

"New Media Technologies and the Scholarship of Teaching and Learning"

January 2009 issue of Filtered: The Academic Commons Magazine

Edited by Randy Bass with Bret Eynon and an editorial group from Georgetown University's Center for New Designs in Learning & Scholarship (Eddie Maloney, Susannah McGowan, John Rakestraw and Theresa Schlafly)





Reprinted from the January 2009 issue of Academic Commons on "New Media Technologies and the Scholarship of Teaching and Learning," edited by Randy Bass with Bret Eynon and an editorial group from the Center for New Designs in Learning and Scholarship (CNDLS) at Georgetown University— Eddie Maloney, Susannah McGowan, John Rakestraw and Theresa Schlafly http://www.academiccommons.org/issue/january-2009

Academic Commons

Academic Commons is licensed under a Creative Commons license (http://creativecommons.org/licenses/by-nc-sa/3.0/)
Michael Roy and John Ottenhoff, Editors
Lisa Gates, Managing Editor
http://www.academiccommons.org

Center for New Designs in Learning and Scholarship (CNDLS) 3520 Prospect St. NW, # 314 Washington, DC 20057 http://cndls.georgetown.edu

Table of Contents

New Media Technologies and the Scholarship of Teaching and Learning:

A Brief Introduction to this Issue of Academic Commons

Capturing the Visible Evidence of Invisible Learning

Randy Bass, Georgetown University Bret Eynon, LaGuardia Community College, City University of New York

The Difference That Inquiry Makes: A Collaborative Case Study on Technology and Learning from the Visible Knowledge Project

Edited by Randy Bass, Georgetown University, Bret Eynon, LaGuardia Community College, City University of New York

From Knowledgeable to Knowledge-Able: Learning in New Media Environments

Michael Wesch, Kansas State University

Participatory Learning and the New Humanities: An Interview with Cathy Davidson

Making Common Cause: Electronic Portfolios, Learning, and the Power of Community

Kathleen Yancey, Florida State University Barbara Cambridge, National Council of Teachers of English Darren Cambridge, George Mason University

"The Future of ePortfolio" Roundtable

Bret Eynon, LaGuardia Community College, City University of New York

Opening Up Education: The Remix. Excerpts from Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge

by Toru liyoshi and M.S. Vijay Kumar, eds.

Building a Network, Expanding the Commons, Shaping the Field: Perspectives on

Developing a SOTL Repository Tom Carey, California State University Jennifer Meta Robinson, Indiana University John Rakestraw, Georgetown University

"Can We Promote Experimentation and Innovation in Learning As Well As Accountability?"

The VALUE Project Thinks We Can and Here's

How: An Interview with Terrel Rhodes

"Can We Promote Experimentation and Innovation in Learning As Well As Accountability?"

The VALUE Project Thinks We Can and Here's How: An Interview with Terrel Rhodes
Randy Bass, Georgetown University

Editor's Note: What does the learning revolution inherent in the expansion of social and digital media have to do with the national conversation around assessment and accountability? Faculty often fear that "assessment" (especially mandated assessment) will have a reductive effect, either by reducing the rich complexity of teaching and learning to simplistic metrics, or by limiting what's being measured to lower-order skills that can easily be measured. Among those who experiment with new media technologies the tension is exacerbated, as student learning gains in new digital environments seem increasingly expansive, holistic and difficult to measure. How then might we find common ground between an impulse to get a more trenchant read on institutional effectiveness at inducing learning and the cultivation of innovation in teaching that higher education so badly needs?

The VALUE project comes into the middle of this tension, as it proposes to create frameworks (or metarubrics) that provide flexible criteria for making valid judgments about student work that might result from a wide range of assessments and learning opportunities, over time. In this interview, Terrel Rhodes, Director of the VALUE project, describes the assumptions and goals behind the Project. He especially addresses how electronic portfolios serve those goals as the locus of evaluation by educators, providing frameworks for judgments tailored to local contexts but calibrated to "Essential Learning Outcomes," with broad significance for student achievement. The aims and ambitions of the VALUE Project have the potential to move us further down the road toward a more systematic engagement with the expansion of learning.—Randy Bass

Randy Bass: What is VALUE? What problem is it trying to solve?

Terrel Rhodes: In short, the VALUE Project (Valid Assessment of Learning in Undergraduate Education) works to develop approaches to assessment based upon examples of student work completed in their courses and saved over time in an e-portfolio.¹ The project collects and synthesizes best practices in assessing student work using rubrics developed by faculty members. One of the project's core purposes is to identify commonalities of outcome expectations of achievement across a variety of institutions.

The project really grew out of the national conversation that was begun with the Essential Learning Outcomes (ELOs) articulated as part of AAC&U's ten-year LEAP (Liberal Education and America's Promise) initiative and developed through campus-community conversations (AAC&U 2007). There are fourteen ELO's, ranging from skills—perhaps more readily assessable—such as written communication or quantitative literacy, to broader abilities and dispositions, such as problem solving, critical

I The VALUE project website can be found at http://www.aacu.org/value/

thinking, and ethical reasoning. Also included among the ELO's were more abstract—but no less "essential"—learning goals such as civic engagement, intercultural knowledge, creative thinking, and integrative learning.²

What we were finding was that there was broad agreement about the value of these learning outcomes, but considerable lack of clarity and precedent for how to be accountable to them. That is, how could a campus or a program use one or more of these Essential Learning Outcomes as a driver for changes and improvement in practice, or even as a measure of how well current curricula were achieving these goals? People were asking, "if we wanted to take these learning outcomes seriously how would we do that? Where would we look? How would we have results that might be comparative and valid?"

We were responding to the growing consensus that to achieve a high-quality education for all students, valid assessment data are needed to guide planning, teaching, and improvement. That was one core assumption. And it was clear that colleges and universities were interested in fostering and assessing many of these essential learning outcomes beyond those addressed by currently available standardized tests—or for that matter that are captured by student performance in individual courses.

We also started from some other assumptions, such as: that learning develops over time and should become more complex and sophisticated as students move through various pathways toward a degree; that good practice in assessment requires multiple assessments, over time; and that well-planned electronic portfolios provide excellent opportunities to collect meaningful data about student learning, from multiple assessments, across a broad range of learning outcomes. At the same time, the electronic portfolio process can serve to help guide student learning and build self-assessment capabilities. Ultimately, we believe that e-portfolios and the assessment of student work in them can better inform programs and institutions on how effectively they are helping students achieve their expected goals.

Say more about what kind of learning is being assessed? What kind of student performance gets looked at in the e-portfolios?

The project builds on a philosophy of learning assessment that privileges multiple expert judgments of the quality of student work over reliance on standardized texts administered to samples of students outside of their required courses. The VALUE project builds on the work campus faculty and staff have done in developing assessment rubrics to evaluate achievement of a broad range of Essential Learning Outcomes and in articulating the expectations and criteria for student learning at beginning through advanced levels of performance. The project explores how rubrics can be applied to the actual work students have done both in their required courses and co-curricular activities.

The initial reaction to the national accountability demands for indicators of student learning have resulted in calls to use tests that have some basic characteristics in common: they are in some way standardized; they result in a score or quantitative measurement that summarizes how well a group of students has performed; they test only samples of students at a given institution; they require

² See a complete list and description of the Essential Learning Outcomes at http://www.aacu.org/leap/vision.cfm

additional costs for students or institutions to administer; they reflect a snapshot picture at one point in time; they provide an institutional rather than an individual score; and they lack high stakes for the students taking the exams.

It is ironic that just at the point when higher education research has finally developed a rich information base on effective practices that enhance learning, on cognitive development and neurobiologic bases of knowing, and technological advances that greatly expand our abilities to collect, preserve and demonstrate complex, multi-faceted learning, that we so willingly accept outmoded, snapshot, shorthand representations of the value of our educational outcomes and impact on student learning.

In contrast, the VALUE project responds to the need for multiple measures of multiple abilities and skills, many of which are not particularly well suited to snapshot standardized tests. The types of learning that employers and policy makers are calling for need to be demonstrated through cumulative, progressive work students perform as they move through their educational pathways to graduation; rich, multifaceted representations of learning in curricular and co-curricular contexts, rather than artificial examinations divorced from applied contexts.

Why e-portfolios? How is the e-portfolio different from other kinds of assessments?

The evidence of learning collected in an e-portfolio creates a rich portrait of achievement for an individual and, with sampling and analysis from a collection of portfolios, can create a similar portrait of a program or an entire institution. Drawing directly from curriculum-embedded and co-curricular work, e-portfolios can represent multiple learning styles, modes of accomplishment, and the quality of work achieved by students.

Although it is not a direct objective of the Project, VALUE promotes wider use of e-portfolios for assessment without impairing the developmental and progressive dimensions of e-portfolios as spaces that students can own to represent themselves as learners and to make connections across their educational experience. We believe that e-portfolios, potentially, can foster and provide evidence of high levels of student learning, across a vast range of experiences, and across programs and institution-wide outcomes.

By gathering and disseminating student work through electronic portfolios, the same set of student performance information can be used at course, program and institutional levels for assessment purposes, and faculty can collaborate on assessing and responding to student progress. Student work from on and off campus and from all the institutions a student may have attended can be included in a single presentation of student accomplishment over time and space.

We also know, from twenty or more years of pioneering work with portfolios in higher education that periodic reflections on learning by students are critical components of an education. Student reflections, along with self and peer assessments, guided by rubrics, help students to judge their own work as an expert would. These reflections and self-assessments all become part of the collection of work that gets evaluated in light of the Essential Learning Outcomes.

What are these rubrics or metarubrics? What are they supposed to do? What can't they do?

All teachers use criteria for achievement, if only implicit. Many educators at all levels have created and make use of explicit "rubrics," or scoring guides, with statements of expected levels of achievement using criteria vital to quality work in a chosen area. For VALUE, the criteria for the rubrics at the center of the project are determined in discussions among experts in the appropriate fields.

The VALUE project has collected rubrics from faculty and programs across the country designed to assess all of the Essential Learning Outcomes. Teams of cross-institutional faculty and staff have been assembled, bringing their own expertise to the process. They have examined the rubrics for the purpose of identifying and articulating the most commonly shared expectations or criteria for learning for each outcome and at progressively more sophisticated and complex levels of performance. This analysis has resulted in what we have been calling "metarubrics," or shared learning expectations. (See Appendix for rubrics for Critical Thinking, Creative Thinking, and Integrative Learning.)

The VALUE project is piloting the use of these rubrics by having faculty score actual student work collected in e-portfolios on twelve leadership campuses and additional partner campuses.³ Although e-portfolio assessment does not typically result in a simple number or score for students, programs, or institutions, it does result in shared judgments about the quality of student performance in terms of important learning outcomes. The use of rubrics is not new, nor are the methods for creating inter-rater reliability. The resulting e-portfolio scores and judgments are more detailed, indicative of the types of learning expected, and nuanced than simple numeric scores. The examples of work upon which the assessments are based are what the students actually submitted in response to assignments and requirements of the curriculum (and co-curriculum) that comprised their educational program; therefore they reflect the students' levels of motivation, focus, and investment in demonstrating their learning as exhibited on a day-to-day basis, i.e. the assessment data have face validity.

We hope that the VALUE project will be able to demonstrate several things: that faculty across the country share fundamental expectations about student learning on all of the Essential Learning Outcomes deemed critical for student success in the 21st century; that rubrics can articulate these shared expectations; that the shared rubrics can be used and modified locally to reflect campus culture within this national conversation; and that the actual work of students should be the basis for assessing student learning and can more appropriately represent an institution's learning results.

Specifically, how does student learning and student work get assessed? What is the relationship between these "metarubrics" (at a national level) and what actually happens at the local level?

From the collection of rubrics for each outcome, we have engaged teams of faculty and staff to examine the rubrics and to identify the criteria or expectations for learning that appear across multiple institutions. In essence, we have asked the teams to articulate shared expectations and criteria for each outcome. The purpose of this exercise is to demonstrate to ourselves, and to those outside the academy, that faculty across the country and at different types of institutions do have shared criteria for what student learning should look like from beginning or novice levels through advanced understandings and applications.

³ For a complete list of leadership campuses, see http://www.aacu.org/value/leadership_campuses.cfm.

The shared general criteria are too broad to be useful for assessing specific student work at a course level, but the local rubrics developed for assessing student work are mirrored in these metarubrics that encapsulate the shared expectations of faculty and others for student performance. The local rubrics will use different terms and language, but the core criteria contained in the metarubric map onto these local rubrics so that faculty and staff can use what they have developed that works for their purposes with their students, and at the same time show how what they and their students are doing fits within the core expectations for learning that are shared nationally. We can reduce these shared or common expectations to numbers, but we don't have to and we can therefore engage as a result in a much more robust conversation about what and how well our students are mastering learning outcomes.

Various campuses have been taking the core criteria of the metarubrics and translating them into the language and context of their particular discipline or program when using the rubrics to assess their students' work. Other campuses have been testing the metarubrics along with their previously developed local rubrics and comparing the results when used side by side to assess assignment products. We are in the process right now of gathering these types of feedback to modify the metarubrics and further refine the ability of the metarubrics to represent shared expectations that can be used on a variety of campuses and programs.

Where are they being used and tested? What are some examples of what test campuses are doing?

The metarubrics are being tested by faculty on twelve leadership campuses that have histories of using rubrics and e-portfolios to assess student work. The twelve leadership campuses represent large and small, public and private, two and four year institutions, and regions of the country. Each of these campuses uses student e-portfolios in one form or another to have students capture and present examples of the work they have done in response to assignments embedded in the curriculum and co-curriculum at their institutions.

We have relied upon the established processes on these campuses for testing the metarubrics. In many instances, the campus faculty has used their local rubrics and the metarubrics for comparison of the comparability of the rubrics. No campus has piloted all of the rubrics, but all rubrics have been piloted among the campuses collectively. Based on the piloting of the metarubrics, the rubric teams have revised the metarubrics. In total, there will be three iterations of piloting and redrafting for each metarubric during the VALUE project process. Final drafts will be available in the summer of 2009.

In addition, almost sixty other campuses have requested permission to pilot test one or more of the rubrics with student work on their respective campuses (not all of these campuses are using e-port-folios of student work). On every campus, though, faculty members and student services colleagues are using the metarubrics to see how useful they are in assessing student work on the respective learning outcomes.

A lot of work with new media technologies involves student work that doesn't fit traditional assessments. How might VALUE be useful for understanding new kinds of learning?

One of things that we have learned through the research on student learning is that newer generations of students are exhibiting a variety of learning styles. As everyone knows, current students are much more technologically savvy than earlier generations; they use and expect to use the internet, audio and video sources, social networking modes, etc. Many of our students do not perceive learning as a linear process more attuned to traditional reading and writing – hyperlinking and networked learning are more commonly apparent in the classroom. Couple this with the fact that most student learning occurs outside of the classroom, we have an environment in which we need to be able to encompass a wider variety of modes for students to demonstrate their learning processes and achievements. By definition this forces us to encompass audio and video, Web 2.0, hard copy and virtual learning.

The e-portfolio allows us to bring all of these, and other, modes of learning and demonstration of learning into the collection of evidence we use to assess student learning in the full complexity and variety of its existence. We have tried to encourage our rubric development teams to write rubrics that are not bound by the printed page conception of learning, but applicable and encompassing of other modes of performance.

Are there campuses using the VALUE rubrics to look at non-traditional kinds of learning?

Several campuses already have their students incorporate non-traditional modes of demonstrating their learning in the student e-portfolios. Portland State University has students including videos of community based work, performances, presentations to government boards, or interviews in their e-portfolios to demonstrate communication skills, civic engagement, working in teams, etc. Alverno College has all of their students record oral presentations to show the growth and development of these abilities as they move through the curriculum. LaGuardia Community College has their students deeply engaged in visual representations of their learning through art work, e-portfolio design, etc. as a way to communicate their learning to family and communities outside the academy who are often not accustomed to the text-heavy traditions of higher education. Bowling Green State University, St. Olaf College and the University of Michigan have students incorporate connections outside the classroom, whether they are in co-curricular activities or community-based learning related to the curriculum.

Often we perceive a tension between the desire to assess student learning and the interest in experimentation with new approaches to learning. Assessment of recognizable outcomes and innovation often seem at odds. Might the work of the VALUE project help address that tension?

We certainly hope so. The development of the metarubrics and their pilot testing on campuses was designed to create a shared set of standards that could be used for assessing, or judging, more traditional modes or demonstrations of learning, as well as Web 2.0, live performances or other types of learning. The outcomes for learning can be demonstrated in many ways. In the past, some have been too quick to conclude or declare that certain types of learning cannot be measured. The reality that we all face is that when we begin to evaluate learning, we are always grasping at and relying upon indicators of learning.

Learning of the essential outcomes does not occur in a vacuum or in the ether, it occurs through content and knowledge bases, and therefore will vary depending on the knowledge base on which it rests. Part of the reason we have different disciplines and interdisciplinary programs, is that different knowledge sets and ways of knowing result in learning outcomes being demonstrated in different ways. But in the deconstruction of the demonstrated learning, we tend to find similarity in the core components or criteria of learning, e.g. for critical thinking.

Just as we learn from our research and from our colleagues, we also learn from our students. Innovation and creativity are part of what we all look for in our students' learning—it tends to be the ultimate learning outcome that we try to capture in many ways, e.g. capstone courses and projects, senior recitals, e-portfolio graduation reflections on work, etc. Having shared expectations or standards for learning outcomes is in no way in conflict with innovation. Our limitations are often due to lack of knowledge and comfort in using newer technologies to capture and represent the learning we seek in our students.

How could a campus make these viable? How would they be useful to start a conversation or provide a framework for discussion around student learning?

Our experience at AAC&U in working with faculty on campuses across the country is that faculty are typically eager to have permission to talk about and to focus on student learning. Once you get beyond complaints about teaching is not rewarded adequately, etc., faculty embrace discussing learning and teaching. So, there is no difficulty in getting faculty interested in talking about the subject. The biggest barrier is often a lack of awareness about options for assessing learning and what it would take for the individual faculty member to adapt what they know and are familiar with to some new environment or process.

Part of the selection of the VALUE leadership campuses was to identify a diverse set of campuses that are using e-portfolios and rubrics in different ways on their respective campuses to illustrate how faculty and institutions can see themselves beginning, expanding or enhancing what they are doing to assess student learning. By broadening our work to include campuses that are not using e-portfolios, we also wanted to demonstrate how similar approaches can be undertaken in the absence of the investment in e-portfolios. Increasingly, the investment in e-portfolios is becoming less and less of an obstacle for campuses since there are free Web tools that students can use to construct e-portfolios.

Essentially, we are finding that campuses are recognizing that student learning is something that the entire campus community is engaged with; each person on the campus participates in the learning, but no one is responsible for all of the learning. By creating and articulating shared learning expectations, we are helping faculty and others on campus see how they can contribute to student learning for essential outcomes; we help students become better judges of their own learning progress; and we create the evidence we can use to communicate to other audiences exactly what it is that our students are learning and what they can do with that learning.

By experimenting with e-portfolios and Web technology, we expand the robustness for capturing learning and the opportunities for students to apply their learning in "real world" situations, which employers, civic leaders and policymakers are calling for. E-portfolios also reflect the attendance patterns of so many of our students who attend multiple institutions (often at the same time) as they move through their educational careers. Their learning is shared in ways we often overlook—different faculty and colleagues in different institutions, perhaps in different states, and different spans of time. The sharing of rubrics, of expectations for learning, perhaps most importantly allows our students to have a much clearer picture of what their learning should look like. They can use the rubrics to frame the demonstration of their learning in an e-portfolio when transferring among institutions, when applying for a job, or for graduate school. The rubrics allow students to better assess their own strengths and weaknesses in areas of learning.

Having been a faculty member on several campuses for over twenty years, I know that using rubrics and e-portfolios does not have to create more work—it requires working differently, shifting my time and focus a bit—but it is richer and more rewarding than what I used to struggle with in trying to communicate my expectations for learning and how students could more readily succeed in meeting those expectations. There is a transparency and communication ability that enriches the conversations both with students and with colleagues.

of American Colleges and Association Universities

VALUE CREATIVE THINKING METARUBRIC FALL 2008 DRAFT

This rubric is the first step in a rubric development process that will produce additional drafts, each responsive to the feedback. The next draft of this rubric will be available in April 2009. For more information or to give feedback, please email Wande Morgaine at wendemm@gmail.com. Thank you!

Creative thinking at the higher education level can only be expressed productively within a particular domain. The student must be versed in the strategies and skills of the domain in order to make connections and synthesize. Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as:

• the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of the boundaries of reality and/or domains; or

• the creativity demonstrated by an enterprising student who finds unique and novel ways to cheat and escape responsibility for his/her actions.

Because these rubrics are intended for use with eportfolios, they refer to what is shown in the student's finished work or reflective essays.

Evaluators are encouraged to assign a zero to any performance that doesn't meet level one performance.

	4	3	2	
Demonstrates willingness and ability to acquire skill and theory-based competence within a domain	Reflect: uses the criteria appropriate to the domain to correctly evaluate hisher own work and the work of others, being aware of choices made and able to defend them within the domain	Create: creates an entirely new object or solution acceptable within the parameters of the domain	Adapt: adapts an expert model to their own specifications, thereby creating an object or solution acceptable within the parameters of the domain	Model: bases work entirely on reproduction of expert models within the parameters of the domain
Willing to take risks Can include going against the directives of the assignment, introducing new materials and forms, tackling highly challenging topics, etc.	Willingly attempts new directions or approaches in the project knowing that failure is a real possibility on the way to successful completion of the project as assigned.	Attempts the project by going in new directions or approaches but does so within the explicit confines of the assignment as presented.	Rejects the possibility of a taking the project in a new direction or of exploring new approaches. Strictly adheres to the parameters of the assignment as given.	Even when given an assignment where risk is required, unwilling to take risk
Complexity and flexibility of thought	Successfully utilizes a broad range of strategies and adapts unexpected strategies in response to the problem or assignment	Utilizes multiple strategies in response to the problem or assignment	Explores several strategies in response to the problem or assignment, not always successfully	Is limited to a single predictable strategy in response to the problem or assignment
Open to alternate, potentially divergent or contradictory perspectives	Alternate, divergent, or contradictory ideas are contextualized effectively and presented coherently. The author demonstrates a tolerance for ambiguity and is able to negotiate between competing ideas	Alternate, divergent, or contradictory ideas are present and an attempt is made to contextualize them, although there is evidence that the author may have difficulty coordinating all the varying approaches	Alternate, divergent, or contradictory ideas are not effectively contextualized or made to cohere with other parts of the whole.	Alternate, divergent, or contradictory ideas are not present in the work, or, if they do appear are presented inappropriately. The author does not speak to divergent perspectives.
Novelty or Uniqueness (of Idea, Claim, Question, Form, etc.)	Consistently identifies and explores unique ideas, novel questions, and creates original formats	Frequently identifies and explores unique ideas, novel questions, and creates original formats	Includes limited number of unique ideas, novel questions, and/or original formats	Repeats existing ideas.
Synthesis and connections Transformational results	Goes beyond synthesizing transforms existing ideas and solutions into entirely new forms	Synthesizes diverse or contradictory ideas or solutions into a coherent whole	Identifies new connections among disparate or contradictory ideas or solutions	Does not recognize connections among disparate or contradictory ideas or solutions

Created by a team of faculty from higher education institutions across the United States.



FALL 2008 VALUE INTEGRATIVE LEARNING METARUBRIC DRAFT FOR PUBLIC RELEASE

This rubric is the first step in a rubric development process that will produce additional drafts, each responsive to the feedback received. Feedback deadline is February 15, 2009. The next draft of this rubric will be available in May 2009. For more information or to give feedback, please email Wende Morgaine at wendemm@gmail.com. Thank you!

Evaluators are encouraged to assign a zero to any performance that doesn't meet level one performance.

	4	33	2	
Connections to experience	Shows evidence of combining fields of study and one's own	Demonstrates an understanding of the influence of fields of study with	Begins to appropriately associate one's own experience outside of	Demonstrates some understanding of how one's own experience
Connects relevant	perspective on classroom content	one's own experience outside of	the classroom with fields of study.	outside of formal classroom relates
experience &	as well as life situations to	the classroom.		to fields of study.
асааетіс Ігомдедае	mummate and deepen one s			
MOWieuge	interpretation(s).			
Connections to	Extends and recombines	Uses examples, facts, and theories	Includes an example, fact, or	Stays within the confines of a
discipline	theories/frameworks using	from beyond a field of study, and	theory from outside a field of	discipline in the context of
Sees (makes)	examples and facts to deepen	identifies multiple perspectives.	study; acknowledges the presence	assignments; and
connections	analysis of issues or define/solve		or possibility of other perspectives.	articulates one perspective.
across disciplines,	problems; takes multiple			
perspectives	perspectives on a range of issues.			
Transfer	Adapts familiar frameworks for	Synthesizes familiar frameworks	Applies familiar frameworks to	Connects familiar frameworks to
Adapts knowledge,	new uses.	into new uses.	new situations.	new situations.
concepts, and/or				
tools from one				
discipline to				
another				
Communication	Within context of portfolio (or	Begins to use medium and form to	Demonstrates of an awareness of	Uses medium and form adequately
Balances form and	artifacts being reviewed),	contribute and respond to content.	how form can contribute and	to convey content.
content in	demonstrates clear ability to		respond to content.	
communication	integrate or synthesize content,			
choices	medium, and form to skillfully			
	communicate complex learning.			
Identity as	In challenging learning situations,	Articulates one's identity as a	Articulates one's own learning	Begins to identify one's self as a
Learner	articulates one's identity as a	learner, beginning to contribute in	strengths and sets goals for	learner, differentiating
Reflects on	learner and contributor to a variety	environments characterized by	improvement.	appropriately one's self from what
	of settings, which may include	ambiguity and risk.		one is learning.
	academic work, campus and civic			
	environments.			

Created by a team of faculty from higher education institutions across the United States.



FALL 2008 VALUE CRITICAL THINKING METARUBRIC DRAFT FOR PUBLIC RELEASE

This rubric is the first step in a rubric development process that will produce additional drafts, each responsive to the feedback received. Feedback deadline is February 15, 2009. The next draft of this rubric will be available in May 2009. For more information or to give feedback, please email Wende Morgaine at wendemm@gmail.com. Thank you!

Evaluators are encouraged to assign a zero to any performance that doesn't meet level one performance.

Explanation Problem/stosue relevant to situation of followers are relevant to stuation of streams. Problem/stosue relevant to situation of surface and partially described. Problem/stosue relevant to situation described and partially described. Problem/stosue relevant to stuation identified of convenient of surfaces. Under sealer the context and care subminance and attribution context and context. Position is supported by evidence, population stress are supported by evidence, that influence of recognition of fourtains assumptions and attribution (attainans) deepen the position not just assumptions and and proper context and cont		4	က	2	1
region exploration across some complexity of sources summaries and attribution decepent the position is established with a considerations of experiences, source summaries and attribution decepent the position not just and deceptation of experiences, recognition of contextual source summaries and attribution decepent the position not just and deceptation of experiences, recognition of contextual source summaries and attribution deterance of Position presented with profitors and attribution deceptations of experiences, and the implications of experiences, conditions and or folias, assumptions and possible environment that influence influence influence, hypothesis, stated or implied, and thought. It also acknowledges, appropriately, conclusions are based on a some other perspectives and the specifications of experiences abust causing sources. Inferences abust causing drawn from sources are supported by evidence. Assertions of conclusions are supported by evidence. Assertions of conclusions are supported mostly by evidence are supported by evidence. Assertions of conclusions are supported mostly by evidence are supported by evidence. Assertions of concentrations of cause are supported mostly by evidence. Assertions of concentrations of concentrations of consequences are narrow or experience as one amplications. Analysis of implications are considerations of consequences are narrow or evidence that has been evaluated consequences are narrow or concentrations of consequences are narrow or concentrations of consequences are narrow or concentrations of consequences are narrow or considerations.	Explanation	Problem/issue relevant to situation	Problem/issue relevant to situation	Problem/issue relevant to situation	Problem/issue relevant to a
dence evidence. Source selection reflects in the position is supported by evidence evidence. Source selection reflects in the position across multiple some exploration across received and mostly balanced is challenged and mostly balanced deepen the position not just and adds authority to position. To a standard and mostly balanced are per the position not just and adds authority to position. To a standard and mostly balanced are per the position not just and adds authority to position. To a standard and mostly balanced are per the position not just and adds authority to position. To a standard and mostly balanced are position not just and adds authority to position. To a standard and mostly balanced are position not just and adds authority to position. To a standard and mostly balanced are position not just and adds authority to position. To a standard and mostly balanced are are part of the assignment that influence are cognition of contextual sources and implications of bases, stated or implications of bases. To a standard and mostly balanced are are apported by prophesis, stated or implications of bases. To a standard and mostly balanced are are are are are are are supported by evidence that has been evaluated are are supported are are supported by a conclusions and earlied and political. To a standard and mostly by a subtantive symbolications are are supported are are supported are are supported by a conclusions and earlied and political. To a support and a supported are are supported by evidence that has been evaluated are are supported are are supported are	of issues	in context clearly stated	stated and partially described	stated	different situation identified
dence source selection reflects in though selective (cherry picked), supporting evidence, shource selection reflects is consequences and integrates multiple media modes; Veracity of sources in reconsistently aligned, marrow in disciplines and integrates multiple media modes; Veracity of sources media modes, Veracity of sources and limited to one or two media modes, Veracity of sources and limited to one or two media modes, Veracity of sources and attribution (citations) documents decorate it. Source summaries and attribution and adds authority to position. Attribution merely lists references, decorate it. Attribution merely lists references, decorate it. Position qualified by recognition of contextual sources and implications of experiences, or chidicions and or circumstances, conditions and or circumstances, conditions and or circumstances, conditions and or perspectives and the implications of experiences, demonstrates some complexity of thought. It also acknowledges, thought. It also acknowledges, consequences are supported by relatively obvious, with synthesis some other perspectives are relatively or evidence that has been evaluated cations some evaluated or demonstrates some evaluated cations synthesis of evidence from various relatively by consequences are supported by evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates some evaluated sources are supported by evidence are narrow or consequences are supported by evidence are narrow or evaluation of public and cations are that has been evaluated or demonstrates or devidence that has been evaluated or demonstrates. An evaluation of propression or determined that has been evaluated or demonstrates or demonstrates. An evaluation of propression or demonstrates or devidence that has been evaluated or demonstrates or demonstrates or demonstrates or demonstrates. An evaluation of the propression or demonstrates or d	Investigation	Position is established with	Position is supported by evidence,	Position strengthened by	Position is unsubstantiated,
some exploration across inconsistently aligned, narrow in disciplines and integrates multiple scope and limited to one two media modes. Veracity of sources is challenged and mostly balanced. Source summaries and attribution depen the position not just deepen the position not just and decorate it. Route use repeats information and adds authority to position. Attribution merely lists references, decorates. Position qualified by considerations of experiences, conditions and considerations of experiences, of those perspectives. A reasonable, clear, position or A reasonable, clear position or perspectives and the implications of these perspectives. A reasonable, clear, position or A reasonable, clear position or thought. It also acknowledges, refutes, synthesis of evidence from various sources. Inferences about causal sources and implications indicates some evaluated from disparations of the been evaluated eations. A reasonable, clear, position or acknowledges. A reasonable, clear, position or acknowledged. A reasonable, clear, position or acknowledges. A reasonable, clear, position or acknowledged. A reasonable, clear, position or acknowledged. A reasonable, clear, position or hypothesis is clear, hypothesis stated or implied, with at leaso acknowledges. Conclusions are based on a gridence are supported mostly by evidence, with only emerging sources. Inferences about causal or actions are supported by consequences are supported by consequences are supported or acknowledged. A reasonable clear, position or acknowledged. Conclusions are based on a clear perspective acknowledged consequences are supported by consequences are supported by consequences are arrow or from dispositions of pointor and are also selective. Analysis of implications indicates A reasonable clear, position or propred by consequences are arrow or consequences are supported by consequences ar	of evidence	evidence. Source selection reflects	though selective (cherry picked),	supporting evidence, though	random.
disciplines and integrates multiple scope and limited to one or two media modes, Venacity of Sources modes. Examination of source is challenged and mostly balanced quality shows some balance; Source summaries and attribution and decorate it. Source summaries and attribution of iterations) documents deepen the position not just adecorate it. Bostition qualified by considerations of experiences, conditions and circumstances, conditions and environment that influence perspectives and the implications of those perspectives and the implication of those perspectives and the implication of those perspectives are refutes, synthesis is atted or implied, hypothesis, stated or implied, hypothesis, sta		some exploration across	inconsistently aligned, narrow in	sources are limited or convenient	Limited evidence of exploration
media modes; Veracity of sources is challenged and mostly balanced. Source summaries and attribution (citations) documents deepen the position not just decorate it. Position presented with considerations of experiences, of those perspectives and the implications of bias, assumptions and position or functions and the implications of those perspectives A reasonable, clear, position or hypothesis is stated or implied, thought. It also acknowledges, and thought. It also acknowledges, appropriately. A reasonable, clear, position or editors, synthesizes, or extends some other perspectives and thought. It also acknowledges, and thought are also acknowledges, and the acknowledges, and thought are also acknowledges, and the acknowledges, and thought are also acknowledges, and the acknowledges are supported by a conclusions are weakly supported acknowledges are supported by a conclusions and evidence, with only energing acknowledges		disciplines and integrates multiple	scope and limited to one or two	(assigned sources & personal	(curiosity) or awareness of need
is challenged and mostly balanced. Source summaries and attribution and deepen the position not just decorate it. Source summaries and attribution and deepen the position not just deepen the position not just decorate it. Articulations of experiences, conditions and and adds authority to position qualified by recognition of contextual sources or considerations of experiences, conditions and environment that influence perspectives and the implications of bias. A reasonable, clear, position or A reasonable, clear position or hypothesis, stated or implied, demonstrates some complexity of thesis, demonstrates some complexity of thesis, considerations of evidence from various relatively obvious, with synthesizes, or extends some other perspectives are relatives, sorthers are based on a relatively obvious, with synthesis of evidence from various relatively obvious, with synthesis of evidence from various relatively obvious, with synthesis on some other perspectives are supported by evidence. Assertions of consequences are supported by evidence. Assertions of consequences are narrow or from disparate viewpoints. An easonable, clear position or hypothesis is stated or implied, whether stated or implied, with at least one other perspectives are relatively obvious, with synthesis of evidence from various relatively obvious, with synthesis of evidence from various relatively obvious, with synthesis one consequences are supported by evidence. Assertions of consequences are narrow or from disparate viewpoints. An experience of the propertion of propertions and or implied, hypothesis is stated or implied, hypothesis is stated or implied, hypothesis is clear. A reasonable, clear position or hypothesis is clear, hypothesis are devely with at least one orther perspectives are relatively obvious, with synthesis of evidence from various developments. An experience of the propertion of propertion of orther perspective and implications indicates of evidence are supported by evidence are supported by evidence with only emerg		media modes; Veracity of sources	modes. Examination of source	stories only) and in a single mode	for information, search, selection,
Source summaries and attribution deepen the position not just decorate it. decerate the position not just and adds authority to position. decerate the position not just and decorate it. decorate it. decorate it. Position presented with considerations of experiences, conditions and position of bias, assumptions and possible circumstances, conditions and environment that influence environment that influence are supported by hypothesis, stated or implied, thought. It also acknowledges, demonstrates some complexity of important objections and vortantes, synthesizes, or extends some other perspectives are supported by consequences are supported by evidence that has been evaluated environment and disparate viewpoints. A reasonable, clear, position or A reasonable, clear position or hypothesis is stated or implied, hypothesis, stated or implied, hypothesis, stated or implied, thought. It also acknowledges, considered with some thought. Synthesizes, or extends appropriately. Conclusions are based on a synthesis of evidence from various evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates of ambiguity. A reasonable, clear position or position or hypothesis is clear, hypothesis, stated or implied, historian and are also evidence are supported by evidence are supported by evidence. Assertions of consequences are narrow or from disparate viewpoints. A reasonable, clear position or from the political and political, with a tention of the perspective and diction or hypothesis is clear, hypothesis is stated or implied, historian and are also evidence are narrow or consequences of ambiguity. A reasonable, clear position of context and diction or hypothesis is clear, hypothesis, sated or implied, historian and evidence are supported by evidence with		is challenged and mostly balanced.	quality shows some balance;	(text, audio, graphs, or video, etc);	source evaluation & source
ence of deepen the position not just and adds authority to position. absent contrary evidence. ence of decorate it. Position presented with pringing and possible environment that influence perspectives and the implications of bias. Position presented with position of contextual sources and implications of bias. Position presented tentatively, with recognition of contextual sources of own and others' biases, ethical and political, implications of bias. Position presented tentatively, with recognition of contextual sources and implications of bias. Position presented tentatively, with recognition of contextual sources and implications of bias. Position presented tentatively, with recognition of contextual sources and implications of bias. nective, hypothesis, stated or implied, thesis, demonstrates some complexity of sition sition. A reasonable, clear position or hypothesis is stated or implied, demonstrates some complexity of alternate perspectives are supported. A reasonable, clear position or hypothesis is clear, why there restored or implied, demonstrates some complexity of alternate perspectives are supported with some thought. Position or hypothesis is clear, whether stated or implied, important objections and evidence are supported and or conclusions are weakly supported actions sources. Inferences about causal drawn from selected (cherry evidence that has been evaluated evidence. Assertions of consequences are supported mostly by evidence, with only energing sources are supported mostly by evidence, with only evidence consequences of ambiguity. Conclusions are based or implied, with supported mostly by consequences are narrow or consequences are implied or obvious and easy.		Source summaries and attribution	attribution (citations) documents	Source use repeats information and	attribution (citations).
ence of notion and field by stated or implications of thesis, strion Position presented with considerations of experiences, or conditions and considerations of experiences, or extends sition Position presented with decorates. Attribution merely lists references, decorates. ence of position qualified by considerations of position applies or considerations of environment that influence are implications of those perspectives and the implications of those perspectives. A reasonable, clear position or hypothesis is clear, hypothesis, stated or implied, demonstrates some complexity of alternate perspectives are refutes, synthesizes, or extends some other perspectives are refutes, synthesizes, or extends appropriately. A reasonable, clear position or phypothesis is clear, whether stated or implied, with at least one other perspective alternate perspectives are refutes, synthesizes, or extends appropriately. A reasonable, clear position or phypothesis is clear, whether stated or implied, with at least one other perspective alternate perspectives are refutes, synthesizes, or extends appropriately. A reasonable, clear position or phypothesis is clear, whether stated or implied, with at least one other perspective alternate perspectives are refutes, synthesizes, or extends appropriately. A reasonable, clear position or hypothesis is clear, whether stated or implied, with at least one other perspective alternate perspectives are appropriately. A reasonable, clear position or phypothesis is clear, whether stated or implied, with at least one other perspective are supported by conclusions and evidence are supported by conclusions and evidence that has been evaluated or implied, with at expe		deepen the position not just	and adds authority to position.	absent contrary evidence.	
rective, hypothesis, stated or implied, hought. It also acknowledges, entertues, some other perspectives and propriately. Conclusions are based on a sources. Inferences about causal cations of evidence that has been evaluated from disparate viewpoints. A halysis of implications indicates some awareness of ambiguity.		decorate it.		Attribution merely lists references,	
considerations of experiences, recognition of contextual sources of thesis, thesis, refutes, synthesizes, or extends sources. Insions, Conclusions are based on a cations considerate iviewpoints. A ray and considerations of experiences, considerate are evidence that has been evaluated evidence in the some awareness of ambiguity.				decorates.	
cricumstances, conditions and circumstances, conditions and christons of experiences, conditions and circumstances, conditions and circumstances, conditions and environment that influence perspectives and the implications of bias, assumptions and perspectives and the implications of bias, of those perspectives and the implications of bias, assumptions and perspectives and the implications of bias, of those perspectives and the implications of bias, of those perspectives and the implications and the implicati	Influence of	Position qualified by	Position presented with	Position presented tentatively, with	Position presented in absolutes
rective, hypothesis, stated or implications afters. A reasonable, clear position or hypothesis is stated or implied, thought. It also acknowledges, appropriately. Conclusions are based on a synthesis of evidence that has been evidence are from disparate viewpoints. A reasonable, clear position or A reasonable, clear position or hypothesis is clear, hypothesis, stated or implied, hypothesis is stated or implied, emphasion of those perspectives and thought. It also acknowledges, appropriately. Conclusions are based on a considered with some thought. Some other perspectives and papropriately. Conclusions are based on a consequences are supported mostly by evidence, with only emerging sources. Inferences about causal drawn from selected (cherry sources. Inferences about causal from disparate viewpoints. Analysis of implications indicates some awareness of ambiguity.	context and	considerations of experiences,	recognition of contextual sources	emerging awareness of own and	with little recognition of own
environment that influence implications of bias. perspectives and the implications of those perspectives and the implications of those perspectives. A reasonable, clear, position or A reasonable, clear position or hypothesis is clear, hypothesis, stated or implied, with at least one complexity of limportant objections and/or alternate perspectives are supported some other perspectives. Appropriately. Conclusions are based on a conclusions and evidence are supported by evidence. Assertions of cause are supported by gived) evidence. Assertions of cause are supported are also selective. Analysis of implications indicates envidence that has been evaluated from disparate viewpoints. Analysis of implications indicates envidence that has been evaluated from obvious and easy.	assumptions	circumstances, conditions and	of bias, assumptions and possible	others' biases, ethical and political,	personal and cultural bias and little
perspectives and the implications of those perspectives. A reasonable, clear position or hypothesis is stated or implied, hypothesis, stated or implied, thought. It also acknowledges, refutes, synthesizes, or extends some other perspectives appropriately. Conclusions are based on a cations sources. Inferences about causal from disparate viewpoints. Analysis of implications indicates and the implications indicates are supported by some awareness of ambiguity.		environment that influence	implications of bias.	historical sources and implications	recognition of ethical, political,
of those perspectives. A reasonable, clear, position or hypothesis is stated or implied. hypothesis, stated or implied, demonstrates some complexity of thought. It also acknowledges, refutes, synthesizes, or extends some other perspectives are appropriately. Conclusions are based on a cations sources. Inferences about causal consequences are supported by evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates some operations of consequences some awareness of ambiguity.		perspectives and the implications		of bias.	historical or other considerations.
Rective, thesis, demonstrates some complexity sitionA reasonable, clear position or hypothesis, stated or implied, demonstrates some complexity of thought. It also acknowledges, refutes, synthesizes, or extends some other perspectives appropriately.A reasonable, clear position or hypothesis is stated or implied. Important objections and/or alternate perspectives are some other perspectives appropriately.A reasonable, clear position or hypothesis is stated or implied, with at achieves are considered with some thought.Position or hypothesis is clear, whether stated or implied, acknowledges, acknowledged.Insions, cations some other perspectives appropriately.Conclusions are based on a sources. Inferences about causal consequences are supported by evidence that has been evaluated from disparate viewpoints.A reasonable, clear position or acknowledges, considerations indicates or minion and are also selective.Position or hypothesis is clear, whether stated or implied, with at acknowledged.Analysis of implications indicates some awareness of ambiguity.A reasonable, clear positions and ear positions or implied, with at are timid or obvious and easy.Position or hypothesis is clear, whether stated or implied, with at acknowledged.		of those perspectives.			
ophesis, othesis, considerhypothesis is stated or implied, demonstrates some complexity of thought. It also acknowledges, refutes, synthesizes, or extends some other perspectiveshypothesis is stated or implied. Important objections and/or alternate perspectives are appropriately.Important objections and/or alternate perspectives are considered with some thought.whether stated or implied, with at acknowledges, considered with some thought.clusions refutes, synthesizes, or extends appropriately.considered with some thought.conclusions are based on a conclusions are based on a sources. Inferences about causal consequences are supported by evidence that has been evaluated from disparate viewpoints.Conclusions are weakly supported from disparate viewpoints.conclusions are weakly supported by evidence, with only emerging synthesis. Assertions of consequences are narrow or exaggerated and dichotomous.Analysis of implications indicates some awareness of ambiguity.hypothesis is stated or implied, with at alternate perspectives acknowledged.whether stated or implied, with at acknowledged.	Own	A reasonable, clear, position or	A reasonable, clear position or	Position or hypothesis is clear,	Work contains a discernible
ootition It also acknowledges, refutes, synthesizes, or extends It also acknowledges, appropriately. Important objections and or acknowledged. It also acknowledges, alternate perspectives are appropriately. It also acknowledges, alternate perspective. It also acknowledges. It alternate perspectives are appropriately. It alternate with some thought. It alternate weakly supported by a vidence, with only emerging synthesis. Assertions of cause are supported mostly by a vidence, with only emerging synthesis. Assertions of cause are supported mostly by a consequences are narrow or action and are also selective. It alternates are also active. It alternates are also active. It alternates are allernated and dichotomous. Analysis of implications indicates some awareness of ambiguity. Important objectives are actions of consequences are are timid or obvious and easy. It alternates are alternated and dichotomous.	perspective,	hypothesis, stated or implied,	hypothesis is stated or implied.	whether stated or implied, with at	position or hypothesis that reflects
thought. It also acknowledges, refittes, synthesizes, or extends some other perspectives appropriately. conclusions are based on a sources. Inferences about causal consequences are supported by evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates are thought. It also acknowledged. considered with some thought. Conclusions are based on a conclusions and evidence are conclusions are weakly supported by evidence. Assertions of cause are supported mostly by consequences are narrow or consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates considerations of consequences are timid or obvious and easy.	hypothesis,	demonstrates some complexity of	Important objections and/or	least one other perspective	the student's perspective.
refutes, synthesizes, or extends some other perspectives appropriately. Conclusions are based on a sources. Inferences are supported by evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates some other perspectives are supported by some awareness of ambiguity.	or position	thought. It also acknowledges,	alternate perspectives are	acknowledged.	
some other perspectives appropriately. Conclusions are based on a synthesis of evidence from various synthesis of evidence from various sources. Inferences are supported by evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates appropriately some awareness of ambiguity.		refutes, synthesizes, or extends	considered with some thought.		
relusions, lications Conclusions are based on a synthesis of evidence from various Conclusions are based on a sources. Inferences about causal consequences are supported by evidence that has been evaluated from disparate viewpoints. Conclusions are weakly supported by evidence, with only emerging by evidence, with only emerging synthesis of cause are supported (cherry cause are supported mostly by evidence are supported mostly by evidences are narrow or from disparate viewpoints. Conclusions are weakly supported cause are drawn from selected (cherry cause are supported mostly by consequences are narrow or opinion and are also selective. Analysis of implications indicates considerations of consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates some awareness of ambiguity. are timid or obvious and easy.		some other perspectives			
Icolusions are based on a lications Conclusions are based on a synthesis of evidence from various synthesis of evidence from various Conclusions are weakly supported by synthesis of evidence from various are latively obvious, with synthesis synthesis of evidence are supported to consequences are supported by evidence. Assertions of evidence that has been evaluated from disparate viewpoints. Conclusions are weakly supported by evidence, with only emerging synthesis. Assertions of cause are supported mostly by consequences are narrow or exaggerated and dichotomous. Requences Reported from various are supported mostly by cause are supported mostly by consequences are narrow or exaggerated and dichotomous. Considerations of consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates some awareness of ambiguity. are timid or obvious and easy.		appropriately.			
lications synthesis of evidence from various relatively obvious, with synthesis relatively obvious, with synthesis relatively obvious, with synthesis by evidence, with only emerging sequences relatively obsources. Inferences about causal consequences are supported by evidence. Assertions of evidence. Assertions of evidence that has been evaluated from disparate viewpoints. relatively obvious and east of consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates Considerations of consequences consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates considerations of consequences consequences	Conclusions,	Conclusions are based on a	Conclusions and evidence are	Conclusions are weakly supported	Conclusions are not supported by
sequences Inferences about causal drawn from selected (cherry synthesis. Assertions of cause are supported by evidence. Assertions of from disparate viewpoints. picked) evidence. Assertions of cause are supported mostly by from disparate viewpoints. doubtful. Considerations of consequences are narrow or exaggerated and dichotomous. Analysis of implications indicates some awareness of ambiguity. Considerations of consequences are timid or obvious and easy.	implications	synthesis of evidence from various	relatively obvious, with synthesis	by evidence, with only emerging	the evidence or repeat the evidence
consequences are supported by evidence. Assertions of evidence that has been evaluated from disparate viewpoints. Analysis of implications indicates are timid or obvious and easy.	and	sources. Inferences about causal	drawn from selected (cherry	synthesis. Assertions of cause are	without synthesis or elaboration;
luated cause are supported mostly by consequences are narrow or opinion and are also selective. exaggerated and dichotomous. dicates Considerations of consequences ity.	conseduences	consequences are supported by	picked) evidence. Assertions of	doubtful. Considerations of	tendency to confuse correlation
dicates Considerations of consequences ity. exaggerated and dichotomous.		evidence that has been evaluated	cause are supported mostly by	consequences are narrow or	and cause. Considerations of
dicates Considerations of consequences ity.		from disparate viewpoints.	opinion and are also selective.	exaggerated and dichotomous.	consequences are sketchy, drawn
		Analysis of implications indicates	Considerations of consequences		in absolutes, or absent.
		some awareness of ambiguity.	are timid or obvious and easy.		