the student to do to conclude the assignment?

- Summarize main points
- Consider personal implications
- Consider social-cultural implications
- Give the reader instructions or directions for additional thought or action
- Draw plausible connections which support larger principles or theories
- other

What rhetorical (communicative) mission does this piece of writing have?

- To teach
- To persuade
- To entertain

Who is the intended audience for this piece of writing?

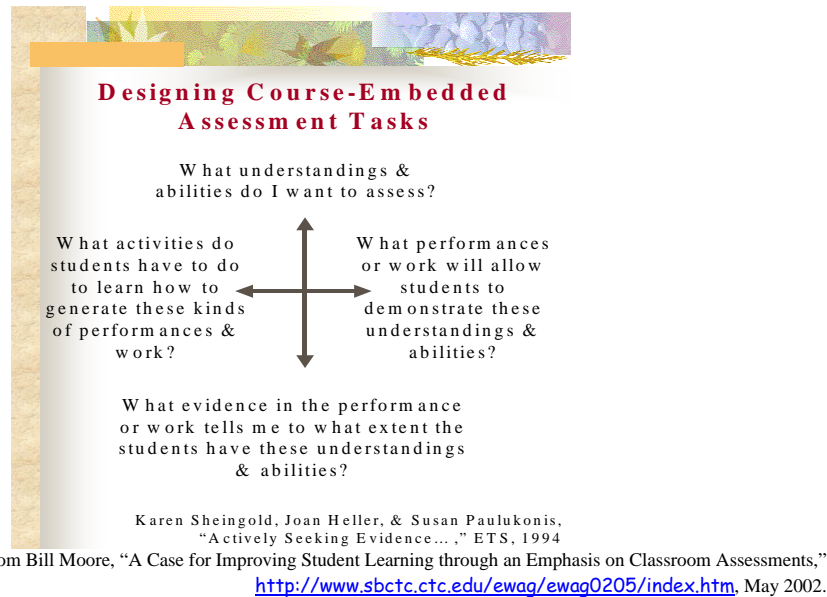
- Professor
- Peers, friends, family
- Classmate
- Layperson
- Professional in the field
- Child
- other

How long should the piece of writing be and how does this length support the assignment?

- 1-2 pages
- 3-5 pages
- 6-8 pages
- 8-12 pages
- 12-20pages
- other

Additional Details to consider:

- Formatting requirements
- Number of expected drafts or options for revision
- Opportunities for extra-credit
- The appropriateness of group work
- Would the assignment be better if given in parts or stage?
- Are there activities that could accompany the assignment?



1. Contextualize assessment and instruction in the classroom.
2. Recruit faculty to participate who are committed to teaching, and who are known as good teachers.
3. Encourage faculty to use rubric to suit disciplinary expectations, teaching styles, level of courses and so on.
4. Provide concrete examples—assessment criteria, assignments and so on.
5. Have faculty participants speak for the project.
6. Provide on-going, cross-disciplinary forums for faculty to share and exchange ideas.
7. Invite faculty to give presentations at regional and national conferences.
8. Create opportunities for faculty from across the state (or larger region) to exchange and share ideas—state-wide assessment conferences and retreats. Bring together faculty from two- and four-year institutions.
9. Compensate faculty for their time and efforts.
10. Encourage faculty participation for more than one semester. This allows faculty to try out new methodology and then to refine it.

Diane Kelly-Riley, Director Writing Assessment Program
Washington State University
dokelly@wsu.edu
509-335-1323

Development Outline
Washington State University
2001

The following outline provides an overview of the activities that typically take place during the planning and development of a project to incorporate technologies into the teaching and learning experience. Note that not every point in this outline is relevant for every project nor is every consideration necessarily listed here. This document is intended to provide a framework for establishing a project agreement.

Project Planning (3 months to a year, depending)

Overview: negotiate a contractual agreement.

- Overview of the development process:
 1. Review of the data: GAPS, critical thinking project, cost study analysis, ie: How do we know that this process works? How do we assess and then revise that process?
 2. Review of best practices.
 3. How will we work together?
- Outline responsibilities (including those related to any and all legal issues) of all team members in exchange for the use of institutional resources
- Review University policy on legal issues such as copyright & IP.
- Determine market and feasibility, including demographics.
- Establish remuneration.
- Establish nature of partnership and roles of various team members during development and delivery.
- (other issues include who teaches, how often the course is offered and revised, what's the process to determine when and what gets revised, how students services get provided, etc.)
- Orientation/workshop/training on facilitating online teaching and learning.
- Establish general specifications of the program/course based on market and program and insitutional goals.

Design (3 months)

Overview: development of the most appropriate approach to teaching and learning in general and what forms that approach will take in practice.

(2 months)

- Develop the design plan which involves
 1. Identification of program/course goals or project
 2. Identify sub-goals or project stages.
 - i. What students should be learning in the course
 - ii. What students need to do in order to learn those things
 - iii. Methods of guiding students in that learning process
 - iv. Methods of evaluating what students learn
 - v. Methods of helping students through difficult points in the course

Center for Teaching, Learning and Technology
<http://www.ctlt.wsu.edu>

Distance Degree Program
<http://www.distance.wsu.edu>

- vi. Develop evaluation criteria to determine how well students have met those goals.
- vii. Design activities appropriate for the criteria and goals.
- viii. Identify resources necessary for the students to complete those goals.
- ix. How will we assess this course?

(1 month)

- Consider any University policies and processes that may impact on the goals, activities, or resources and modify design plan as necessary.
- Identify other units or departments that need to be consulted and/or utilized as resources in the development process and how that collaboration will take place and modify design plan as necessary.
- Select the learning environment most suited for the course and program goals.
- Identify further training needs.

Development (2 months)

Overview: implementation of the design.

(1 month)

- Import the goals, criteria, and instructions for activities into the learning environment.
- Order/produce resources. Obtain copyright where necessary.
- Consult with DDLS on feasibility of assignments.
- Participate in any previously identified additional training.

(1 month)

- Orientation of faculty and student support services during delivery.
- Participate in any previously identified additional training.
- Review of course and course resources by support services staff.
- Final revisions.

Delivery

Overview: First offering which includes formative assessment and any resulting revisions.

- Facilitate students' orientation to the course by participating in introductory activities.
- Model substantive and collaborative interaction for students.
- Participate in planned assessment activities.
- Revise course as required based on assessment.

Course Generator
Washington State University
2002

1. Learning experience

In this section, elaborate on how this course relates to the larger program goals and how students will benefit academically, personally, and professionally.

Think about

- What should students be able to do or think about differently when they've completed the course (i.e. complex problem solving, creative idea generation, communication skills, other content-specific skills, etc.)?
- What relevant attitudinal changes students can expect to adopt as a result of working through the course?
- What expert skills will students develop, including both critical thinking and physical skills?
- What can the students expect to experience as the work through the course?
- What do students expect to get out of the course?
- How will students use the knowledge and skills outside this learning experience?

Tip: it often helps frame the course by thinking about what one question students should be able to answer at the end of the course and what sub-questions would best help them answer that main question.

Assessment Considerations:

- What is the relationship between the course goals and educator's expectations and student goals and expectations?
- How can we best determine that relationship and what do we do with that information once we have it?

2. Evaluation Criteria

Once students have a sense of what a course is about and what they can hope to get out of and contribute to it, they need to know how they will be able to recognize what they're learning and how well they're doing that.

- How you will be able to tell when your students have engaged successfully in the kinds of learning experiences described above.
- What does it mean to have successfully grappled with the concepts and issues?
- How can the acquisition of the skills best be manifested?
- What would the process of acquiring those skills look like?

Assessment considerations:

- How will we determine if our criteria really measures what we think it is measuring?

3. *Activities*

Once students have a sense of what a course is about, what they can hope to get out of it, and how their work will be assessed, it is important for them to have a clear sense of what they can expect to do to acquire those skills and knowledge.

- What do students have to do to acquire the skills demanded of this course?
- How can they collaborate to draw on their own and their colleagues' existing knowledge and skills and collaborate with one another to refine what they already know and to generate new awareness, knowledge, and skills?
- Are there other institutions, businesses, community organizations etc with which they can partner to gain real life experience?
- In what ways should students expect to be able to contribute: i.e. in what ways can they expect to be able to draw on and share their own knowledge and experiences?
- What kinds of activities will best mirror what they will be doing once they've completed this course and are putting their newly acquired skills to use?

Assessment considerations:

- How will we determine if the activities actually help students meet the evaluation criteria and reach course and course goals?

4. *Resources*

Students will need to access information in one way or another. To help ensure the required resources are both accessible and relevant to the course, we need to think about how we can best make that information accessible to them and how those resources contribute to their learning.

- What resources already exist and can be easily incorporated?
- Are there any copyright issues?
- Where are the students and what access do they have to technologies such as the Internet, synchronous video/audio systems, computer technology?
- What barriers might exist to students' ability to meet synchronously?
- What kind of research is required of the students?
- What skills do they need to be able to be effective in conducting that research?

Assessment Considerations:

- How will we determine the effectiveness of the selected resources?
- How will we determine if additional or different resources are required?

5. *Description of the course*

This section provides students with an overview of the curriculum for the course: the main concepts and issues to be covered and skills to be developed as well as the relevant contexts, parameters, and approaches.

Here are some questions to help you develop a full description:

- What, if any, are the underlying biases, perspectives, assumptions of this course?
- In what ways should students expect to be able to contribute: i.e. in what ways can they expect to be able to draw on and share their own knowledge and experiences?
- What special areas of expertise do you and your fellow faculty bring to this discipline?
- What knowledge and skills should students expect to have before beginning this course including specific prerequisite knowledge/skills, life-experiences?
- How will participating in this course benefit students?

Assessment considerations:

- How complete and accurate is the syllabus for the course?
- How responsive is the syllabus and course design to marketing analysis and needs assessment?

6. Assessment

Best practices are informed through an engagement with and contribution to scholarly research. As educators, we are all interested not only in our specific subject area but also in how the skills and knowledge we value is disseminated and developed in others.

- How can we identify best practices to inform our colleagues and educators in other fields who may share similar experiences?
- How can we determine what doesn't work so well so that we don't continue to make the same mistakes?

FORMATIVE ASSESSMENT RUBRICS
Evaluating Rubrics Used for Skill and Ability Development

Formative Rubric: An instrument used to guide the teaching and development of performance-based skills and abilities in a reliable, fair and valid manner.

It is assumed a functional formative rubric adequately addresses all the issues listed in the "Not Functional" column.

	Not functional	Functional
Structured feedback	<input type="checkbox"/> Provides only a series of checkmarks <input type="checkbox"/> No space for written comments <input type="checkbox"/> Rubric is only used once <input type="checkbox"/> Used only to give grades or scores	<input type="checkbox"/> Rubric is used developmentally <input type="checkbox"/> Rubric focuses written and verbal feedback <input type="checkbox"/> Rubric promotes discussion
Multifaceted	<input type="checkbox"/> Insufficient criteria to describe skill or ability <input type="checkbox"/> Criteria do not reasonably describe the skill or ability	<input type="checkbox"/> Combined, the criteria describe the skill or ability assessed <input type="checkbox"/> Criteria are authentic indicators of skill
Common Language	Language is: <input type="checkbox"/> not used in assignments and/or classroom discussions <input type="checkbox"/> subjective, repetitive, and carries an ill-defined message	Language is: <input type="checkbox"/> behavioral and observable <input type="checkbox"/> communicates clear expectations <input type="checkbox"/> free from bias <input type="checkbox"/> promotes critical thinking & communication
Validity	<input type="checkbox"/> Criteria rated primarily by quantitative marks to rate performance <input type="checkbox"/> Criteria rated is limited to what is easy to see or count	<input type="checkbox"/> Qualitative, not quantitative, differences in performance are identified <input type="checkbox"/> Criteria rated is central to performance <input type="checkbox"/> Rubric focuses rater's attention on factors other than students' gender, race, age, ethnic heritage, appearance, or prior academic record
Developmental performance	<input type="checkbox"/> Wording is repetitive and does not provide useful designations of skill development <input type="checkbox"/> Degree of difference between levels or phases of skill development is unequal	<input type="checkbox"/> Levels or phases of skill development are distinctive <input type="checkbox"/> High ratings truly represent exemplary performance as a standard of excellence and incorporate prior attainment of skill development
Reliability	<input type="checkbox"/> Assessment yields inconsistent results when used by faculty, students & external assessors <input type="checkbox"/> No agreement about what constitutes good performance <input type="checkbox"/> Students' skill levels do not improve <input type="checkbox"/> Outcome is not readily attained	<input type="checkbox"/> Assessment yields consistent results when used by faculty, students & external assessors <input type="checkbox"/> Rubric is an excellent teaching tool <input type="checkbox"/> Students achieve the intended outcome
Context	Rubric is: <input type="checkbox"/> not integrated into course in meaningful ways <input type="checkbox"/> above or below students' developmental comprehension <input type="checkbox"/> not aligned with course content, design, and outcome	<input type="checkbox"/> Criteria can be reasonably taught and assessed <input type="checkbox"/> Rubric matches students' language and development levels <input type="checkbox"/> Rubric is aligned with course content, design, and outcome

Christine Martin, Curriculum Development Specialist
 Pierce College
cmartin@pierce.ctc.edu
 253-964-6309

**General Education Goals and Outcomes
within WSU's Baccalaureate Programs
1996**

The "Goals and Outcomes" listed below define the aims of the General Education curriculum in support of WSU's undergraduate degree programs, including major programs. Other discipline-specific objectives may be identified and addressed within the various majors. The General Education curriculum should contribute substantially to the achievement of these outcomes, but in conjunction with the students' experience of the major curriculum. Attempts to measure student progress at certain strategic points in the curriculum do not imply that some single component or course is the sole source of the progress; intellectual growth is a complex and synergistic process with many contributing factors, including extra-curricular ones. On the other hand, part of the purpose of articulating programmatic goals and outcomes is to allow instructors to envision more clearly how their separate courses relate to a larger whole.

As outcomes of their education, WSU students should be able to:

1. Reason critically

- a. Define and solve problems
- b. Integrate and synthesize knowledge
- c. Assess the accuracy and validity of findings and conclusions
- d. Understand how one thinks, reasons, and makes value judgments
- e. Understand diverse viewpoints, ambiguity and uncertainty
- f. Understand differing philosophies and cultures

2. Conduct self-directed or independent learning projects

- a. Demonstrate research and information retrieval skills
in the library
on the internet
- b. Evaluate data and apply quantitative principles and methods
- c. Show evidence of continued self-directed learning
- d. Demonstrate creativity in framing and solving problems
- e. Understand how one thinks, reasons, and makes value judgments

3. Understand the roles of normative views and values, including ethics and aesthetics

- a. Understand distinctions between value assertions and statements of fact;
recognize and evaluate evidence
- b. Derive the premises upon which systems of value are grounded
- c. Understand historical and contemporary systems of political, religious, and
aesthetic values
- d. understand diverse viewpoints and respect the rights of others to hold them;
understand the contingent nature of truth; tolerate ambiguity and
uncertainty
- e. develop aesthetic sensibilities in regard to art, literature, nature

Richard Law, Director, General Education
Washington State University
rlaw@wsu.edu
509-335-5699

4. Communicate conclusions, interpretations and implications clearly, concisely and effectively, both orally and in writing

- a. Critically analyze written information
- b. Define, evaluate, and solve problems
- c. Organize for clarity and coherence in writing and speaking tasks
- d. Show awareness of contexts--audiences, styles, & conventions
- e. Be able to use correct standard English
- f. Show evidence of copy-editing skills
- g. Work cooperatively

5 Acquire and assimilate knowledge in a variety of modes and contexts and recognize diverse disciplinary viewpoints and methods

- a. Understand and apply scientific principles and methods
- b. Understand and apply quantitative principles and methods
- c. Understand and apply the principles and methods of the arts and humanities
- d. Understand and apply the principles and methods of the social sciences

6. Understand the historical development of human knowledge and cultures, including both Western and non-Western civilizations

- a. Demonstrate awareness of a broad overview of the human past
- b. Understand perspectives linked to race, gender, ethnicity both in American society and in international contexts
- c. Understand differing philosophies and cultures
- d. Understand the interaction of society and the environment
- e. recognize one's responsibilities, rights, and privileges as a citizen

Richard Law, Director, General Education
Washington State University
rlaw@wsu.edu
509-335-5699

Here is a shorter version of the goals of the Undergraduate Programs, to make comparison easier with our World Civilizations objectives:

As outcomes of their education, WSU students should be able to:

1. Reason critically
2. Conduct self-directed or independent learning projects
3. Understand the roles of normative views and values, including ethics and aesthetics
4. Communicate conclusions, interpretations and implications clearly, concisely and effectively, both orally and in writing
5. Acquire and assimilate knowledge in a variety of modes and contexts and recognize diverse disciplinary viewpoints and methods
6. Understand the historical development of human knowledge and cultures, including both Western and non-Western civilizations

Our learning objectives for the World Civilization courses:

1. To develop students' abilities to recognize and to analyze problems; to synthesize diverse kinds of information, to ask questions and to think critically; [1]
2. To provide coherent intellectual frameworks for subsequent learning; [1, 5]
3. To introduce students to basic methodologies in the scholarly disciplines; [5]
4. To provide students a common body of basic knowledge concerning the major world civilizations; [3, 6]
5. To encourage students to develop a broad international perspective as a background for understanding the contemporary world, including issues of American diversity; [3, 6]
6. To enhance students' awareness, understanding, and appreciation of the great art, thoughts, and achievements of human beings throughout history;
7. To develop students' writing skills and ability to express their ideas clearly and cogently; [4]
8. To teach basic information retrieval and library research skills; [2, 5]

Richard Law, Director, General Education
Washington State University
rlaw@wsu.edu
509-335-5699

Sample Assignments



Gen Ed 111: World Civilizations, 1500-Present
Expert and Jigsaw Groups
Collaborative Learning Process

Regions

Throughout the semester, you will work to become an expert on one of the following regions:

- South Asia (India, etc.)
- East Asia (Japan, China, Korea, etc.)
- Europe
- Middle East and North Africa
- Sub-Saharan Africa
- Anglo-America (U.S. and Canada)
- Latin America

You will work in "Expert" groups of approximately seven students each to conduct research about your group's region and to prepare reports that you will present in class and post to the Speakeasy Studio and Café. We will cycle through this process six times during the semester, as follows:

Class meeting 1: Expert groups meet in class to plan the current research cycle.

Class meeting 2: Expert groups meet in class to assemble their research and plan their presentations.

Class meeting 3: Expert groups split up, each member joining a "Jigsaw" group, where the members from different Expert groups share the information their own groups have developed.

Speakeasy Activity: One or two members from each Expert Group writes up the report for this cycle and posts the report to the Speakeasy. The analysis will comprise a 5-7 page written summary of her/his group's presentation, including a one-page annotated bibliography of library and online sources for the report. These analytical reports must be posted within three calendar days of the Jigsaw Group meetings for that cycle.

Evaluation: Expert Group members fill out an evaluation of the group's work for the current cycle, including an evaluation of the contributions individual members made to the group.

Reports

1. Expert Groups will develop reports based on each of five broad topic areas for their regions:
 - Material Base—Information about the region's geography (including maps), its primary economic systems, and its subsistence systems.
 - Social System—Information about kinship systems, gender roles and relationships, issues of class, and political systems.
 - Ideological System—Information about primary religions, philosophy, science and technology.
 - Creative Arts—Information about literature, music, visual arts, and architecture in the region.
 - Continuity/Change over Time—Historical information about the region's stability (continuity of governments, change in the region over time, etc.).

Bill Condon
 Director, Writing Programs
 Washington State University
bcondon@wsu.edu

2. **Jigsaw Groups** consisting of one member from each of the regional Expert Groups will convene once per cycle in order to hear the presentations from each of the Expert Groups. In this way, the whole class will share the products of each group's research.
3. At the end of each cycle, each Expert Group will write up its presentation. This 5-7 page analysis, including a one-page annotated bibliography of library and online sources for the report, will be posted to the Speakeasy Studio and Café, so that the class can have access to the report from that date on. These reports will be posted no later than three calendar days after the Jigsaw Group meetings in class. Expert Groups should assign one or two members per cycle to write and post this analysis (In this way, each group member will write or co-author at least one report).

Questions

For each cycle, each Expert Group must post to the Speakeasy a list of proposed test questions from the information the group has developed. Questions should include the following:

1. Ten questions of fact. These should be short-answer questions that simply reveal whether the responder has learned the information in the group's presentation.
2. Two discussion questions. These should be essay questions about significant issues presented in the group's research.

Again, these questions should be posted to the Speakeasy within three calendar days of the Jigsaw Groups' meetings in class.

The Sixth Cycle: WTO Project

One of the goals of World Civ is to think about how what we are studying affects us. We will use the Expert/Jigsaw process to explore the World Trade Organization (WTO) controversy. We will spend one cycle researching the WTO itself—its origins, its history, its provisions, etc. Then, in the final cycle, each Expert Group will use its expertise to explain and account for its region's position(s) vis-à-vis the WTO.

Evaluation

At the end of each cycle, each group member will fill out an evaluation of that cycle's work, including input about the contributions of the group members. These evaluations will figure into the group members' grades for this collaborative work.

Bill Condon
 Director, Writing Programs
 Washington State University
bcondon@wsu.edu

General Guidelines for Research Paper Assignment
FREN 350/450 Québécois Literature and Culture

There are three main purposes in the assignment of the research paper in this class.

1. Research skills: To provide the opportunity to develop your skills at locating, reading and assessing scholarly writing found in books, journals, and the WWW.
2. Writing skills: To provide the opportunity to enhance your skills at integrating information from a variety of primary and secondary sources into your own discussion of the topic. The mechanics of your writing is also a focus of this assignment (basic grammar, stylistic devices, etc.).
3. Analytical skills: To provide the opportunity to do close readings of literary texts and to write and talk about themes found in these texts.

The TOPIC for this research paper is decided in consultation with the instructor. The paper should not be a one-dimensional descriptive report or re-telling of a story, but an analysis of a theme found in a work we have read. In general, you should:

- a. Identify an important topic or theme that interests you in one or more of the novels or short stories read in this courses (i.e. voyage, isolation, community, exile...) and formulate a thematic statement or a thesis (i.e. 'The Role of the Mother in Early Québécois Novels' or 'Matriarchal Home/Patriarchal Society as Reflected in [you supply author/text]).
- b. Find 3 relevant articles or books about that topic and/or the text. None of the sources can be an encyclopedia. Additionally, you may only use two Internet sources that are not journal articles. Photocopy and submit your articles.
- c. Prepare a summary and an assessment of the main points of each article or book, to be handed in (due date on Work Plan).
- d. Write a 5-6 page double-spaced paper analyzing the theme. Integrate your sources and quotations from the text itself to enhance (not supplant) your own thoughtful discussion of the thesis. Relate all parts of the paper back to the thesis. If this cannot be done, you will need to consider whether a particular source is indeed relevant to your argument or if you need to revise your thesis statement or topic. Use the MLA format to cite your sources.

The BODY of your analysis should contain:

- i. commentary on both the complexities and the nuances of the theme as found in the text;
- ii. specifics about the context in which the theme is developed (could be economic, racial, historical, religious, social, etc.);
- iii. mention of your reading of the theme and that of scholars who have written about the theme or related aspects of the text;
- iv. discussion of assumptions that are made either by the author of the text and/or the perceived/actual reader (you or another) regarding the issue you are discussing.

Joan Grenier-Winther
Associate Professor of French
Department of Foreign Languages and Cultures

Your CONCLUSION should tie all of the threads of your analysis/argument together into a comprehensive and coherent final statement on the theme you have studied, rather than a simple restating of points already made in the body of the paper. That means that you need to give the reader a sense of closure on the topic, while suggesting to him/her possible implications and/or consequences of your analysis that go beyond the text at hand.

The fine print: The first draft of your paper will peer- and instructor-reviewed. On Tuesday of week 12, bring three copies of your paper to class. Two students plus the instructor will each take a copy of your paper home and write out a more detailed critique to help you with revisions for your final version. They will use the same evaluation criteria as will be used on the final paper. *If you are absent this day, you will have 10 points deducted from the final paper grade. Anyone coming with an unfinished first draft will lose 5 points.* Reviewers must be tactful, but are expected to provide honest, constructive feedback. Peer reviewers and instructor will return the papers on the following Tuesday.

You will turn in the final version of the paper by due date on the syllabus. The evaluation criteria sheet will accompany the instructor's specific comments of your paper and your grade. Late submissions will lose 5 points.

Remember, an effective paper will have:

- An interesting and informative introduction
- A clearly defined focus and thesis
- Logical organization and transitions
- Smooth synthesis of ideas from outside and textual sources
- Effective, logical and interesting conclusion
- Correct use of the MLA citation format
- No evidence of plagiarism
- An awareness of the audience; appropriate scholarly tone
- Correct use of syntax, grammar, punctuation, spelling

Joan Grenier-Winther
Associate Professor of French
Department of Foreign Languages and Cultures

Econ 198 First Writing Assignment

Option 4: Economics in the Arts

The values of a society are often expressed, touted, or challenged in movies, theater, music, and art. If you have an interest in any of these areas, find a treatment of any concept we have discussed or read in this course so far, and write an essay describing how the concept was expressed. The concept can be broad (racial economic theory, property rights, capitalism, communism, liberty) or narrow (the meat-packing industry, farm policy, the job market for unskilled labor..). Articulate the point the artist is making. This may be quite subtle, and may take up a considerable portion of the paper. Evaluate the artist's treatment of the economic concept. What is the artist's attitude toward the economic environment he/she portrays? Consider the work in the context of the artist's life and times. What events influenced her attitudes? How did the artist influence your own thinking about the particular economic concept addressed? If you choose a piece of music or art, I would like you to turn in a tape or a reproduction of the work with your essay. If you choose movies, let me know where I can rent the video.

Writing Assessment Rubric for Option 4
Econ 198

1) Identifies and summarizes the economic content of the piece.

Weak.....Strong

Does not relate the text to economics at all: merely provides a book report or a literary criticism. Is confused about the issue, or represents the issue inaccurately or incompletely.	Clearly articulates the economic content in the introductory paragraph.
---	---

2) Identifies and articulates the artist's point.

Weak.....Strong

Misses the point	Identifies applicable principle(s) and clarifies distinctions at many levels.
------------------	---

3) Evaluates the artist's treatment of the economic concept in light of economic theory.

Weak.....Strong

Fails to critically evaluate the artist's perspective. Accepts unquestioningly or rejects out of hand the artist's opinions or the principles of economic theory.	Successfully evaluates the artist's position in light of the relevant economic theory. Recognizes the point of departure from or the parallels to mainstream economic theory.
---	---

4) Identifies and considers the influence of context (eg., social, cultural, economic, ethical..) on the artist's treatment of the economic concept.

Weak.....Strong

Does not identify the context within which the concept is being presented.	Identifies and uses the relevant context to "make sense" out of what the artist was saying.
--	---

5) Discusses personal response to the artist's treatment of the economic concept.

Weak.....Strong

Restates the artist's perspective without evaluation or reflection	Considers artist's perspective, evaluates merits of the piece, and identifies any influence it may have had on student's own thinking. Describes the emotional impact of the artist's work.
--	---

Pat Kuzyk
Department of Economics, Washington State University
pkuzyk@wsu.edu