



Ralph Nader,
Public Citizen

Bertrand Russell Scholar

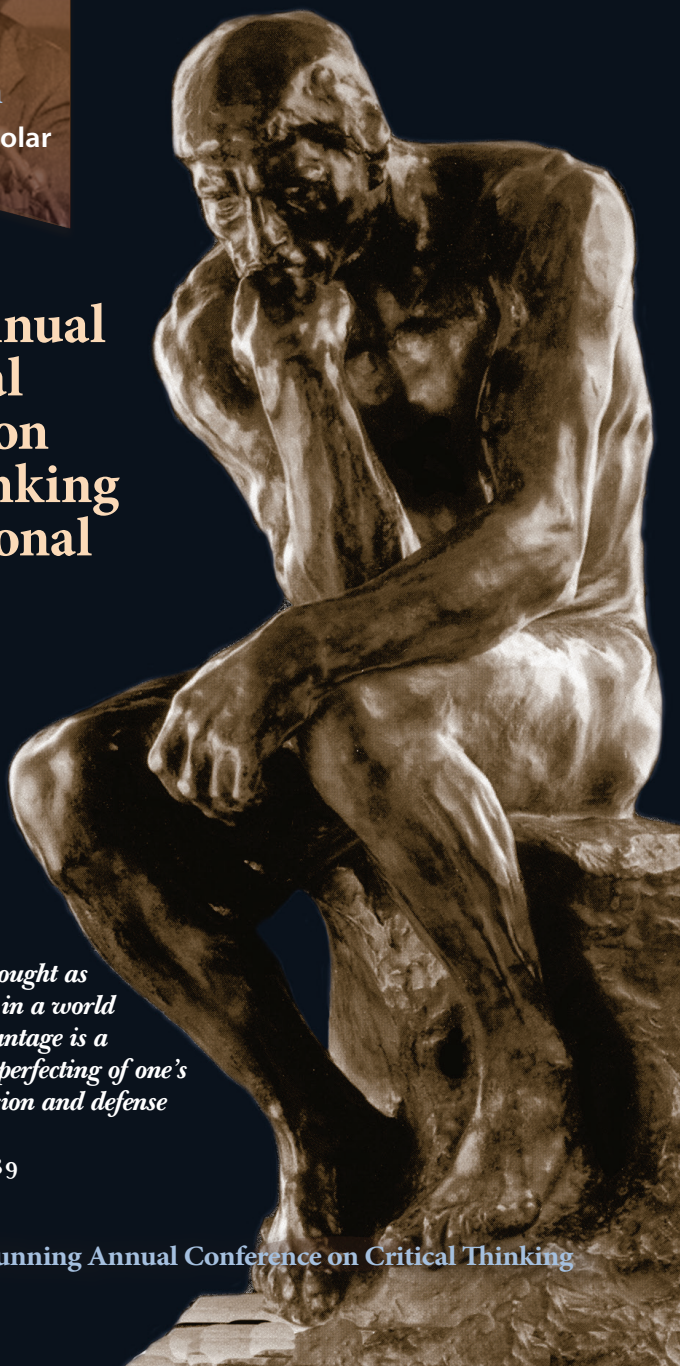
The 34th Annual International Conference on Critical Thinking and Educational Reform

July 2014

*The perfecting of one's thought as
an instrument for success in a world
based on power and advantage is a
different matter from the perfecting of one's
thought for the apprehension and defense
of fairminded truth.*

— RICHARD PAUL, 1989

The World's Longest Running Annual Conference on Critical Thinking





Proceedings of
the
34th Annual
International Conference
on
Critical Thinking and
Educational Reform



July 26 - 31, 2014





Socrates



The proceedings of the 34th International Conference on Critical Thinking are dedicated to the memory of Socrates, an exemplar of the fairminded critical thinker who was willing to die for his right to educate and emancipate the mind.

Socrates is being honored at this year's conference as the first Bertrand Russell Scholar to be named posthumously.

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From Past Conferences



**Henry Steele
Commanger**
at the 1st Conference



Neil Postman
at the 2nd Conference



Edward Glaser
at the 4th Conference



Carol Tavis
at the 7th Conference



David Perkins
at the 7th Conference



Matthew Lipman
at the 10th Conference



Michael Shermer
*at the 32nd Conference;
Bertrand Russell Scholar*



**William
Robinson**
*at the 32nd Conference;
Bertrand Russell Scholar*



Elizabeth Loftus
*at the 33rd Conference;
Bertrand Russell Scholar*

Introduction to the Conference

The Center and Foundation for Critical Thinking have together hosted critical thinking academies and conferences for almost thirty-five years. During that time, we have played a key role in defining, structuring, assessing, improving, and advancing the principles and best practices of fairminded critical thought in education and society. Our annual conference provides delegates from around the world a unique opportunity to improve their understanding of critical thinking, as well as their ability to foster it more substantively in the classroom and in all aspects of work and life.

Throughout our work we emphasize the importance of fostering a substantive conception of critical thinking. Such a conception not only highlights the qualities of the educated person, but also implies the proper design of the educational process. There are essential minimal conditions for educating minds. These entail modes of instruction that facilitate development of the standards, abilities, and traits of the educated person. For example, when history is substantively taught, it is taught as historical thinking; the major goal is to give students practice in thinking historically (analyzing, evaluating, and reconstructing historical interpretations and problems). As a result, students learn not only how to read historical texts with insight and understanding, but also how to gather important facts and write well-developed historical essays of their own. Through this mode of instruction, students come to see the significance of historical thinking, both in their own lives and in the life of culture and society. History becomes – in such a transformed mind – not random facts from the past, but a way to reason about the past in order to make intelligent decisions in the present, as well as reasonable plans for the future.

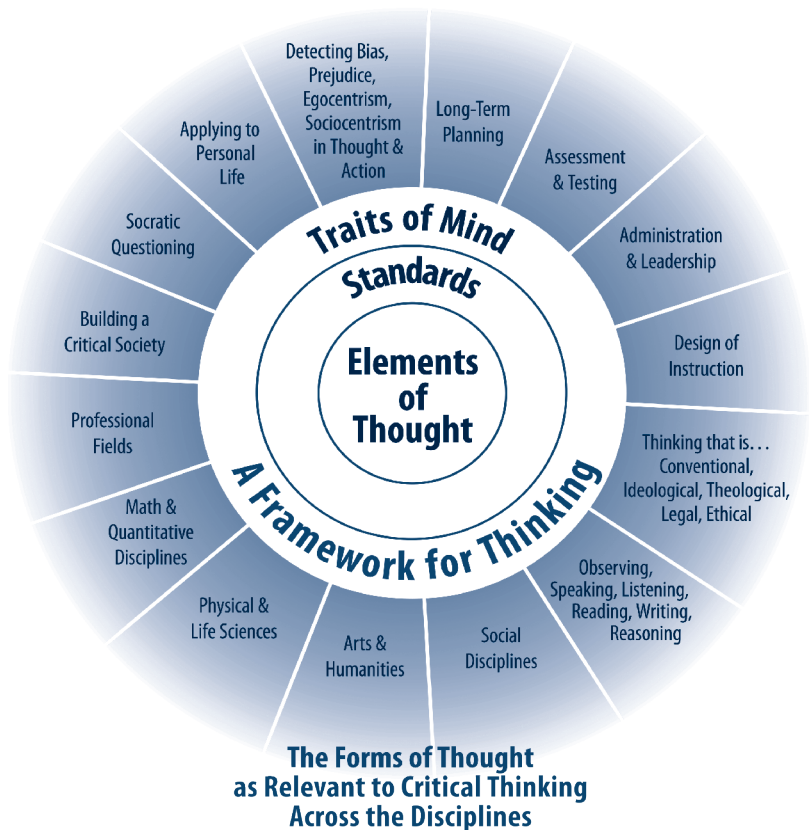
When students are taught using a substantive concept of education as the guide to the design of instruction, they can learn to initiate, analyze, and evaluate their own thinking and the thinking of others (within all the content areas they study). Doing so, they come to act more reasonably and effectively in every part of life. They are able to do this because they have acquired intellectual tools and intellectual standards essential to sound reasoning, as well as to personal and professional judgment. Self-assessment becomes an integral part of their lives. They are able to master content in diverse disciplines. They become proficient readers, writers, speakers, and listeners. They become reasonable and fairminded persons capable of empathizing with views with which they disagree. They are able to use their reasoning skills to take command of their own emotional life, and to transform their desires and motivations. They come to embody, increasingly over time, the virtues of the fairminded critical thinker.

All of our work and thus all of our conference sessions are based on this substantive conception of critical thinking. We are committed to a concept that interfaces optimally within and among the disciplines, that integrates critical with creative thinking, and that applies directly to the needs of everyday and professional life.

All conference sessions are designed to converge on basic critical thinking principles, and to enrich a core concept of critical thinking with practical teaching and learning strategies.

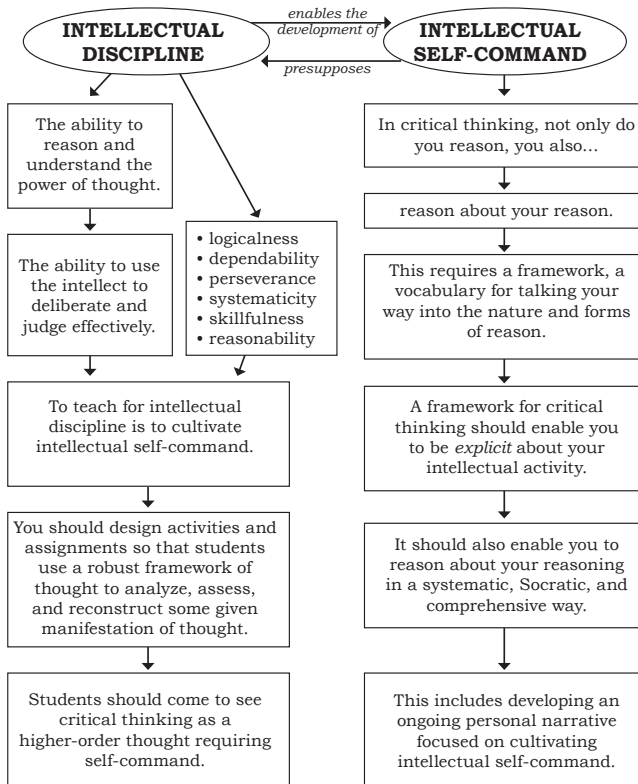


Critical Thinking is Manifested in ALL Forms of Thought



Intellectual Discipline

Requires and Presupposes Intellectual Self-Command Can Be Fostered in Teaching and Learning

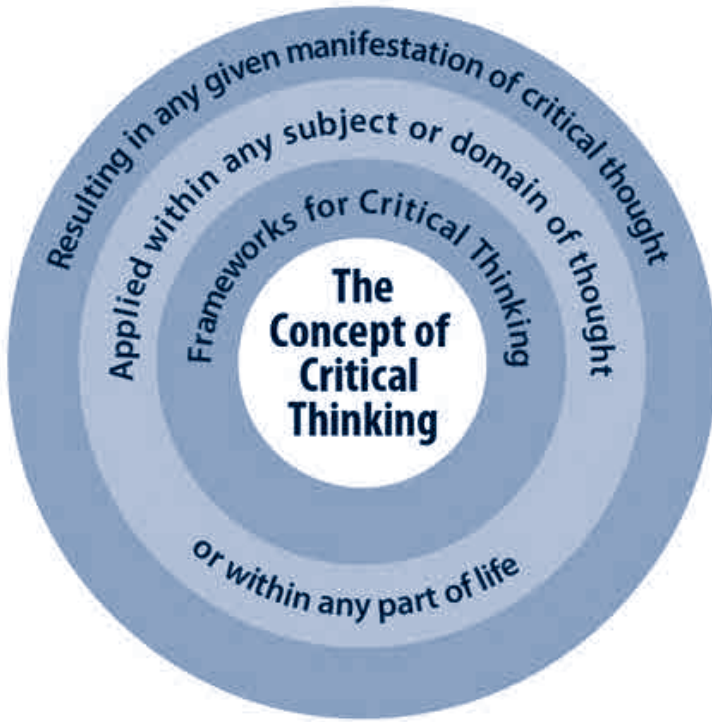


This diagram suggests the importance of the relationship between intellectual discipline and intellectual self-command. What is more, a number of core concepts are interwoven here, while others are suggested by implication.

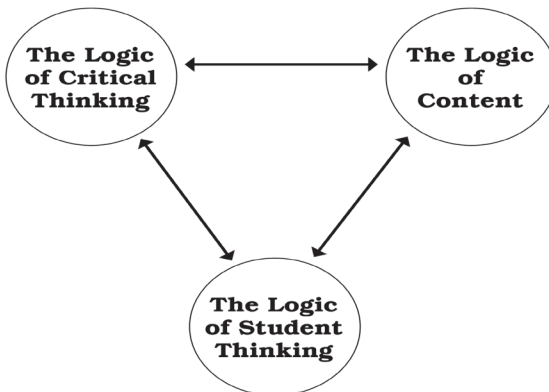
Contrast your sense of the conceptual points made in the graphic with an unintegrated list of individual concepts: Intellectual discipline, self-command, ability to reason, understanding the power of thought, ability to use the intellect, ability to deliberate, ability to judge and to reason about your reason, logicalness of thought, dependability of thought, perseverance in thought, systematicity of thought, skillfulness in thought, teaching for intellectual discipline, and cultivating intellectual self-command.

Thinking Within Every Subject and Domain of Human Thought

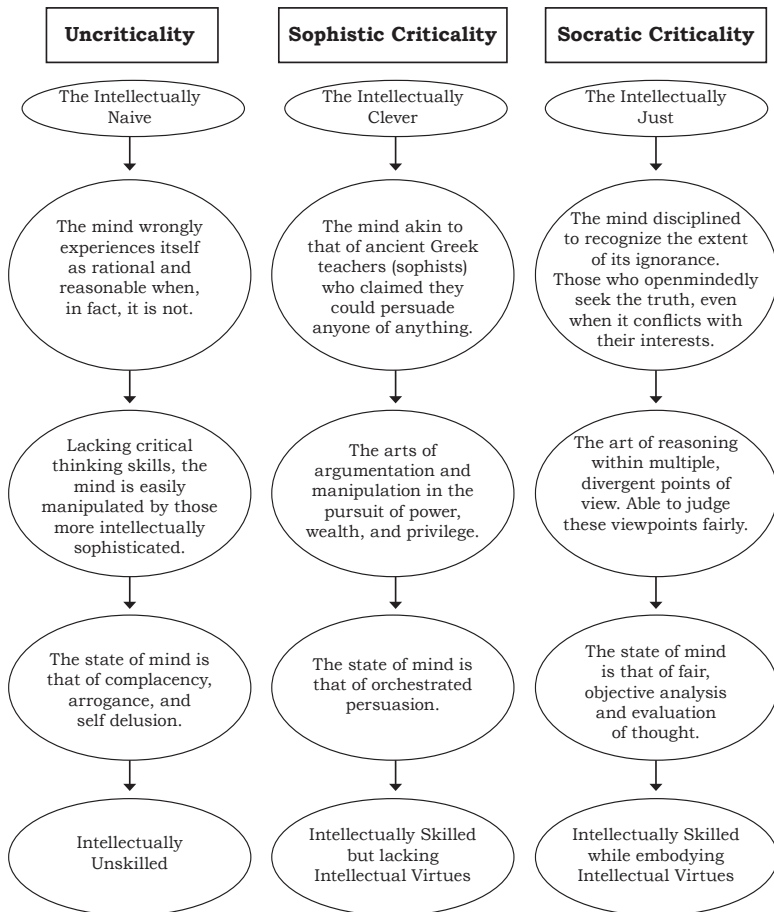
Anthropological thinking	Thinking like a doctor
Mathematical thinking	Thinking homeopathically
Sociological thinking	Thinking allopathically
Historical thinking	Thinking like a surgeon
Archeological thinking	Thinking like a psychologist
Biological thinking	Thinking like an economist
Botanical thinking	Thinking like a librarian
Zoological thinking	Thinking like a lawyer
Chemical thinking	Thinking like an educator
Biochemical thinking	Thinking like a teacher
Geological thinking	Thinking like a principal
Political thinking	Thinking like a dean
Geographical thinking	Thinking like a classroom teacher
Ecological thinking	Thinking like a novelist
Physiological thinking	Thinking like a dramatist
Astronomical thinking	Thinking like a poet
Financial thinking	Thinking like a writer
Medical thinking	Thinking like a civil engineer
Pharmacological thinking	Thinking like a nurse
Psychological thinking	Thinking like an accountant
Arithmetic thinking	Thinking like an architect
Algebraic thinking	Thinking like a sculptor
Geometrical thinking	Thinking like a painter
Musical thinking	Thinking like a dancer
Artistic thinking	Thinking like a physicist
Biotechnological thinking	Thinking like a parasitologist
Criminological thinking	Thinking like a linguist
Epidemiological thinking	Thinking like a computer scientist
Statistical thinking	Thinking like a judge
Technological thinking	Thinking like a defense attorney
Nano-technological thinking	Thinking like a prosecutor
Global thinking	Thinking like a police officer
Philosophical thinking	Thinking like a social worker
Metaphysical thinking	Thinking like a physical therapist
_____ thinking	Thinking like a _____



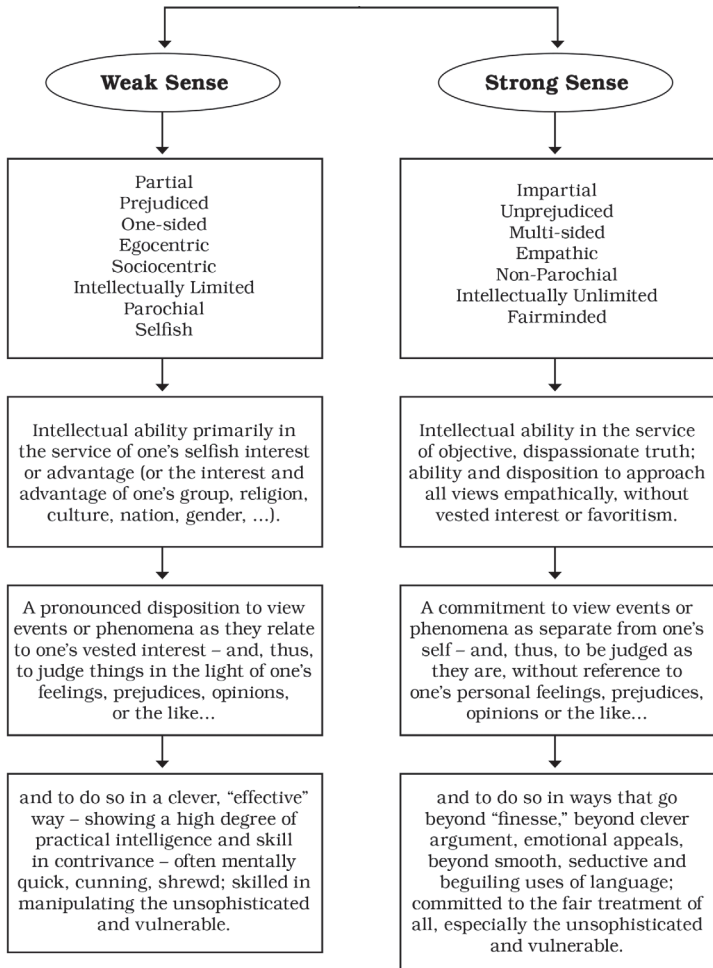
Critical Thinking, Content, and Student Thinking
Each Has its Own Logic: Each Must Interconnect



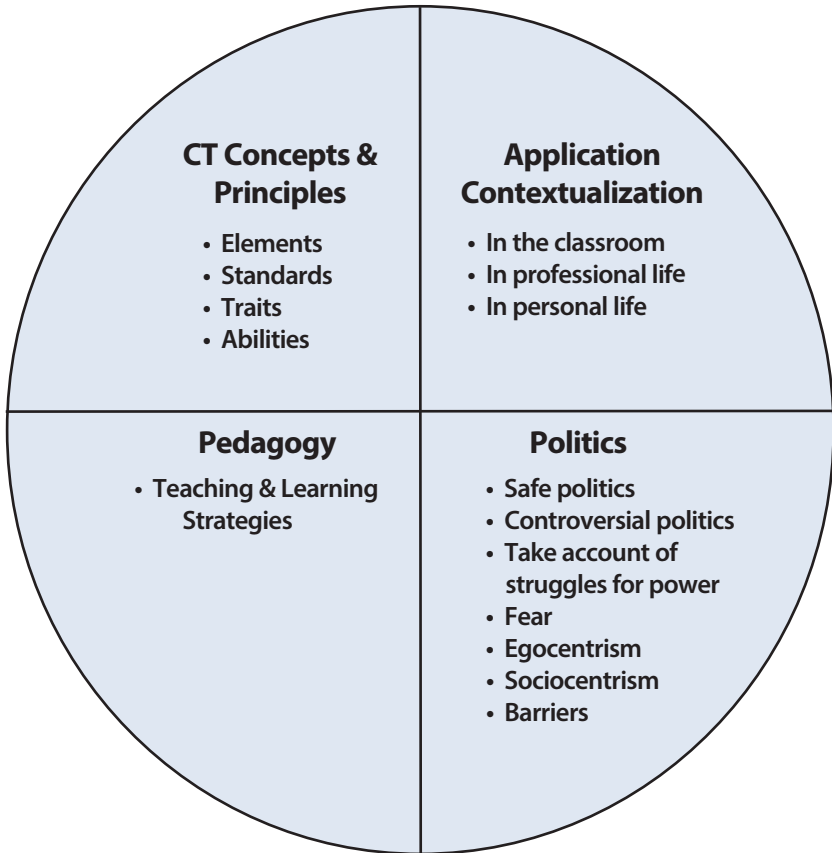
Three Forms of Criticality



Strong Versus Weak



Integrating Four Dimensions of Critical Thinking Development



Conference Overview

The conference entails the following four types of sessions and learning opportunities:

1. *Focal Sessions* that are designed to foster deep understanding of core critical thinking concepts and principles. These sessions are led by Fellows and Visiting Scholars of the Foundation for Critical Thinking
2. *Concurrent Sessions and Roundtable Discussions*, which are led by guest faculty and administrators attempting to contextualize critical thinking in instruction and in various domains of life.
3. *Bertrand Russell Distinguished Scholars Program*, which highlights the contributions of important scholars to the conception and realization of fairminded critical societies. This year's Russell Scholar is Public Citizen Ralph Nader.
4. *Film and Video Continuous Loop* highlighting the thinking of Ralph Nader and Richard Paul. Video includes the documentary *An Unreasonable Man*, which focuses on Nader's life, as well as classic footage of Richard Paul exploring the importance of critical thinking to education. Watch videos in the Alumni Room before, between, and after sessions, Saturday - Wednesday.



Conference at a Glance

Preconference

Saturday, July 26
and Sunday, July 27

(9:00 am - 4:00 pm)

Preconference registrants have chosen one of the following sessions:

- Cultivating Critical Thinking in Teaching and Learning: the Foundations of Critical Thinking–
[Richard Paul and Linda Elder](#)
Sonoma Room
- Bringing Critical Thinking Concepts and Principles into the Heart of Socratic Dialogue–
[Gerald Nosich](#)
Napa Room

View Ralph Nader and Richard Paul video (looping) in the Alumni Room before sessions begin each day, during breaks and lunch, and after the afternoon sessions. (Sat-Wed)



DAY ONE - Monday, July 28 Opening Ceremony

(8:45 am - 10:00 am)

Welcome and Keynote Address

**Fellows of the Foundation for
Critical Thinking**

Empire Ballroom

Focal Sessions Day One

(10:30 am - 4:00 pm)

Conference registrants have chosen one of the following sessions:

- Placing Critical Thinking at the Core of the Core of the College Curriculum– [Richard Paul and Linda Elder](#)
Claremont Room
- Cultivating the Public Citizen Through a Robust Conception of Critical Thinking in Education–
[Rush Cosgrove](#)
Napa Room
- Fostering Deep Understanding of Fundamental and Powerful Concepts in Instruction and in Daily Life– [Gerald Nosich](#)
Sonoma Room
- *For Returning Registrants:* Socrates, Epictetus, and Critical Thinking: Linking Transformative Ideas Throughout History–
[Brian Barnes](#)
Lanai 2

Conference at a Glance

Day One: Reception with Ralph Nader and Fellows of the Foundation for Critical Thinking (5:30 pm - 7:00 pm)

All conference delegates invited
for drinks, hors d'oeuvres, and
intelligent conversation.

Claremont Room

DAY TWO - Tuesday, July 29

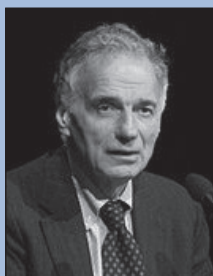
Bertrand Russell Distinguished Scholars Lecture and *Conversazione*

Empire Ballroom

(9:00 am - 12:30 pm)

Russell Scholar: Ralph Nader

*The Most Pressing Issues of Our Time
and What We Can Do About Them*



*All Conference delegates are
encouraged to actively participate
in this session. Only those registered
may attend. Wear name badges to
show conference registration.*

Afternoon Focal Sessions (Tues.) (2:00 pm - 4:30 pm)

Conference registrants have chosen
one of the following sessions:

- Assessing Students' Critical Thinking– [Gerald Nosich](#)
Claremont Room
- Emotional Intelligence: a
Conceptual Model– [Richard Paul
and Linda Elder](#)
Sonoma Room
- Intellectual Virtues – Essential to
the Public Citizen– [Rush Cosgrove](#)
Lanai 2
- The Role of Close Reading and
Substantive Writing in Education,
in the Mind of the Public Citizen,
and Throughout Life– [Paul Bankes](#)
Napa Room

View Ralph Nader and
Richard Paul video (looping)
in the Alumni Room before
sessions begin each day, during
breaks and lunch, and after the
afternoon sessions. (Sat-Wed)

Conference at a Glance

DAY THREE -

Wednesday, July 30

Concurrent Sessions

(see concurrent session program;
choose one per time slot)

Concurrent Sessions I:

8:30 am - 9:30 am

- Cultivating Critical Thinking for College Completion– [Scott Demsky](#), [Joshua Kimber](#)
Empire Ballroom
- “Philosophizing” the Zeitgeist - Using the Elements of Reasoning to Connect History and Philosophy Through the Common Core Standards– [J. Stephen Scanlan](#)
Claremont Room
- Creating Assignments that Engage Your Students in Critical Thinking and Analysis– [Mel Manson](#)
Sonoma Room
- A Project Demonstration of Critical Thinking in Analyzing Students’ Career Paths– [Barbara Burke](#) and [Barbara Goldberg](#)
Napa 3
- Are We Really Teaching Critical Thinking by Adopting Programmes that Delineate Critical Thinking as a Goal and a Learning Outcome?– [Yara Hilal-Jurdi](#)
Monterey Room
- Improving Student Critical Thinking Through Direct Instruction in Rhetorical Analysis– [Lauren McGuire](#)
Napa 1

- Teaching Critical Thinking to Students from Different Cultures: Pitfalls and Remedies– [Nancy Burkhalter](#)
Napa 2
- Whistle-blowing as the Epitome of Critical Thinking– [Herschel Greenberg](#)
Lanai 1
- The Lesson: “I Think, Therefore, Who Am I?”– [Janice Conti Taraborelli](#)
Lanai 2

Concurrent Sessions II (Wed.):

9:40 am - 10:40 am

- Developing a Sustainable Model for Faculty Development in the Pedagogy of Critical Thinking– [William Reynolds](#) and [Mark Berg](#)
Empire Ballroom
- Making Critical Thinking Visible: Critical Thinking in the Literature Classroom– [Amanda L. Hiner](#) and [John C. Bird](#)
Napa 1
- Intellectual Perseverance: Life inside the Elements Wheel– [Fred May](#)
Sonoma Room
- Critical Thinking Skills for Individuals with Special Needs: A Key Component to a Fully Inclusive Society– [Arshdeep Shinh](#), [Rona Margaret Relova](#), and [Kimberly Tran](#)
Napa 3

Conference at a Glance

- Thinking Critically about Educational Quantification– [Bob Schlim](#)
Claremont Room
- You're Dogmatic About Dogmatism! No! You're Dogmatic About Dogmatism!– [Don Ambrose](#)
Lanai 2
- Educational Transformation for the Classroom Teacher– [Carmen Polka](#)
Lanai 3
- Critical Thinking in Chile: Present Status and Suggested Improvements– [Nicole Hansen](#)
Monterey Room
- Critical Thinking and Teacher Education– [Zena Scholtz](#)
Napa 2

Concurrent Sessions III (Wed.): 10:55 am - 12:25 pm

- Enhancing Critical Thinking Across the Curriculum: Insights into the Long-Term Nature of Substantive Educational Reform– [Trish Parrish](#)
Empire Ballroom
- Historiography: The Application and Dissemination of Critical Thinking Within History– [Mickey Del Castillo](#)
Lanai 3

- Intellectual Values and Critical Thinking in a First-Year College Program– [Heather Barrack](#)
Claremont Room
- Running Toward the Confusion: Making Intellectual Traits Central and Accessing them Meaningfully– [Kurt Weiler](#)
Sonoma Room
- Glocalization of Critical Thinking– [Mohammad Bagher Bagheri](#)
Napa 1
- Wiki-Ethics: Implications of the Mass Behavior of the Internet and Social Media for Critical Thinking and Ethics– [Shawn Thompson](#)
Napa 2
- Observation: The Earliest Critical Thinking Skill– [Steve Coxon](#)
Monterey Room
- Empathy's Contribution to Critical Thinking– [Kevin R. Cutright](#)
Lanai 2
- Uncritically Organized: Improving Critical Thinking Development in Organizations– [Richard King](#)
Napa 3

View Ralph Nader and Richard Paul video (looping) in the Alumni Room before sessions begin each day, during breaks and lunch, and after the afternoon sessions. (Sat-Wed)

Conference at a Glance

DAY THREE - Afternoon Focal Sessions (Wed.)

(1:45 pm - 4:00 pm)

Conference registrants have chosen one of the following sessions for the afternoon:

- What Current Research Reveals about the State of Critical Thinking in Education Today– [Rush Cosgrove](#)
Empire Ballroom
- The Role of Essential Questions in Education and in Cultivating the Public Citizen– [Gerald Nosich](#)
Claremont Room
- For Administrators: Key Ingredients of an Effective Professional Development Program in Critical Thinking– [Linda Elder and Richard Paul](#)
Sonoma Room
- What It Means to Be a Public Citizen: Exploring Ralph Nader's Philosophy and World View– [Brian Barnes](#)
Lanai 2

Round Table Discussions (Wed.)

7:00 pm - 8:30 pm

Claremont Room

(see page 102 for details)

DAY FOUR - Thursday, July 31

Concurrent Sessions

(see concurrent session program; choose one per time slot)

Concurrent Sessions IV:

8:00 am - 9:00 am

- Content vs. Thinking? Challenges in Faculty Development and Insight into Institutional Improvement– [Steven J. Pearlman and David Carillo](#)
Empire Ballroom
- Promoting Critical Thinking in the Public Speaking Course– [Myra H. Walters](#)
Claremont Room
- Intellectual Courage, Whistleblowing, and the Public Citizen: A Well Founded Fear of Persecution– [Caroline Hunt-Matthes](#)
Napa 2
- Fostering Critical Leadership in the High School Classroom: Routines and Processes– [Joseph Heyer](#)
Sonoma Room



Conference at a Glance

- Critical Thinking in the Elementary Classroom– [Lindsey Wilkes](#) and [Andrea Friesen](#)
Napa 3
- Using Social Media as an Access Point to Analyze Our Thinking– [Shira M. Cohen-Goldberg](#)
Napa 1
- Bringing Data into the Classroom to Foster Quantitative Reasoning and Critical Thinking Development–
[Frederique Laubepin](#)
Lanai 3
- Fledgling Programmes in Critical Thinking - The Challenges and the Triumphs – [Justin Skea](#)
Lanai 2



Morning Focal Sessions (Thurs.) (9:15 am - 11:15 am)

Conference registrants have chosen one of the following sessions:

- Sociocentrism – a Primary Barrier to the Development of the Public Citizen– [Linda Elder](#) and [Richard Paul](#)
Napa Room
- Fostering Multilogical Thinking Across the Disciplines–
[Gerald Nosich](#)
Sonoma Room
- Teaching Students to Give Feedback Using Intellectual Standards– [Rush Cosgrove](#)
Claremont Room

Closing Session (Thurs.)

Where Do We Go From Here?

(11:40 am – 12:30 pm
Empire Ballroom)

Led by the Fellows of the Foundation for Critical Thinking.

All conference participants are invited.

Preconference Schedule

Daily Schedule July 26-27, 2014

Saturday - July 26

7:30 a.m. - 9:00 a.m.	Registration & Check In – Horizon Room
9:00 a.m. - 10:30 a.m.	Preconference Workshops begin
10:30 a.m. - 10:45 a.m.	Break – Horizon Room
10:45 a.m. - 11:45 a.m.	Preconference Workshops continue
11:45 a.m. - 1:15 p.m.	Lunch — on your own
1:15 p.m. - 2:45 p.m.	Preconference Workshops continue
2:45 p.m. - 3:00 p.m.	Break – Horizon Room
3:00 p.m. - 4:00 p.m.	Preconference Workshop sessions continue

Sunday - July 27

9:00 a.m. - 10:30 a.m.	Preconference Workshops begin
10:30 a.m. - 10:45 a.m.	Break – Horizon Room
10:45 a.m. - 11:45 a.m.	Preconference Workshops continue
11:45 a.m. - 1:15 p.m.	Lunch — on your own
1:15 p.m. - 2:45 p.m.	Preconference Workshops continue
2:45 p.m. - 3:00 p.m.	Break – Horizon Room
3:00 p.m. - 4:00 p.m.	Preconference Workshop sessions continue

View Ralph Nader and Richard Paul Videos in the Alumni Room before sessions begin each day, during breaks and lunch, and after the afternoon sessions. (Sat-Wed)

Conference Begins Daily Schedule July 28-29, 2014 Days One and Two

Monday - July 28

7:30 a.m. - 8:40 a.m.	Registration & Check In – Horizon Room
8:45 a.m. - 10:00 a.m.	Opening Ceremony – Empire Ballroom
10:00 a.m. - 10:30 a.m.	Break – Horizon Room
10:30 a.m. - 12:00 p.m.	Day One Focal Sessions Begin
12:00 p.m. - 1:30 p.m.	Lunch — on your own
1:30 p.m. - 2:45 p.m.	Day One Focal Sessions Continue
2:45 p.m. - 3:00 p.m.	Break – Horizon Room
3:00 p.m. - 4:00 p.m.	Day One Focal Sessions Continue
5:30 p.m. - 7:00 p.m.	Reception with Ralph Nader for all delegates— Claremont Room

Tuesday - July 29

9:00 a.m. - 10:00 a.m.	Bertrand Russell Scholars Program Begins - Honoring Ralph Nader*
10:00 a.m. - 10:30 a.m.	Working Break – Horizon Room
10:30 a.m. - 12:30 p.m.	Bertrand Russell Scholars Program Continues
12:30 p.m. - 2:00 p.m.	Lunch — on your own
2:00 p.m. - 3:15 p.m.	Afternoon Focal Sessions Begin
3:15 p.m. - 3:30 p.m.	Break – Horizon Room
3:30 p.m. - 4:30 p.m.	Afternoon Focal Sessions Continue

* See *Bertrand Russell Distinguished Scholars Critical Thinking Series*

View Ralph Nader and Richard Paul Videos in the Alumni Room before sessions begin each day, during breaks and lunch, and after the afternoon sessions. (Sat-Wed)

Conference Continues

Daily Schedule July 30-31, 2014

Days Three and Four

Wednesday - July 30

Concurrent sessions in the morning; focal sessions in afternoon. To choose concurrent sessions, see the concurrent session program.

8:30 a.m. - 9:30 a.m.	Concurrent Sessions I
9:40 a.m. - 10:40 a.m.	Concurrent Sessions II
10:40 a.m. - 10:55 a.m.	Break – Horizon Room
10:55 a.m. - 12:25 p.m.	Concurrent Sessions III
12:25 p.m. - 1:45 p.m.	Lunch — on your own
1:45 p.m. - 2:45 p.m.	Afternoon Focal Sessions Begin
2:45 p.m. - 3:00 p.m.	Break – Horizon Room
3:00 p.m. - 4:00 p.m.	Afternoon Focal Sessions Continue
7:00 p.m. - 8:30 p.m.	Roundtable Discussions – Claremont Room

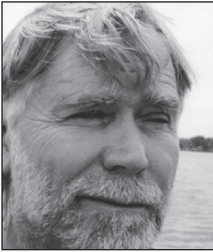
Thursday - July 31

8:00 a.m. - 9:00 a.m.	Concurrent Sessions IV
9:00 a.m. - 9:15 a.m.	Break – Horizon Room
9:15 a.m. - 11:15 a.m.	Morning Focal Sessions
11:40 a.m. - 12:30 p.m.	Closing Session – Empire Ballroom

View Ralph Nader and Richard Paul Videos in the Alumni Room before sessions begin each day, during breaks and lunch, and after the afternoon sessions. (Sat-Wed)



Fellows of the Foundation for Critical Thinking and Focal Session Presenters



Dr. Richard Paul is Director of Research and Professional Development at the Center for Critical Thinking and Chair of the National Council for Excellence in Critical Thinking. Dr. Paul is an internationally recognized authority on critical thinking, with eight books and over 200 articles on the subject. He has written books for every grade level and has done extensive experimentation with teaching tactics and strategies, as well as devising – among other things – novel ways to engage students in rigorous self-assessment. Dr. Paul has received four degrees and has given lectures on critical thinking at many universities in both the United States and abroad, including Harvard, the University of Chicago, the University of Illinois, and the universities of Puerto Rico, Costa Rica, British Columbia, Toronto, and Amsterdam. He taught beginning and advanced courses in critical thinking at the university level for over 30 years. He has been the recipient of numerous honors and awards, including Distinguished Philosopher (by the Council for Philosophical Studies, 1987), O.C. Tanner Lecturer in Humanities (by Utah State University, 1986), Lansdown Visiting Scholar (by the University of Victoria, 1987), and the Alfred Korsybski Memorial Lecturer (by the Institute for General Semantics, 1987). His views on critical thinking have been canvassed in the *New York Times*, *Education Week*, *The Chronicle of Higher Education*, *American Teacher*, *Reader's Digest*, *Educational Leadership*, *Newsweek*, and *U.S. News and World Report*.



Dr. Linda Elder is an educational psychologist and a prominent authority on critical thinking. She is President of the Foundation for Critical Thinking and Executive Director of the Center for Critical Thinking. Dr. Elder has taught both psychology and critical thinking at the college level, and has given presentations to more than 20,000 educators at all levels. She has coauthored four books and 24 thinker's guides on critical thinking. Dr. Elder has developed an original stage theory of critical thinking development. Concerned with understanding and illuminating the relationship between thinking and affect, and with the barriers to critical thinking, Dr. Elder has placed these issues at the center of her thinking and her work.

Fellows of the Foundation for Critical Thinking and Focal Session Presenters, cont.



Dr. Gerald Nosich is an authority on critical thinking, and has given more than 150 national and international workshops on the subject. He has worked with the U.S. Department of Education on a project for the National Assessment of Higher Order Thinking skills, served as the Assistant Director of the Center for Critical Thinking, and has been featured as a Noted Scholar at the University of British Columbia. He is Professor of Philosophy at Buffalo State College in New York. He is the author of two books including *Learning to Think Things Through: A Guide to Critical Thinking Across the Curriculum*.



Dr. Rush Cosgrove is Assistant Director of Research, Historian, and a Research Fellow at the Foundation for Critical Thinking. He holds a PhD from the University of Cambridge, Darwin College. He holds Masters degrees from both the University of Oxford, New College and the University of Cambridge, Darwin College. He has conducted research on critical thinking and the Oxford Tutorial, and on the Paulian Framework for critical thinking as contextualized at a major U.S. research university. He conducts workshops in critical thinking for faculty and students, in English as well as Spanish.



Guest Focal Session Presenters

Visiting Scholars of the Foundation for Critical Thinking



Mr. Brian Barnes has taught Critical Thinking courses for seven years at the university level. He is a PhD candidate at the University of Louisville, which fosters the Paulian Approach to critical thinking. Barnes has made critical thinking presentations for a wide variety of educational audiences, often presenting critical thinking through the lens of sustainable systems. With his teaching experience and deep connection to the logic of student thought, Barnes brings a wealth of knowledge to the conference setting.



Dr. Paul Bankes is Executive Director of Elementary Education for the Thompson School District in Loveland, Colorado. For more than 10 years, Dr. Bankes has played an important leadership role in fostering the Paulian conception of critical thinking in instruction across his district. As a principal, he led the implementation of this critical thinking approach to achieve state recognized levels of achievement in three different Title I schools– a high school, a middle school and an elementary school. He helped author the reasoning portion of the Colorado Academic Standards that are based on the Paul-Elder framework. In addition to his administrative experience, Dr. Bankes has taught courses at the college level in critical thinking and served as an elementary teacher.

The Bertrand Russell Distinguished Scholars Critical Thinking Series



This year's conference marks our third year to include the Bertrand Russell Distinguished Scholars Critical Thinking Series. This feature of the conference highlights the work and thinking of distinguished thinkers within subjects, fields, disciplines, or about specific topics or issues. We honor the thinking, the philosophy, and the contributions of Bertrand Russell through this series.

Bertrand Russell was one of the most influential 20th century philosophers. In the following passages, he emphasizes the importance of open and free inquiry. He stresses the critical

need to create education systems that foster fairminded pursuit of knowledge, and warns of the dangers inherent in dogmatic ideologies.

The conviction that it is important to believe this or that, even if a free inquiry would not support the belief, is one which is common to almost all religions and which inspires all systems of state education...A habit of basing convictions upon evidence, and of giving to them only that degree of certainty which the evidence warrants, would, if it became general, cure most of the ills from which the world is suffering. But at present, in most countries, education aims at preventing the growth of such a habit, and men who refuse to profess belief in some system of unfounded dogmas are not considered suitable as teachers of the young...

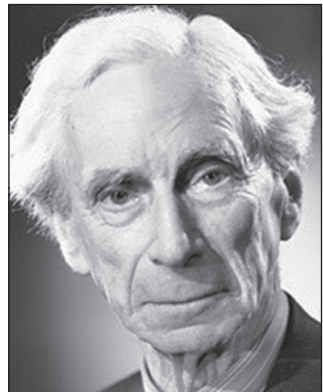
The world that I should wish to see would be one freed from the virulence of group hostilities and capable of realizing that happiness for all is to be derived rather from cooperation than from strife. I should wish to see a world in which education aimed at mental freedom rather than at imprisoning the minds of the young in a rigid armor of dogma calculated to protect them through life against the shafts of impartial evidence. The world needs open hearts and open minds, and it is not through rigid systems, whether old or new, that these can be derived (Russell, 1957, pp. vi-vii).

In his book, *Portraits from Memory*, “Reflections on My Eightieth Birthday,” Russell (1956) comments on the long-term nature of change and the importance of moving ever closer toward the creation of critical societies:

...beneath all this load of failure I am still conscious of something that I feel to be victory. I may have conceived theoretical truth wrongly, but I was not wrong in thinking that there is such a thing, and that it deserves our allegiance. I may have thought the road to a world of free and happy human beings shorter than it is proving to be, but I was not wrong in thinking that such a world is possible, and that it is worth while to live with a view to bringing it nearer. I have lived in the pursuit of a vision, both personal and social. Personal: to care for what is noble, for what is beautiful, for what is gentle; to allow moments of insight to give wisdom at more mundane times. Social: to see in imagination the society that is to be created, where individuals grow freely, and where hate and greed and envy die because there is nothing to nourish them. These things I believe, and the world, for all its horrors, has left me unshaken.

Russell (1919) also illuminates the fact that the vast majority of people today do not think critically, or indeed ethically, and that those who do will seek a “new system of society.” He says:

The great majority of men and women, in ordinary times, pass through life without ever contemplating or criticizing, as a whole, either their own conditions or those of the world at large. They find themselves born into a certain place in society, and they accept what each day brings forth, without any effort of thought beyond what the immediate present requires...they seek the satisfaction of the needs of the moment, without much forethought, and without considering that by sufficient effort the whole condition of their lives could be changed...It is only a few rare and exceptional men who have that kind of love toward mankind at large that makes them unable to endure patiently the general mass of evil and suffering,



regardless of any relation it may have to their own lives. These few, driven by sympathetic pain, will seek, first in thought and then in action, for some way of escape, some new system of society by which life may become richer, more full of joy and less full of preventable evils than it is at present (p. viii).

Bertrand Russell's thoughts and writings on social issues are intimately linked with the ideals of critical thinking and the concept of fairminded critical societies.



References:

Russell, B. (1919). *Proposed Roads to Freedom*. NY: Henry Holt and Co. Russell, B. (1956). *Portraits From Memory and Other Essays*. New York: Simon and Schuster.

Russell, B. (1957). *Why I am Not a Christian*. New York: Simon and Schuster.

The First Bertrand Russell Distinguished Scholar Named Posthumously

At this year's conference, we look backwards in history to begin to identify Russell Scholars to be named posthumously. Our first Russell Scholar to be named posthumously is Socrates, as he may be considered the first true exemplar of fairminded critical thinking.

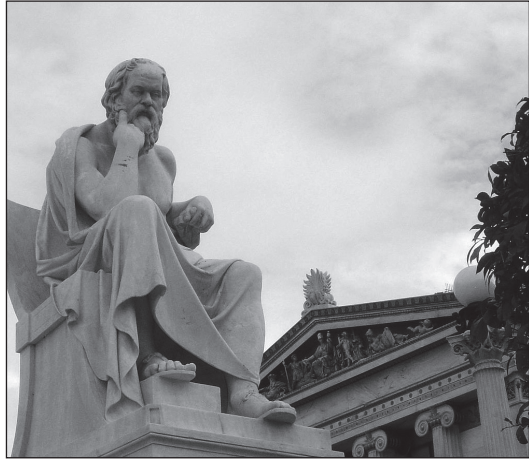


Socrates was an early Greek philosopher and teacher (c. 470–399 BCE) who believed the best way to teach and learn was through disciplined, rigorous questioning. He believed that people learn best not by being told what to believe or do, but by being guided through questioning to what makes most sense to believe or do. He often used questioning to help people see either that what they said they believed they did not, in fact, believe (because their “beliefs” were inconsistent with their behavior), or that what they said they believed was conceptually unsound or illogical.

When questioning others, Socrates often functioned as both teacher and student, modeling the kind of disciplined inquiry he thought people needed to engage in if they were to live a rational life. Socrates also used questioning when dealing with his adversaries, revealing – through the pursuit of answers to questions he formulated – that their reasoning was illogical, unsound, or otherwise unjustifiable.

Socrates was fundamentally concerned with the *soundness of reasoning* –

with getting closer and closer to the truth. He was at home with complexities, confusion, perplexities, and uncertainties. He was known for the sharpness of his mind, the ways in which he opened up questions for debate and discussion, and the seemingly tireless source of energy he expended in expanding his mind – and helping others do the same.



Socrates embodied the intellectual virtues at the heart of fairminded criticality. He was, for instance, a living example of [intellectual humility](#), being keenly aware of the limits of his knowledge, and quite comfortable pointing out those limits to others – a rare human quality. He exhibited and cultivated [confidence in reason](#), believing that the pursuit of knowledge is the primary function of human thought, and hence should be pursued rigorously and routinely in everyday life. Socrates exhibited [intellectual perseverance](#), pursuing ideas and questions with energy and zest, infecting others with his delight in learning, and never tiring of the process. Consistently attempting to live in accordance with the ideals he espoused, and never afraid to stand alone in his views – as long as those views had been rigorously analyzed and assessed – Socrates was a living example of both [intellectual integrity](#) and [intellectual autonomy](#). And through [intellectual courage](#), he was willing to face an angry mob of accusers at his trial and to stand alone in his views, even when facing the probability of a death sentence.

Socrates viewed education, properly so called, as a complex process requiring active and disciplined engagement in learning. In his view, the only way students can learn important and meaningful ideas is through engaging their minds *intellectually*. Hence the role of the teacher is to foster intellectual discipline and skill so that students come to develop, increasingly over time, deep and important insights.

We honor Socrates, his life, and his thought through the Bertrand Russell Scholars Series.

Bertrand Russell Distinguished Scholar for the 34th International Conference

This feature of the conference highlights the work and thinking of distinguished thinkers within subjects, fields, disciplines, or about specific topics or issues. This year's scholar is Public Citizen Ralph Nader. All conference participants are invited to the Russell Scholars Program. See p. 35 for this year's Russell Program format.

Honored by *Time Magazine* as "One of the 100 Most Influential Americans of the 20th Century" and as "One of the 100 Most Influential Figures in American History" by *The Atlantic*, consumer advocate and Green Party presidential candidate Ralph Nader has devoted his life to giving ordinary people the tools they need to defend themselves against corporate negligence and government indifference. With a tireless, selfless dedication, he continues to expose and remedy the dangers that threaten a free and safe society.

The subject of the critically acclaimed documentary *An Unreasonable Man*, Nader also penned the introspective book *The Seventeen Traditions* about the earliest days of his own life, where he revisits 17 key traditions he absorbed from his parents, siblings, and the people in his community and draws from them inspiring lessons for today's society.

Nader released his first novel, *Only the Super-Rich Can Save Us*, in March 2011. The book presents a "practical utopia" outlining the lasting improvements to society that America's most powerful figures could achieve if they pooled their resources toward a singular goal. *Legendary* magazine editor Lewis Lapham called the book "as inspired



a work of the political imagination as Tom Paine's *Common Sense*." His latest work is *Told You So: The Big Book of Weekly Columns*, which presents a panoramic portrait of the problems confronting our society, and provides examples of the many actions an organized citizenry could – and should – take to create a more just and environmentally sustainable world.

Recently, Nader announced his plans for a museum in his Connecticut hometown that celebrates victories of the law over corporate power. The American Museum of Tort Law, which is set to be built in a former bank building in downtown Winsted, will hold appeal for an audience far beyond law school students: visitors will learn that the jury system can serve ordinary citizens.

Nader's foray into public life began in 1965 when he took on the Goliath of the auto industry with his book *Unsafe at Any Speed*, a shocking expose of the disregard carmakers held for the safety of their customers. The Senate hearing into Nader's accusations and the resulting life-saving motor vehicle safety laws catapulted Nader into the public sphere.

Nader quickly built on the momentum of that success. Working with lawmakers, he was instrumental in creating the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and the Consumer Product Safety Commission. Laws he helped draft and pass include the Safe Drinking Water Act, the Meat and Poultry Inspection Rules, the Air and Water Pollution Control Laws, and the Freedom of Information Act. Working to empower the average American, Nader has formed numerous citizen groups, including the Center for Auto Safety, Public Citizen, the Pension Rights Center, the National Coalition for Universities in the Public Interest, and the student Public Interest Research Groups (PIRGs) that operate in over 20 states. He has also worked with alumni classes, including his own at Princeton



University and Harvard Law School, to expand their efforts beyond parties and reunions to community projects that systemically advance social justice.

Accurately predicting the current financial crisis years ago, Nader has outlined a ten-point plan for recovery. His plan involves sweeping reforms for the financial and housing markets, as well as increased public accountability for any institution seeking a bailout. Nader has also defended the integrity of public office by rallying against the laws allowing multi-national corporations to make unlimited donations to political campaigns.



Nader organized the Green Party's first presidential campaign in 1996 to challenge the "duopoly" of the two-party system. He received 700,000 votes on a limited campaign budget of \$5,000 and he ran again in 2000, receiving 2.8 million votes. His goal is to build the foundation of a third political party and create a robust progressive political movement that rallies around issues rather than empty slogans and figureheads.



Among his best-selling books are *Crashing the Party: How to Tell the Truth and Still Run for President*, *Winning the Insurance Game*, *Why Women Pay More*, and *Getting the Best from Your Doctor*. Other titles include *Children First: A Parent's Guide to Fighting Corporate Predators*, *No Contest: Corporate Lawyers and the Perversion of Justice in America*, and *The Ralph Nader Reader*. He also writes a weekly column, "In the Public Interest," which runs in newspapers around the US.

Both citizens and corporate audiences listen intently to what Nader has to say. Years after they graduate, college students tell him how his lecture changed their lives. His message is simple and compelling: "To go through life as a non-citizen would be to feel there's nothing you can do, that nobody's listening, that you don't matter. But to be a citizen is to enjoy the deep satisfaction of seeing the prevention of pain, misery, and injustice."

Bertrand Russell Scholars Program

Empire Ballroom

Lecture by Russell Scholar Ralph Nader

*The Most Pressing Issues of Our Time
and What We Can Do About Them*

Tuesday, July 29 9:00 a.m. - 10:00 a.m.

Process: Working Break

10:00 a.m. - 10:30 a.m.

Conversazione

10:30 a.m. - 11:45 a.m.

**Dignitaries' Comments on Ralph Nader's Contributions
to Fairminded Critical Societies**

11:45 a.m. - 12:15 a.m.

Format for the Russell Program

To draw out the critical thinking implicit in the thinking of the Russell Scholars, the following unique design for the Working Break and *Conversazione* is used:

Working Break – Participants will break for coffee while working together in small groups to reason within some of the dimensions of Nader's worldview. Guidelines for this process will be given before the break. One part of the process will be to formulate one or more questions that might be posed to Mr. Nader after the working break. Find coffee in the Horizon Room; then form groups of two to three. Work in the lounge area of the lobby, in the Claremont room, the alumni room, or anywhere else you can find to quickly get seated and begin. Make notes of your discussion.

Conversazione – To draw out the critical thinking implicit in the thinking of the Russell Scholar, the following unique design for the conversation will be used: One or more fellows of the Foundation for Critical Thinking will lead a Socratic dialogue with Mr. Nader (approximately 45 minutes). This will be followed by 15 minutes of questions to Mr. Nader by conference delegates and attendees. There will then be another 15 minutes of Socratic dialogue between the Fellow(s) and Mr. Nader.

The program will be followed by a book signing. Books by Ralph Nader will be available for sale at that time.

From the archives...

Ethics Without Indoctrination

By Richard Paul

Abstract

In this revised paper, originally published in Educational Leadership (1988), Richard Paul argues that ethics ought to be taught in school, but only in conjunction with critical thinking. Without critical thinking at the heart of ethical instruction, indoctrination rather than ethical insight results. Moral principles do not apply themselves; they require a thinking mind to assess facts and interpret situations. Moral agents inevitably bring their perspectives into play in making moral judgments and this, together with the natural tendency of the human mind to self-deception when its interests are involved, is the fundamental impediment to the right use of ethical principles.

Paul spells out the implications of this view for the teaching of ethics in literature, science, history, and civics. He provides a taxonomy of moral reasoning skills and describes an appropriate long term staff development strategy to foster ethics across the curriculum.

The Problem of Indoctrination

Nearly everyone recognizes that even young children have moral feelings and ideas, make moral inferences and judgments, and develop an outlook on life which has moral significance for good or ill. Nearly everyone also gives at least lip service to a universal common core of general ethical principles — for example, that it is morally wrong to cheat, deceive, exploit, abuse, harm, or steal from others, that everyone has a moral responsibility to respect the rights of others, including their freedom and well-being, to help those most in need of help, to seek the common good and not merely their own self-interest and egocentric pleasures, to strive in some way to make this world more just and humane. Unfortunately, mere verbal agreement on general moral principles alone will not accomplish important moral ends nor change the world for the better. Moral principles mean something only when manifested in behavior. They have force only when embodied in action. Yet to put them into action requires some analysis and insight into the real character of everyday situations.

The world does not present itself to us in morally transparent terms. The moral thing to do is often a matter of disagreement even among people of good will. One and the same act is often morally praised by some, condemned by others.

Furthermore, even when we do not face the morally conflicting claims of others, we often have our own inner conflicts as to what, morally speaking, we should do in some particular situation. Considered another way, ethical persons, however strongly motivated to do what is morally right, can do so only if they know what that is. And this they cannot do if they systematically confuse their sense of what is morally right with their self-interest, personal desires, or what is commonly believed in their peer group or community. Because of complexities such as these, ethically motivated persons must learn the art of self-critique, of moral self-examination, to become attuned to the pervasive everyday pitfalls of moral judgment: moral intolerance, self-deception, and uncritical conformity. These human foibles cause pseudo-morality, the systematic misuse of moral terms and principles in the guise of moral action and righteousness.

Unfortunately few have thought much about the complexity of everyday moral issues, can identify their own moral contradictions, or clearly distinguish their self-interest and egocentric desires from what is genuinely moral. Few have thought deeply about their own moral feelings and judgments, have tied these judgments together into a coherent moral perspective, or have mastered the complexities of moral reasoning. As a result, everyday moral judgments are often a subtle mixture of pseudo and genuine morality, moral insight and moral prejudice, moral truth and moral hypocrisy. Herein lies the danger of setting up ill-thought-out public school programs in moral education. Without scrupulous care, we merely pass on to students our own moral blindness, moral distortions, and closedmindedness. Certainly many who trumpet most loudly for ethics and morality in the schools merely want students to adopt their ethical beliefs and their ethical perspectives, regardless of the fusion of insight and prejudice those beliefs and perspectives doubtless represent. They take themselves to have the Truth in their pockets. They take their perspective to be exemplary of all morality rightly conceived. On the other hand, what these same people fear most is someone else's moral perspective taught as the truth: conservatives afraid of liberals being in charge, liberals of conservatives, theists of non-theists, non-theists of theists.

Now, if truth be told, all of these fears are justified. People, except in the most rare and exceptional cases, do have a strong tendency to confuse what they believe with the truth. It is always the others who do evil, who are deceived, self-interested, closedminded — never us. Given this universal blind spot in human nature, the only safe and justified basis for ethical education in the public schools is one precisely designed to rule out bias in favor of the substantive beliefs and conclusions of any particular group, whether religious, political, communal, or national. Indeed since one of our most fundamental responsibilities as educators is to educate rather than indoctrinate our students — to help them cultivate skills,

insights, knowledge, and traits of mind and character that transcend narrow party and religious affiliations and help them to think beyond biased representations of the world — we must put special safeguards into moral education that prevent indoctrination. The world needs not more closedminded zealots, eager to remake the world in their image, but more morally committed rational persons with respect for and insight into the moral judgments and perspectives of others, those least likely to confuse pseudo with genuine morality.

But how is this to be done? How can we cultivate morality and character in our students without indoctrinating them, without systematically rewarding them merely because they express our moral beliefs and espouse our moral perspective?

The answer is in putting critical thinking into the heart of the ethical curriculum, critical thinking for both teachers and students. To bring ethics and morality into the schools in an educationally legitimate way, administrators and teachers must think critically about what to emphasize and what to avoid. Intellectually discriminating minds and morally refined sensibilities must be in charge of both initial curriculum design and its subsequent classroom implementation. This is not an unreasonable demand, for, ethics aside, skill in the art of drawing important intellectual discriminations is crucial to education in any subject or domain, and proficiency in the art of teaching critically — encouraging students to question, think for themselves, develop rational standards of judgment — is the responsibility of all classroom teachers. Any subject, after all, can be taught merely to indoctrinate students and so to inadvertently stultify rather than develop their ability to think within it. Unfortunately, we have all been subjected to a good deal of indoctrination in the name of education and retain to this day some of the intellectual disabilities that such scholastic straight-jacketing produces. To allow ethics to be taught in the public schools this narrowly is unconscionable. It is to betray our ethical responsibility as educators in the name of ethics.

Integrating Critical Thinking and Ethics

If we bring ethics into the curriculum — and we should — we must ensure that we do so morally. This requires us to clearly distinguish between espousing the universal, general principles of morality shared by people of good will everywhere, and the very different matter of defending some particular application of these principles to actual life situations as conceived from a particular moral standpoint (liberal, conservative, radical, theistic, non-theistic, U.S., Soviet, etc.). Any particular moral judgment arises from someone conceptualizing the facts of a situation from some moral perspective or standpoint. Every moral perspective in some way embodies the same general

moral principles. The integration of principles with purported facts within a particular perspective produces the judgment that this or that act is morally right or wrong. Precisely because we often differ about the facts or about the proper perspective on the facts, we come to differing moral judgments.

The problem is not at the level of general moral principles. No people in the world, as far as I know, take themselves to oppose human rights or stand for injustice, slavery, exploitation, deception, dishonesty, theft, greed, starvation, ignorance, falsehood, and human suffering. In turn, no nation or group has special ownership over any general moral principle. Students, then, need skill and practice in moral reasoning, not indoctrination into the view that one nation rather than another is special in enunciating these moral principles. Students certainly need opportunities to explicitly learn basic moral principles, but more importantly they need opportunities to apply them to real and imagined cases, and to develop insight into both genuine and pseudo morality. They especially need to come to terms with the pitfalls of human moralizing, to recognize the ease with which we mask self-interest or egocentric desires with high-sounding moral language.

In any case, for any particular instance of moral judgment or reasoning, students should learn the art of distinguishing principles (which tell us in a general way what we ought or ought not to do) from perspectives (which characterize the world in ways which lead to an organized way of interpreting it) and facts (which provide the specific information for a particular moral judgment). In learning to discriminate these dimensions of moral reasoning, we learn how to focus on the appropriate questions at issue. Sometimes the dispute will depend on the facts: (Did John actually take the watch?) But, more often, they will be a matter of perspective (If you look at it this way, Jack did not take advantage of her, but if you look at it that way, he did. Which is more plausible given the facts?) Sometimes they will be a matter of both the facts and how to interpret them. (Do most people on welfare deserve the money they get? Should white collar crime be punished more severely?).

As people, students have an undeniable right to develop their own moral perspective — whether conservative, liberal, theistic, or non-theistic — but they should be able to analyze the perspective they do use, compare it accurately with other perspectives, and scrutinize the facts they conceptualize and judge as carefully as in any other domain of knowledge. They should, in other words, become as adept in using critical thinking principles in the moral domain as we expect them to be in scientific and social domains of learning.

To help students gain these skills, teachers need to see how one adapts the principles of critical thinking to the domain of ethical judgment and reasoning

(see figure #1). Teachers also need insight into the intimate interconnection of intellectual and moral virtues. They need to see that being moral is something more than abstract good-heartedness, that our basic ways of knowing are inseparable from our basic ways of being, that how we think and judge in our daily life reflects who we are, morally and intellectually. To cultivate the kind of moral independence implied in being an educated moral person, we must foster in students moral humility, moral courage, moral integrity, moral perseverance, moral empathy, and moral fairmindedness (see figure #2). These moral traits are compatible with all moral perspectives (whether conservative, liberal, theistic, non-theistic, etc.).

Students who learn to think critically about moral issues and so develop moral virtues, can then develop their moral thinking within any tradition they choose. Critical thinking does not compel or coerce students to come to any particular substantive moral conclusions or to adopt any particular substantive moral point of view. Neither does it imply moral relativism, for it emphasizes the need for the same high intellectual standards in moral reasoning and judgment at the foundation of any bona fide domain of knowledge. Since moral judgment and reasoning presupposes and is subject to the same intellectual principles and standards that educated people use in all domains of learning, one can integrate consideration of moral issues into diverse subject areas, certainly into literature, science, history, civics, and society. Let us consider each of these areas very briefly.

Ethics and Literature

Good literature represents and reveals, to the reflective critical reader, the deeper meanings and universal problems of real everyday life. Most of these problems have an important moral dimension or character. They are the kinds of problems all of us must think about and solve for ourselves; no one can simply tell us the “right” answers:

Who am I? What kind of person am I? What is the world really like? What are my parents, my friends, and other people really like? How have I become the way I am? What should I believe in? Why should I believe in it? What real options do I have? Who are my real friends? Who should I trust? Who are my enemies? Need they be my enemies? How did the world become the way it is? How do people become the way they are? Are there any really bad people in the world? Are there any really good people in the world? What is good and bad? What is right and wrong? How should I decide? How can I decide what is fair and what is unfair? How can I be fair to others? Do I have to be fair to my enemies? How should I live my

life? What rights do I have? What responsibilities?

Stimulating students to reflect upon questions like these in relationship to story episodes and their own experience enables them to draw upon their own developing moral feelings and ideas, to reason about them systematically, to tie them together and see where they lead. Careful reflection on episodes in literature — characters making sound or unsound moral judgments, sometimes ignoring basic moral principles or twisting them to serve their vested interests, sometimes displaying moral courage or cowardice, often caught in the throws of a moral dilemma — helps students develop a basic moral outlook on life. Furthermore, since moral issues are deeply embedded in everyday life, they often appear in literature. One need not unnaturally force discussion of literature into a moral framework. Moral issues are inevitably implicit there for the raising. However, it is important to realize that moral issues in literature, like the moral issues of everyday life, are rarely simplistic, and involved students will typically generate opposing viewpoints about how to respond to them. This, too, reflects the nature of the real world with its variety of moral outlooks vying for our allegiance.

As teachers of literature we should not impose authoritative interpretations upon the student; we should help them develop a reasoned, reflective, and coherent approach of their own. Each perspective, of course, should be respected; however, to be considered, each perspective must be reasoned out, not simply dogmatically asserted. In discussion, each student must learn the art of appealing to experience and reason, not merely to authority. Each student must therefore learn to reflect upon the grounds of his or her beliefs, to clarify ideas, support them with reasons and evidence, explore their implications, and so forth. Each student must also learn how to sympathetically enter into the moral perspectives of the others, not with the view that all moral perspectives are equally sound, but rather with the sense that we cannot judge another person's perspective until we genuinely understand it. Everyone is due the respect of at least being understood. And just as students will feel that they have something worth saying about the moral issues facing characters in stories and want their views to be understood, so they must learn to give that same respect to the others. Students then learn the art of reasoned dialogue, how to use moral reasoning skills to articulate their concerns about rights, justice, and the common good, from whatever moral viewpoint their experience and background predisposes them.

Essay writing is an excellent means of helping students organize their thinking on moral issues in literature. It provides the impetus to formulate moral principles explicitly, to carefully conceptualize and interpret facts, and to give and consider reasons in support of their own and contending moral conclusions. Needless to say we must grade students' moral writing, not on the basis of their substantive

perspectives or conclusions, but rather on grounds of clarity, coherence, and sound reasoning. A clearly thought out, well-reasoned, well-illustrated piece of “moral” writing is what we are after. Such writing need not be long and complicated. Indeed it can begin in the early years with one-sentence “essays” such as “I think Jack (in “Jack and the Bean Stalk”) was greedy because he didn’t need to take all the golden eggs and the golden harp, too.”

Ethics and Science

Students should study science to understand, evaluate, and utilize scientific information. Most students will not, of course, become scientists but nevertheless need scientific knowledge to understand and solve problems within everyday personal and vocational life, problems having to do with such diverse areas as medicine, biology, chemistry, engineering, technology, the environment, and business. Science and technology play a greater and greater role in our lives, often generating major moral issues in the process. Scientific information is not simply used, it is used, and sometimes misused, for a variety of purposes, to advance the interests of a variety of groups, as those interests are conceived from a variety of perspectives. Its use must always be assessed.

In their daily lives students, like the rest of us, are bombarded with scientific information of every kind, typically in relation to some kind of advocacy. And they, like the rest of us, need to make decisions about the implications of that information. What are the real dangers of air pollution? Do people have a right to clean air and water? If so, how clean? What are the consequences of developing nuclear rather than solar power? To what extent should scientists be able to use animals in their experiments? Do animals have moral rights? To what extent should scientists be allowed to experiment with new viruses that might generate new diseases? Under what conditions should people be artificially kept alive? What life and death decisions should be left to doctors? What special moral responsibilities, if any, do scientists have to the broader society? These are but a few of the many weighty moral and scientific issues with which all of us as educated people are faced. Whether we develop an informed viewpoint or not, practical decisions are made everyday in each of these areas, and the public good is served or abused as a result of the rationality or irrationality of those decisions. Although many of these issues are ignored in traditional science instruction, there are good reasons not only to include but to emphasize them. First, they are more interesting and useful to most students than the more traditional “pure-science” emphasis. Second, they help students develop a more unified perspective on their values and personal beliefs and on the moral issues that science inevitably generates when applied to the real world.

Ethics and History

There is no more important subject, rightly conceived, than history. Human life in all of its dimensions is deeply historical. Whatever experiences we have, the accounts that we give of things, our memories, our records, our sense of ourselves, the “news” we construct, the plans we form, even the daily gossip we hear — are historical. Furthermore, since we all have a deep-seated drive to think well of ourselves, and virtually unlimited powers to twist reality to justify ourselves, how we construct history has far-reaching ethical consequences. Not only do virtually all ethical issues have a historical component (moral judgment presupposes an account of what actually happened) but also virtually all historical issues have important ethical implications.

Issues arise among historians when they have conflicting accounts of events. Each major moral standpoint tends to read history differently and comes to importantly different moral conclusions as a result. The moral and the historical come together again and again in questions such as these: Morally speaking, what does the past teach us? What were the long-term effects of this kind of action as opposed to that? What kind of a world are we living in? What moral ideals can we actually live by and in what way? Is pacifism, for example, realistic? Are we justified in engaging in “unethical” practices in our own defense because our enemies use them to attack or harm us? What does it mean for countries to be “friendly” toward each other? How are friendships between countries like and unlike those between individuals? To what extent have we as a nation (and I as an individual) lived in accordance with the moral ideals we have set for ourselves? For example, was the historical treatment accorded Native Americans and other ethnic groups, has our foreign policy in general, been in keeping with our traditional espoused moral values? Morally speaking, how could our founding fathers justify slavery? Should they be morally criticized for accepting this violation of human rights or are there historical reasons why our criticism should be tempered with “understanding”? If our founding fathers, who eloquently formulated universal moral principles, were capable of violating them, are we now different from them, are we morally better, or are we also, without recognizing it, violating basic moral values we verbally espouse?

Once we grasp the moral significance of history, as well as the historical significance of morality, and recognize that historical judgment, like ethical judgement, is necessarily selective, that facts are conceptualized from some point of view, then we are well on our way toward constructing an unlimited variety of assignments in which history is no longer an abstraction from present and immediate concerns but rather an exciting, living, thought-provoking subject. Once students truly see themselves constructing history on a daily basis and, in

doing so, coming to conclusions that directly affect the well-being of themselves and others, they will have taken a giant step toward becoming historically sensitive, ethical persons. As Carl Becker said in his presidential address to the American Historical Association over 50 years ago, every person, like it or not, “is his own historian”. We must make sure that our students grasp the moral significance of that fact.

Ethics, Civics, and the Study of Society

Just as all of us, to be ethical, must be our own historian, so too, to ethically fulfill our civic responsibilities, we must be our own sociologists. That is to say, each of us must study the underlying realities of social events, the unwritten rules and values that unreflectively guide our behavior; otherwise how can we justify using ethical principles to judge people and situations in the real world around us? We should be more than uncritical social observers and superficial moral judges. We have to recognize, as every sociologist since William Graham Sumner has pointed out, that most human behavior is a result of unanalyzed habit and routine based on unconsciously held standards and values. These embedded standards and values often differ from, even oppose, the ideals we express, and yet the conformist thinking which socialization tends to produce resists critical analysis. This resistance was recognized even from the early days of sociology as a discipline:

Every group of any kind demands that each of its members shall help defend group interests ... group force is also employed to enforce the obligations of devotion to group interests. It follows that judgments are precluded and criticism is silenced. (Sumner, 1906)

Even patriotism, Sumner points out, “may degenerate into a vice ... chauvinism”:

It is a name for boastful and truculent group self-assertion. It overrules personal judgment and character, and puts the whole group at the mercy of the clique which is ruling at the moment. It produces the dominance of watchwords and phrases which take the place of reason and conscience in determining conduct. The patriotic bias is a recognized perversion of thought and judgment against which our education should guard us. (Sumner, 1906)

Ironically, true patriots in a democratic society serve their country by using their critical powers to ensure governmental honesty. Intelligent distrust rather than uncritical trust is the foundation necessary to keep officials acting ethically and in the public good. It was Jefferson who said:

It would be a dangerous delusion were a confidence in the men of our choice to silence our fears for the safety of our rights. Confidence is everywhere the parent of despotism — free government is founded in jealousy, and not in confidence.

And Madison enthusiastically agreed: “The truth is, all men having power ought to be mistrusted.”

What students need in civic education, then, is precisely what they need in moral education: not indoctrination into abstracted ideals, with the tacit implication that the ideals are generally practiced, not slogans and empty moralizing, but assignments that challenge their ability to use civic ideals to assess actual political behavior. Such assignments will, of course, produce divergent conclusions by students depending on their present political leanings. But, again, their thinking, speaking, and writing should be graded on the clarity, cogency, and intellectual rigor of their work, not on the substance of their answers. All students should learn the art of political analysis, the art of subjecting political behavior to critical assessment based on civic and moral ideals, on an analysis of important relevant facts, and on consideration of alternative political viewpoints. Virtually no students graduate today with this art in hand.

This means that words like “conservatism” and “liberalism,” the “right” and “left,” must become more than vague jargon; they must be recognized as names of different ways of thinking about human behavior. Students need experience actually thinking within diverse political perspectives. No perspective, not even one called “moderate,” should be presented as the correct one. By the same token, we should be careful not to lead the students to believe that all perspectives are equally justified or that important insights are equally found in all points of view. We should continually encourage and stimulate our students to think and never do their thinking for them. We should, above all, be teachers and not preachers.

Implementation Philosophy

Bringing ethics into the curriculum is essential but difficult. Many teachers are deeply committed to didactic lectorial modes of teaching. If ethics is taught in this way, indoctrination results, and we have lost rather than gained ground. Better no ethics than dogmatic moralizing.

To successfully establish a solid framework of ethical reasoning throughout the curriculum, we need excellent supplemental resources and well-designed in-service. Whenever possible, teachers should have access to books and materials that demonstrate how ethical and critical thinking principles can be integrated into subject matter instruction. They also need opportunities to air whatever misgivings they have about the paradigm shift this model represents for many of

them. Above all, one should conceive of a move such as this as part of a long-term strategy in which implementation is achieved progressively over an extended time.

Just as educators should respect the autonomy of students, so in-service design should respect the autonomy of teachers. Teachers can and should be helped to integrate a critical approach to ethics into their everyday teaching. But they must actively think their way to this integration. It should not be imposed on them.

The model I suggest is one I have used successfully in in-service for both elementary and secondary teachers on numerous occasions. I call it the “Lesson Plan Remodeling Strategy” and have written three handbooks and an article explaining it in depth.

The basic idea is simple. Every practicing teacher works daily with lesson plans of one kind or another. To remodel lesson plans is to critique one or more lesson plans and formulate one or more new lesson plans based on that critical process. Thus, a group of teachers or staff development leaders with a reasonable number of exemplary remodels with accompanying explanatory principles can design practice sessions that enable teachers to develop new teaching skills as a result of experience in lesson remodeling.

Lesson plan remodeling can become a powerful tool in staff development for several reasons. It is action oriented and puts an immediate emphasis on close examination and critical assessment of what is taught on a day-to-day basis. It makes the problem of infusion more manageable by paring it down to the critique of particular lesson plans and the progressive infusion of particular principles. It is developmental in that, over time, more and more lesson plans are remodeled, and what has been remodeled can be remodeled again.

Inservice Design

The idea behind inservice on this model is to take teachers step-by-step through specific stages of implementation. First of all, teachers must have an opportunity to become familiar with the basic concepts of critical thinking and ethical reasoning. They should first have an opportunity to formulate and discuss various general principles of morality and then to discuss how people with differing moral perspectives sometimes come to different moral conclusions when they apply these principles to actual events. Questions like “Is abortion morally justified?” or “Under what conditions do people have a right to welfare support?” or “Is capital punishment ever morally justified?” etc., can be used as examples to demonstrate this point.

Working together, the teachers should then construct examples of how they might encourage their students to apply one or more of the moral reasoning skills

listed in figure #1. One table might focus on devising ways to help students clarify moral issues and claims (S-8).

Another table may discuss assignments that would help students develop their moral perspective (S-7). A third might focus on ways to encourage one of the essential moral virtues, say, moral integrity. Of course teachers should have examples for each of the moral reasoning skills, as well as model classroom activities that foster them. Teachers should not be expected to work with nothing more than a list of abstract labels. The subsequent examples developed by the teachers working together should be written up and shared with all participants. There should be ample opportunity for constructive feedback.

Once teachers get some confidence in devising examples of activities they can use to help students develop various individual moral reasoning skills, they should try their hands at developing a full remodel. For this, each table has an actual lesson plan and they collectively develop a critique and remodel that embodies moral reasoning skills explicitly set out as objectives of the lesson. As before, exemplary remodels should be available for teachers to compare with their remodels. The following components should be spelled out explicitly:

1. the original lesson plan (or an abstract of it)
2. a statement of the objectives of the plan
3. a critique of the original (Why does it need to be revised? What does it fail to do that it might do? Does it indoctrinate students?)
4. a listing of the moral reasoning skills to be infused
5. the remodeled lesson plan (containing references to where in the remodel the various moral reasoning skills are infused)

Eventually school-wide or district-wide handbooks of lesson remodels can be put together and disseminated. These can be updated yearly. At least one consultant with unquestionable credentials in critical thinking should be hired to provide outside feedback on the process and its products.

For a fuller explanation of this inservice process and a wide selection of examples, I refer the reader to either *Critical Thinking Handbook: 4th-6th Grades*, or *Critical Thinking Handbook: K-3*, both are subtitled *A Guide for Remodeling Lesson Plans in Language Arts, Social Studies & Science*. Both integrate an emphasis on ethical reasoning into critical thinking infusion, though they do not explicitly express the component critical thinking skills with a moral reasoning emphasis (as I have in figure #1). The handbook examples are easily adaptable as illustrations for the upper grade levels. In any case, handbooks or not, what we should aim at is teacher practice in

critiquing and revising standard lesson plans, based on a knowledgeable commitment to critical thinking and moral reasoning. We should not expect that teachers will begin with the knowledge base or even the commitment but only that with exposure, practice, and encouragement within a well planned long-term inservice implementation, proficiency and commitment will eventually emerge.

In my own experience in conducting inservices, I have found it easy to begin this process working with teachers. Though the early products of the teachers are of mixed quality, all of what is produced is workable as a basis for the development of further insights and teaching skills. The difficulty is not in getting the process started; it is in keeping it going. One new lesson plan does not by itself change an established style of teaching. Like all creatures of habit, teachers tend to revert on Monday to their established teaching practices. A real on-going effort is essential for lesson plan remodeling to become a way of life and not just an interesting inservice activity.

The Need for Leadership

I cannot overemphasize the need for leadership in this area. Teachers need to know that the administration is solidly behind them in this process, that the time and effort they put in will not only be appreciated but also visibly built upon. The school-wide or district-wide handbooks mentioned above are one kind of visible by-product that teachers should see. An excellent start is to have key administrators actively participate in the inservice along with the teachers. But the support should not end there. Administrators should facilitate on-going structures and activities to support this process: making and sharing video tapes, sending key personnel to conferences, establishing working committees, informal discussion groups, and opportunities for peer review. These are some among the many possibilities. Administrators should also be articulate defenders of an educational rather than a doctrinaire approach to morality. They should be ready, willing, and able to explain why and how critical thinking and ethics are integrated throughout the curriculum. They should make the approach intelligible to the school board and community. They should engender enthusiasm for it. They should fight to preserve it if attacked by those good hearted but closedminded people who see morality personified in their particular moral perspectives and beliefs. Above all, they should make a critical and moral commitment to a moral and critical education for all students and do this in a way that demonstrates to teachers and parents alike moral courage, perseverance, and integrity.

Figure 1
Moral Reasoning Skills

A. Moral Affective Strategies

- S-1 exercising independent moral thought and judgment
- S-2 developing insight into moral egocentrism and sociocentrism
- S-3 exercising moral reciprocity
- S-4 exploring thought underlying moral reactions
- S-5 suspending moral judgment

B. Cognitive Strategies: Moral Macro-Abilities

- S-6 avoiding oversimplification of moral issues
- S-7 developing one's moral perspective
- S-8 clarifying moral issues and claims
- S-9 clarifying moral ideas
- S-10 developing criteria for moral evaluation
- S-11 evaluating moral authorities
- S-12 raising and pursuing root moral questions
- S-13 evaluating moral arguments
- S-14 generating and assessing solutions to moral problems
- S-15 identifying and clarifying moral points of view
- S-16 engaging in Socratic discussion on moral issues
- S-17 practicing dialogical thinking on moral issues
- S-18 practicing dialectical thinking on moral issues

C. Cognitive Strategies: Moral Micro-Skills

- S-19 distinguishing facts from moral principles, values, and ideals
- S-20 using critical vocabulary in discussing moral issues
- S-21 distinguishing moral principles or ideas
- S-22 examining moral assumptions
- S-23 distinguishing morally relevant from morally irrelevant facts
- S-24 making plausible moral inferences
- S-25 supplying evidence for a moral conclusion
- S-26 recognizing moral contradictions
- S-27 exploring moral implication and consequences
- S-28 refining moral generalizations

Figure 2

Essential Moral Values

Moral Humility: Awareness of the limits of one's moral knowledge, including sensitivity to circumstances in which one's native egocentrism is likely to function self-deceptively; sensitivity to bias and prejudice in, and limitations of, one's viewpoint. Moral humility is based on the recognition that no one should claim to know more than one actually knows. It does not imply spinelessness or submissiveness. It implies the lack of moral pretentiousness, boastfulness, or conceit, combined with insight into the strengths and weaknesses of the logical foundations of one's beliefs.

Moral Courage: The willingness to face and assess fairly moral ideas, beliefs, or viewpoints to which we have not given serious hearing, regardless of our strong negative reaction to them. This courage arises from the recognition that ideas considered dangerous or absurd are sometimes rationally justified (in whole or in part), and that moral conclusions or beliefs espoused by those around us or inculcated in us are sometimes false or misleading.

Moral Empathy: Having a consciousness of the need to imaginatively put oneself in the place of others in order to genuinely understand them. We must recognize our egocentric tendency to identify truth with our immediate perceptions or longstanding beliefs. This trait correlates with the ability to reconstruct accurately the moral viewpoints and reasoning of others and to reason from moral premises, assumptions, and ideas other than our own. This trait also requires that we remember occasions when we were morally wrong, despite an intense conviction that we were right, as well as consider that we might be similarly deceived in a case at hand.

Moral Integrity: Recognition of the need to be true to one's own moral thinking, to be consistent in the moral standards one applies, to hold one's self to the same rigorous standards of evidence and proof to which one holds one's antagonists, to practice what one morally advocates for others, and to honestly admit discrepancies and moral inconsistencies in one's own thought and action.

Moral Perseverance: Willingness and consciousness of the need to pursue moral insights and truths despite difficulties, obstacles, and frustrations; firm adherence to moral principles despite irrational opposition of others; a sense of the need to struggle with confusion and unsettled questions over an extended period of time, to achieve deeper moral understanding or insight.

Moral Fairmindedness: Willingness and consciousness of the need to entertain all moral viewpoints sympathetically and to assess them with the same intellectual standards without reference to one's own feelings or vested interests, or the feelings or vested interests of one's friends, community, or nation; implies adherence to moral standards without reference to one's own advantage or the advantage of one's group.

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This article can be found in Richard Paul's book, *Critical Thinking: What Every Person Needs To Survive in a Rapidly Changing World* (Foundation for Critical Thinking Press, 2012).

Conference Sessions

All conference delegates and attendees have registered for their choices of the following sessions. See your confirmation sheet (in your packet) if you are unclear which focal sessions you have selected. Please attend the sessions you chose, as room assignments have been determined based on enrollment totals for each session. If any problems arise, visit the registration desk.

Preconference Session Descriptions (Saturday/Sunday)

Saturday and Sunday (9:00 am - 4:00 pm)

Cultivating Critical Thinking in Teaching and Learning: The Foundations of Critical Thinking... Richard Paul and Linda Elder

Sonoma Room

This session will lay the foundation for all conference sessions and is therefore highly recommended for new conference attendees. It will introduce you to some of the most basic understandings in critical thinking – namely, how to analyze thinking, how to assess it, and how to develop and foster intellectual virtues or dispositions.

One conceptual set we will focus on is the *elements of reasoning*, or *parts of thinking*. These elements or parts of reasoning are those essential dimensions of reasoning that are present whenever and wherever reasoning occurs, independent of whether we are reasoning well or poorly. Working together, these elements shape reasoning and provide a general logic to the use of thought. They are presupposed in every subject, discipline, and domain of human thought.

A second conceptual set we will focus on is that of universal *intellectual standards*. One of the fundamentals of critical thinking is the ability to assess reasoning. To be skilled at assessment requires that we consistently take apart thinking and examine its parts with respect to standards of quality. We do this using criteria based on clarity, accuracy, precision, relevance, depth, breadth, logicalness, and significance. Critical thinkers recognize that whenever they are reasoning, they reason to some purpose (element of reasoning). Implicit goals are built into their thought processes. But their reasoning is improved when they are clear (intellectual standard) about that purpose or goal. Similarly, to reason well, they need to know that – consciously or unconsciously – they are using relevant (intellectual standard: *relevance*) information (element of reasoning) in their thinking. Furthermore, their reasoning improves if and when they

Preconference Session Descriptions Continued

make sure that the information they are using is accurate (intellectual standard: *accuracy*).

A third essential conceptual set in critical thinking is that of intellectual virtues or traits. Critical thinking does not entail merely intellectual skills. Rather, it is a way of orienting oneself in the world. It is a way of approaching problems that differs significantly from that which is typical in human life. People may have critical thinking skills and abilities, and yet still be unable to enter viewpoints with which they disagree. They may have critical thinking abilities, and yet still be unable to analyze the beliefs that guide their behavior. They may have critical thinking abilities, and yet be unable to distinguish between what they know and what they don't know, to persevere through difficult problems and issues, to think fairly, or to stand alone against the crowd. Thus, in developing as a thinker and fostering critical thinking abilities in others, it is important to develop intellectual virtues – virtues of fairness, intellectual humility, intellectual perseverance, intellectual courage, intellectual empathy, intellectual autonomy, intellectual integrity, and confidence in reason.

Finally, we will illuminate two intrinsic barriers to critical thinking development – egocentric and sociocentric thought. These natural pathological tendencies will be briefly introduced and explored.

In short, this preconference session introduces the foundations of fairminded critical thinking; throughout the two days, we will introduce and explore critical thinking theory while applying this theory to teaching and learning.

Bringing Critical Thinking Concepts and Principles into the Heart of Socratic Dialogue... Gerald Nosich

Napa Room

Socratic questioning is disciplined questioning that can be used to pursue thought in many directions and for many purposes, including: to explore complex ideas, to get to the truth of things, to open up issues and problems, to uncover assumptions, to analyze concepts, to distinguish what we know from what we don't know, and to follow out logical implications of thought. The key to distinguish Socratic questioning from questioning per se is that Socratic questioning is systematic, disciplined, and deep; it usually focuses on foundational concepts, principles, theories, issues, or problems.

Teachers, students, and indeed anyone interested in probing thinking at a deep level should construct Socratic questions and engage in Socratic dialogue. When we use Socratic questioning in teaching, our purpose may be to probe

Preconference Session Descriptions Continued

student thinking, to determine students' depth of understanding, to model Socratic questioning for them, or to help them analyze a concept or line of reasoning. In the final analysis, we want students to learn the discipline of Socratic questioning so that they come to use it in reasoning through complex issues, in understanding and assessing the thinking of others, and in following-out the implications of what they – and others – think.

The art of Socratic questioning is intimately connected with critical thinking, because the art of questioning is important to excellence of thought. Both critical thinking and Socratic questioning share a common end. Critical thinking provides the conceptual tools for understanding how the mind functions in its pursuit of meaning and truth; Socratic questioning employs those tools in this same pursuit.

This session will focus on the methodology of Socratic dialogue, on the conceptual tools critical thinking brings to Socratic dialogue, and on the importance of questioning in cultivating the disciplined mind. The session will be highly interactive as participants practice (throughout the two days) Socratic questioning using the foundations of critical thinking.



Conference Focal Session Descriptions (Monday)

Day One: Monday (10:30 am - 4:00 pm)

Placing Critical Thinking at the Core of the Core of the College Curriculum...

Richard Paul and Linda Elder

Claremont Room

A key insight into content, and into thinking, is that all content represents a distinctive mode of thinking. Math becomes more intelligible as one learns to think mathematically. Biology becomes more intelligible as one learns to think biologically. History becomes more intelligible as one learns to think historically. This is true because all subjects are generated by thinking, organized by thinking, analyzed by thinking, synthesized by thinking, expressed by thinking, evaluated by thinking, restructured by thinking, maintained by thinking, transformed by thinking, LEARNED by thinking, UNDERSTOOD by thinking, and APPLIED by thinking. If you try to take the thinking out of content, you have nothing – literally nothing – remaining. Learning a unique system of meanings is the key to learning any *content* whatsoever. In this session, we will explore the intimate relationship between content and thinking, and will argue for the importance of placing critical thinking concepts and principles at the very heart of teaching and learning in higher education.

Cultivating the Public Citizen Through a Robust Conception of Critical Thinking in Education... Rush Cosgrove

Napa Room

The American Revolution rang with the declaration that “the price of liberty is eternal vigilance.” That is also true for “justice” and “peace” – and for “clean air” and “clean water” and “safe cars” and “healthy work places.” But these good things, the blessings of liberty, will not come to pass until we cease viewing citizen involvement as a privilege and begin defining our daily work to include citizenship toward public problems as an obligation. —Ralph Nader, *The Ralph Nader Reader*, 2000, p. 337.

The problems of education for fairminded independence of thought, for genuine moral integrity, and for responsible citizenship are not three separate issues, but one complex task. If we succeed with one dimension of the problem, we succeed with all. If we fail with one, we fail with all. Now we are failing with all because we do not clearly understand the interrelated nature of the problem nor how to address it. —Richard Paul, *How to Prepare Students for a Rapidly Changing World*, 1995, p. 258.

Conference Focal Sessions Continued (Mon.)

Public citizens are keenly aware of their role as voting, contributing, integrated members of a democratic society. They recognize that the health of a society is embodied in the ways in which people in the society act on a typical day – in a typical family, in a typical relationship, in a typical marriage, in a typical school, in a typical college, in a typical business, in a typical non-profit organization, or in a typical government. Public citizens perceive contributing to a better community, and hence a better world, to be the responsibility of all people in all societies. But they do not always agree on how this should be done. They do not always agree on how to deal with complex issues or problems. Indeed, because of the nature of complex issues, even reasonable persons often disagree on how best to conceptualize and approach them; they frequently disagree on the very questions to be addressed. To make matters worse, we find common – even among advocacy groups pursuing noble goals – those egocentric and sociocentric tendencies intrinsic to all people that give rise to such human pathologies as narrow-mindedness, group-think, intellectual arrogance, hypocrisy, self-righteousness, infighting, and backstabbing.

When students internalize – through the educational process – a substantive, explicit, fairminded conception of critical thinking, they emerge with the intellectual foundations needed to work through difficult problems, as well as to deal with the intrinsic pathological workings of their own minds. They listen intently to arguments with which they disagree; they are moved by arguments superior to their own. They distinguish, in any given situation, between what they know and what they do not know. They can stand alone in their beliefs, if reason and evidence compel them to do so. They routinely:

- raise vital questions within disciplines, formulating them clearly and precisely.
- gather and assess information, using ideas to interpret that information insightfully.
- come to well-reasoned conclusions and solutions, testing them against relevant criteria and standards.
- reason within subjects and disciplines, exploring and assessing – as need be – their assumptions, organizing concepts, implications, and practical consequences.
- communicate effectively with others using the language of academic disciplines, and of educated public discourse.
- relate what they are learning in a given subject to other subjects, as well as to what is significant in human life.

Conference Focal Sessions Continued (Mon.)

- apply intellectual skills to everyday life problems, every day.
- contribute to a more rational and just world.

These and other related critical thinking skills, abilities, and traits are essential to the educated person, the ethical reasoner, and the public citizen. In this session, we focus on internalizing a substantive fairminded (strong-sense) conception of critical thinking, one that can be fostered in teaching and learning at all levels, one that is fundamental to cultivating the public citizen.

Fostering Deep Understanding of Fundamental and Powerful Concepts in Instruction and in Daily Life... Gerald Nosich

Sonoma Room

Concepts are ideas we use in thinking. They enable us to group things in our experience into different categories, classes, or divisions. They are the basis of the labels we give things in our minds. They represent the mental map (and meanings) we construct of the world, the map that tells us the way the world is. Through our concepts we define situations, events, relationships, and all other objects of our experience. All our decisions depend on how we conceptualize things, and all subjects or disciplines are defined by their foundational concepts. For instance, a fundamental concept in ecology is *ecosystem*, defined as a group of living things dependent on one another and living in a particular habitat. Ecologists study how differing ecosystems function and how they interrelate with other ecosystems. They are concerned with *ecological succession* – the natural pattern of change occurring within every ecosystem when natural processes are undisturbed. This pattern includes the birth, development, death, and then replacement of natural communities. Ecologists have grouped communities into larger units called *biomes*, regions throughout the world classified according to physical features, including temperature, rainfall, and type of vegetation. Ecologists use all of these seminal concepts as they reason through ecological problems. Other key concepts for ecologists include imbalances, energy, nutrients, population growth, diversity, habitat, competition, predation, parasitism, adaptation, coevolution, succession, climax communities, and conservation.

When students master foundational concepts at a deep level, they are able to use them to understand and function better within the world. Can you identify the fundamental concepts in your discipline? Can you explain their role in thinking within your discipline? How can you help students take command of these concepts? Can you exemplify how the core ideas in the discipline are important in life? These are some of the questions to be explored in this session.

Conference Focal Sessions Continued (Mon.)

For Returning Registrants: Socrates, Paul, and Epictetus - Linking the Important Ideas of Transformative Thinkers Throughout History... Brian Barnes

Lanai 2

Instead of taking a course which would have done no good either to you or to me, I set myself to do you individually and privately what I hold to be the greatest possible service: I tried to persuade each of you not to think more of practical advantages than of his mental and moral well-being, or in general to think more of advantage than of well-being in the case of the state or of anything else (p. 70)...when I leave the court I shall go away condemned by you to death, but they [my accusers] will go away convicted by Truth herself ... (p. 73). —Plato, *the Apology of Socrates*, in *The Last Days of Socrates*, 1954

Now there are two ways in which a man may be this hardened: one when his reasoning faculty is petrified, and the other when his moral sense is petrified, and he sets himself deliberately not to assent to manifest arguments, and not to abandon what conflicts with them. Now most of us fear the deadening of the body and would take all possible means to avoid such a calamity; yet we take no heed of the deadening of the mind and the spirit. When the mind itself is in such a state that a man can follow nothing and understand nothing, we do indeed think that he is a bad condition; yet, if a man's sense of shame and self-respect is deadened, we even go so far as to call him a "strong man." —from *Arrian's Discourses of Epictetus* (The Stoic and Epicurean Philosophers, p. 232.)

One way of deepening our understanding of critical thinking and its role in history is to interrelate explicit critical thinking concepts and principals with transformative ideas developed by deep thinkers throughout history. At this year's conference, returning registrants (and those who have attended our professional development programs on their campuses) are invited to participate in an advanced session focusing on Socrates and Epictetus – two deeply insightful thinkers in the history of ideas and critical thinking. We explore some ideas of both Socrates and Epictetus integral to a fairminded conception of critical thinking. For a brief study of Socratic thought, we will explore a few excerpts from Socratic dialogues (by Plato and Xenophon); in studying Epictetus, we will read in fragments from his original works, as well as in *Arrian's Discourses of Epictetus*. For this session we presuppose that you have an initial or advanced understanding of the elements of reasoning, intellectual standards, and intellectual virtues. We will use these intellectual tools to open up and begin to internalize the thinking of Socrates and Epictetus.

Conference Focal Session (Tuesday)

Day Two: Tuesday Afternoon (2:00 pm - 4:30 pm)

Assessing Students' Critical Thinking... Gerald Nosich

Claremont Room

The purpose of assessment in instruction is improvement. The purpose of assessing instruction for critical thinking is improving the teaching of discipline-based thinking (historical, biological, sociological, mathematical, and so on). It is to improve students' abilities to think their way through content by using disciplined skill in reasoning. The more particular we can be about what we want students to learn of critical thinking, the better can we devise instruction to serve that purpose. Unfortunately, standardized tests now widely used in critical thinking are not designed to impact instruction. There is a significant disconnect between what standardized tests assess and what we want students to learn. This session will focus on methods for integrating assessment and critical thinking across the curriculum. It will also introduce participants to some of the critical thinking assessment tools offered by the Foundation for Critical Thinking. This workshop is designed for faculty and administrators at the secondary level and above.

Emotional Intelligence: A Conceptual Model... Linda Elder and Richard Paul

Sonoma Room

To develop emotional intelligence is to achieve command of the workings of our minds, for it is our minds that generate our thoughts, feelings, and desires. It is our students' minds that control not only how they study and learn, but also how they make decisions and conduct their lives. To develop as emotionally intelligent persons, we need to understand the relationship between thoughts and emotions. To be in command of one's emotional life is to have command of the faculties of mind that determine it: thoughts, emotions, and desires working, as they do, in concert. Student emotions play a significant role in how, and to what extent, they learn in a given setting. The emotions they bring to the classroom (connected with the thinking that gives rise to these emotions) largely determine the level at which they are able to learn. When they bring learned indifference, irrational fears, acquired hostility, and inflexible ideas into the classroom, their learning is limited to the superficial. It is important that students recognize the universal challenges we all face as largely egocentric and sociocentric persons.

This session provides a structure for helping students (and all people) improve the quality of their emotional experiences – in all parts of life – by

Conference Focal Sessions Continued (Tues.)

commanding the thoughts and feelings that determine that quality. Our approach is based on a conceptual, rather than scientific, orientation to human thought and emotion. Theory to be explored will focus on the relationship between cognition and affect, and on the importance of commanding one's egocentric tendencies when working to cultivate emotional intelligence within oneself. Activities designed to help students gain command of their emotional lives will be briefly explored

Intellectual Virtues – Essential to the Public Citizen... Rush Cosgrove

Lanai 2

We do not now teach for the intellectual virtues. If we did, not only would we have a basis for integrating the curriculum, we would also have a basis for integrating the cognitive and affective lives of students. Such integration is the basis for strong sense critical thinking, for moral development, and for citizenship. The moral, social, and political issues we face in everyday life are increasingly intellectually complex. Their settlement relies on circumstances and events that are interpreted in a variety of (often conflicting) ways... Good heartedness and power are insufficient for creating a just world. Some modest development of the intellectual virtues seems essential for future human survival and well-being... This is certain: we will never succeed in cultivating traits whose roots we do not understand and whose development we do not foster.
—Richard Paul, *How to Prepare Students for a Rapidly Changing World*, 1995, p. 268

If we hope to cultivate fairminded critical societies in the long run, the active pursuit of intellectual virtues must become an explicit, permanent human value. To foster critical societies requires that we go beyond merely teaching critical thinking “skills and abilities” to the active cultivation, in every institution throughout the world, of such intellectual character traits as intellectual humility, intellectual perseverance, intellectual autonomy, intellectual empathy, intellectual integrity, confidence in reasoning, and fairmindedness.

This session presents intellectual virtues as integral to education and to the public citizen. We will discuss essential intellectual virtues, exploring how to better cultivate them in our own thought, as well as how to more explicitly bring them into teaching and learning.

Conference Focal Sessions Continued (Tues.)

The Role of Close Reading and Substantive Writing in Education, in the Mind of the Public Citizen, and Throughout Life... Paul Bankes

Napa Room

Educated persons are skilled at, and routinely engage in, close reading and substantive writing. When reading, they seek to learn from texts; they generate questions as they read, and they seek answers to those questions by reading widely and skillfully. In short, they seek to become better educated through reading. They do this through the process of intellectually interacting with the texts they read, as they read. They come to understand what they read by paraphrasing, elaborating, exemplifying, and illustrating it. They make connections as they read. They evaluate as they read. They bring important ideas into their thinking as they read. Substantive writing, in turn, consists in focusing on a subject worth writing about and then writing something worth writing about it. It enhances our reading. Whenever we read to acquire knowledge, we should write to take ownership of the texts we read. Furthermore, just as we must write to gain an initial understanding of a subject's primary ideas, so also must we write to begin thinking within the subject as a whole, as well as to make connections between ideas within and beyond the subject. Quite remarkably, many of our students have never read a text closely, nor written in a substantive way. Instead they have developed the habit of skirting by with superficial and impressionistic reading, writing, and listening.

This session will explore basic, foundational processes for developing student skills in close reading, and in substantive writing. The aim is for these processes to become internalized and used throughout life as powerful tools for continual development.



Conference Focal Sessions (Wednesday)

Day Three: Wednesday Afternoon (1:45 pm - 4:00 pm)

What Current Research Reveals about the State of Critical Thinking in Education Today... Rush Cosgrove

Empire Ballroom

The development of critical thinking is a desirable outcome of education not only because it contributes to the intellectual and social competence of the individual and helps him to meet his problems more intelligently and more effectively, but also because it helps him to cooperate better with his fellow men. It helps him form intelligent judgments on public issues and contribute democratically to the solution of social problems.

—Edward Glaser, 1941

This session will present an overview of the seminal research in what we might term the emerging field of Critical Thinking Studies. Beginning in 1941 with Edward Maynard Glaser's doctoral dissertation, *An Experiment in the Development of Critical Thinking*, this session will briefly consider, from a historical perspective, insights on critical thinking from diverse sources: philosophy, cognitive psychology, critical theory, education, developmental psychology, and others. Further, we will explore the extent to which critical thinking has been fostered in teaching and learning during the past half century or so (in the U.S.), and to consider the possibility that researchers are gradually moving towards more rigorous methodologies for studying critical thinking. Implications for teaching and learning, for the future development of critical thinking theory and research, and for an emerging field of critical thinking studies will be discussed.

The Role of Essential Questions in Education and in Cultivating the Public Citizen... Gerald Nosich

Claremont Room

It is not possible to be a good thinker and a poor questioner. Questions define tasks, express problems, and delineate issues. They drive thinking forward. Answers, on the other hand, often bring an end to thought. Only when an answer generates further questions does thought continue as inquiry. A mind with no questions is a mind that is not intellectually alive. No questions (asked) equals no understanding (achieved). Superficial questions lead to superficial understandings, and unclear questions lead to unclear understandings. If your mind is not actively generating questions, you are not engaged in substantive

Conference Focal Sessions Continued (Wed.)

learning.

Students must learn to generate and reason through essential questions in academic disciplines to prepare themselves for reasoning with skill and discipline through the problems they face, and will face, throughout their lives – including in their role as public citizens.

Hence these questions are raised:

- How can we teach so our students learn to generate questions that lead to deep learning and the cultivation of powerful intellectual skills?
- What role do questions play in the mind of the cultivated public citizen?
- How can we teach so that students learn to generate (and reason within) essential questions in all domains of life?

In this session we will focus on practical strategies for helping students generate essential questions within subjects and disciplines, so that they are better able to think through content, to reason through life's everyday problems, and to create a more just world through their role as public citizens.

For Administrators: Key Ingredients of an Effective Professional Development Program in Critical Thinking... Linda Elder and Richard Paul

Sonoma Room

Education is to inspire the love of truth as the supremest good, and to clarify the vision of the intellect to discern it. We want a generation of men above deciding great and eternal principles upon narrow and selfish grounds. Our advanced state of civilization has evolved many complicated questions respecting social duties. We want a generation of men capable of taking up these complex questions, and of turning all sides of them toward the sun, and of examining them by the white light of reason, not under the false colors which sophistry may throw upon them. —Horace Mann, 1840 (found in Horace Mann, *His Ideas and Ideals*, by J.E. Morgan, 1936, pp. 93-94).

Critical thinking, deeply understood, provides a rich set of concepts that enable us to think our way through any subject or discipline and through any problem or issue. With a substantive concept of critical thinking clearly in mind, we begin to see the pressing need for a staff development program that fosters critical thinking within – and across – the curriculum. As we come to understand a substantive concept of critical thinking, we are able to follow out its implications in designing a professional development program. By means

Conference Focal Sessions Continued (Wed.)

of it, we begin to see important implications for every part of the institution – redesigning policies, providing administrative support for critical thinking, rethinking the mission, coordinating and providing faculty workshops in critical thinking, redefining faculty as learners as well as teachers, and assessing students, faculty, and the institution as a whole in terms of critical thinking abilities and traits. We realize that robust critical thinking should be the guiding force for all of our educational efforts.

This session presents a professional development model that can provide the vehicle for deep change across the curriculum and across the institution. It will utilize Linda Elder's article on professional development, published in *Times Higher Education*.

What it Means to Be a Public Citizen: Exploring Ralph Nader's Philosophy and World View... Brian Barnes

Lanai 2

Look at the United States today. Can anyone deny that this country has more problems than it deserves and more solutions than it uses?... There seems to be less and less relationship between the country's total wealth and its willingness to solve the ills and injustices that beset it. The spirit of pioneering and problem-solving is weak. National, state, and local political leadership is vague at best, manipulative at worst. Facing the world, the United States stands as an uncertain giant with uncertain purposes toward a world in great need of its help and encouragement (p. 338).

The exercise by citizens of their rights and responsibilities is what makes a working democracy ever sensitive to the just needs of its people... For increasing numbers of Americans, citizenship should become a full-time career role, supported by other citizens, to work on major institutions of government and business for better society. It is this fundamental role of the public citizen in a democracy that must attract more adherents and supporters from across America (p. 341). —Ralph Nader, *the Ralph Nader Reader*

For almost a half-century, Ralph Nader has advocated for a rich idea of the *public citizen* and the responsibility of the people to embrace this idea. In this session, we will explore the concept of the public citizen in connection with a rich concept of education. Using material from Nader's *Bertrand Russell Lecture and Conversation*, as well as additional short readings by Nader, we will explore, discuss, and attempt to work out Nader's view of the public citizen.

Conference Focal Sessions Continued (Wed.)

We will consider the importance of Nader's conception of the public citizen to education, properly so called, and to critical thinking in the strong sense. We will work through the content as "scholars" or students thinking through these questions:

- What is Nader's concept of the public citizen?
- How does this concept interrelate with a rich concept of education?
- How do these two ideas interrelate with critical thinking in the strongest sense?



Conference Focal Sessions Continued (Thursday)

Day Four: Thursday Morning (9:15 am - 11:15 am)

Sociocentrism - a Primary Barrier to the Development of the Public Citizen...

Linda Elder and Richard Paul

Napa Room

Many of the deep-seated habits that humans acquire come from the process of being socialized or indoctrinated into the beliefs of society. Much of what we think or do, we have been taught to think or do by the social groups that have shaped us. Those who want to free themselves from indoctrination, to become intellectually emancipated, must understand this problem as a significant barrier to their development and begin seeing its influence on their daily thinking. Those concerned with cultivating public citizens must understand the powerful barrier of sociocentricity to progressive thought, and to the advancement of human societies.

Living a human life entails membership in a variety of human groups. This typically includes groups such as nation, culture, profession, religion, family, and peer group. We find ourselves participating in groups before we are aware of ourselves as living beings. We find ourselves in groups in virtually every setting in which we function as persons. What is more, every group to which we belong has some social definition of itself and some usually unspoken “rules” that guide the behavior of all members. Each group to which we belong imposes some level of conformity on us as a condition of acceptance. This includes a set of beliefs, behaviors, and taboos.

For most people, blind conformity to group restrictions is automatic and unreflective. Most effortlessly conform without recognizing their conformity. They internalize group norms and beliefs, take on the group identity, and act as they are expected to act – without the least sense that what they are doing might reasonably be questioned. Most people function within social groups as unreflective participants in a range of beliefs, attitudes, and behaviors that are analogous – in the structures to which they conform – to those of urban street gangs. Conformity of thought and behavior is the rule in humans, independence the rare exception. This is a primary reason for the lack of public citizens, as well as for the internal conflict frequently found among even those advocating for the public good.

This session will focus on the problem of sociocentric thinking as a barrier to cultivating the educated person and the public citizen.

Fostering Multilogical Thinking Across the Disciplines... Gerald Nosich

Sonoma Room

When we foster multi-logical thinking in education, we foster students' abilities

Conference Focal Sessions Continued (Thurs.)

to sympathetically enter into, consider, and reason within multiple points of view. Most significant human issues require multi-logical thinking. They are non-atomic issues inextricably joined to other issues; they have some conceptual messiness to them, often with important values lurking in the background. When the issues have an empirical dimension, they tend to be controversial. In dealing with multi-logical problems, people often disagree about how at least some of the relevant facts should be interpreted, and how the significance of these facts should be determined. When these problems have a conceptual dimension, the concepts usually can be pinned down in different ways. Thus, the ability to reason multi-logically is essential to critical thinking. A student who is comfortable thinking through multi-logical problems is comfortable thinking within multiple perspectives, engaging in dialogical and dialectical thinking, practicing intellectual empathy, and thinking across disciplines and domains.

This session will focus on teaching students to reason through multi-logical issues in any subject, discipline, or domain of human thought.

Teaching Students to Give Feedback Using Intellectual Standards... Rush Cosgrove

Claremont Room

To acquire substantive knowledge, students need: 1) engagement in the active construction of knowledge, and 2) critical feedback for that construction. This session will focus on the second need - that of receiving feedback on one's "construction" of ideas or beliefs. In this session we will attempt to replicate the process developed by Drs. Paul and Elder in which students learn to incrementally improve their ability to assess reasoning by actively applying essential intellectual standards to their own, and their peers', papers (on a typical day in the college classroom). Through this process, students help others think more *clearly, accurately, precisely, relevantly, deeply, broadly, logically, and fairly* as they learn to do so themselves.

In this session, participants will write brief "papers," and then give and receive feedback on these papers using intellectual standards under the "direction" of the "teacher" (presenter). By engaging participants in rigorously applying intellectual standards to products of their reasoning (their papers), the presenter will model the *kind* of disciplined reasoning we require in teaching and learning when fostering deep thinking through content. For those conference delegates reluctant to participate in this session, for fear of sharing their written work, remember that we will be less concerned with the quality of your thinking (as we see in your writing) than with the process we hope you might internalize to use routinely in instruction. This session will be lively and engaging.

The Bertrand Russell Scholars Program

Lecture and *Conversazione*

Bertrand Russell Scholar

Ralph Nader

Empire Ballroom

Tuesday, July 29

9:00 am - 12:30 pm

This important dimension of the conference highlights the work and thinking of distinguished scholars throughout history who have contributed significantly to the conception, and advancement, of fairminded critical societies. Russell scholars may come from any subject, field, or discipline, or from any domain of human thought. This year's scholar is public citizen Ralph Nader. All conference participants are invited to participate in the Russell program. Only conference registrants will be admitted.

To draw out the critical thinking implicit in the thinking of the Russell Scholars, the following unique design for the Process: Working Break and the *Conversazione* is used:

Working Break – Participants will break for coffee while working together in small groups to reason within some of the dimensions of Nader's worldview. Guidelines for this

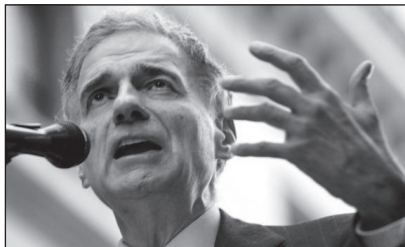


The Bertrand Russell Scholars Program Continued

process will be given before the break. One part of the process will be to formulate one or more questions that might be posed to Mr. Nader after the working break. Find coffee in the Horizon Room, then form groups of two to three. Work in the lounge area of the lobby, in the Claremont room, the alumni room, or anywhere else you can find to quickly get seated and begin. Make notes of your discussion.

Conversazione – To draw out the critical thinking implicit in the thinking of the Russell Scholars, the following unique design for the conversation will be used: One or more fellows of the Foundation for Critical Thinking will lead a Socratic dialogue with Mr. Nader (approximately 45 minutes). This will be followed by 15 minutes of questions to Mr. Nader by conference delegates and attendees. There will then be another 15 minutes of Socratic dialogue between the Fellow(s) and Mr. Nader.

The program will be followed by a book signing. Books by Ralph Nader will be available for sale at that time.



Concurrent Sessions Program

Wednesday, July 30 and Thursday, July 31, 2014

The concurrent sessions are presented by attendees who are attempting to foster critical thinking in teaching and learning. Choose one concurrent session to attend for each time slot.

Schedule Overview:

Wednesday

8:30 am	–	9:30 am	Concurrent Sessions I
9:40 am	–	10:40 am	Concurrent Sessions II
10:40 am	–	10:55 am	Break – Horizon Room
10:55 am	–	12:25 pm	Concurrent Sessions III

Thursday

8:00 am	–	9:00 am	Concurrent Sessions IV
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Concurrent Sessions I

(8:30 am – 9:30 am, Wednesday)

Cultivating Critical Thinking for College Completion

Scott Demsky

Assistant Professor of Mathematics

Broward College

Joshua Kimber

Associate Dean, Academic Affairs

Broward College

Empire Ballroom

Broward College has embraced critical thinking as an essential skill for its students to possess; therefore, it has selected critical thinking as the topic for its first Quality Enhancement Plan for accreditation through SACSCOC. A student's ability to think critically is at the core of teaching academic survival and success, because if an institution can assist students in thinking more critically, then students will be empowered to make informed decisions about their academic careers. This session will discuss strategies that Broward College has developed to assist students enrolled in associate degree programs. Through Broward's conceptual framework of teaching and learning strategies, and of outcomes-based assessments, workshop participants will be exposed to practical ideas and strategies using the Paul-Elder model to cultivate students' critical thinking skills with the goal of student success and completion.

Conference Concurrent Sessions Continued

“Philosophizing” the Zeitgeist – Using the Elements of Reasoning to Connect History and Philosophy Through the Common Core Standards

J. Stephen Scanlan

Southwestern College

Sweetwater Union High School

Claremont Room

The new Common Core Standards (CCS) require United States K-12 students to apply a rigorous set of skills to tie together cross-discipline content in ways they have never been expected to before. However, while the CCS articulate what students are required to do, they do not provide a framework for how to achieve those goals. This presentation considers the results of a study in which grouped students in four eleventh-grade, honors-level English Language Arts (ELA) classes were asked to analyze a set of texts in order to identify and explain the philosophical ‘zeitgeist’ that permeated pre-industrial revolution-era philosophy, literature, and politics to create a social world shift. This presentation explains the basis of the CCS and how the ‘Elements of Thought’ and ‘Intellectual Standards’ can be utilized to meet their demands; it presents the results of a study in which the products of classes that used the Elements and Standards are compared to the products of those that did not. As measured by CCS ELA rubrics, the students who utilized the Elements and Standards performed significantly better than those who did not.

Creating Assignments that Engage Your Students in Critical Thinking and Analysis

Mel Manson

Professor of Sociology and Psychology

Endicott College

Sonoma Room

As teachers we are responsible for designing courses and assignments to engage our students in critical thinking. In order to help the student discipline his or her thinking, the ‘Elements of Reasoning’ and the ‘Intellectual Standards’ need to become integrated into all assignments. The ideal goal for students is not only to learn but also internalize critical thinking strategies so that in all of their reasoning intellectual engagement becomes a habit of the mind. Practical examples of such assignments will be introduced in this session. Participants will be able to share with others how they might be able to incorporate these (and other) strategies to help their students become more engaged in analyzing and assessing their own thinking.

Conference Concurrent Sessions Continued

A Project Demonstration of Critical Thinking in Analyzing Students' Career Paths

Barbara Burke

Senior Professor, Liberal Arts and Sciences Department
DeVry University

Barbara Goldberg

Senior Professor, Liberal Arts and Sciences Department
DeVry University

Napa 3

Our interactive session will emphasize the relationship between critical thinking and our students' field of study, showing how students can work effectively in teams to develop relevant, engaging team projects.

First, we will showcase outstanding examples of our students' career projects. Then we will lead the workshop participants in applying Richard Paul's theory of critical thinking, using his established 'Elements of Thought' and 'Intellectual Standards' to emphasize the thinking behind these projects. The participants will re-create the framework of team thinking by constructing the three-pronged critical thinking foundation of our students' projects. This task includes the analysis and assessment of the students' career paths, of outstanding leaders and their contributions, and of trends in their field. For added engagement, the participants will analyze their own fields of study for a real hands-on demonstration. The session will end with each group sharing highlights of their team's findings, with more examples of our students' work, and with a question/discussion segment.

Are We Really Teaching Critical Thinking by Adopting Programmes that Delineate Critical Thinking as a Goal and a Learning Outcome?

Yara Hilal-Jurdi

International Baccalaureate Diploma Programme Examiner
Educational Consultant and Trainer
Vice President of the Lebanese Center for Human Rights

Monterey Room

Critical thinking continues to gain an increased interest in educational circles, becoming a goal and a student learning outcome in a number of educational programmes. Among others, the International Baccalaureate Diploma Programme (IB-DP) and Lebanese Baccalaureate (LB) are academic programmes that claim to teach critical thinking. This study examines the

Conference Concurrent Sessions Continued

shortages and the contributions of the IB-DP and LB in facilitating the teaching of critical thinking. The research discusses obstacles in the teaching of critical thinking in IB-DP and LB classes using two case-study schools located in the southern suburb of Beirut, Lebanon, and describes a number of “critical-thinking-friendly” teaching methods. The study also identifies a number of factors that play roles in the frequency of adopting critical-thinking-friendly teaching methods and activities, and these include: a programme’s assessment requirements, administrative support, planning time and class time, and a school-unified conception of critical thinking. The research uses “Justified Indoctrination” to propose a model for the teaching of critical thinking without compromising the content delivery of disciplines. Finally, the study proposes a definition for critical thinking that addresses the controversial issues of subject-specificity and subject-neutrality, and explains the impact of this in adopting a model for teaching critical thinking.

Improving Student Critical Thinking Through Direct Instruction in Rhetorical Analysis

Lauren McGuire

English Professor

Victor Valley College

Napa 1

Purposeful implementation of Dr. Richard Paul and Dr. Linda Elder’s ‘Elements of Thought,’ ‘Intellectual Standards,’ and Socratic Questioning could strengthen students’ perceptions of critical thinking and of their own critical thinking abilities. Educators can cultivate these intellectual traits by encouraging students to develop skills necessary for clearly and logically evaluating the credibility and the reliability of rhetoric. Assuming that an argument can be any wording – written or spoken, aural or visual – that expresses a point of view, it is vitally important that educators challenge students to consider new perspectives on topics they may feel they already understand, and to provide practice for analyzing the sorts of arguments they will be assigned in their various courses. Implementing the Elements of Thought, Intellectual Standards, and Socratic Questioning through direct instruction in rhetorical analysis could encourage students to detect and evaluate the assumptions, ego-centrism, and socio-centrism in the rhetoric they are exposed to in literature, in the media, and in their own writing. Furthermore, students are provided with the tools necessary for the acquisition of intellectual humility as they approach the complexities of life with clarity, accuracy, and precision, as they explore multiple perspectives

Conference Concurrent Sessions Continued

of difficult problems, and as they learn to sympathetically acknowledge the viewpoints of others with breadth and clarity.

This session will focus primarily on designing instruction which integrates direct instruction in rhetorical analysis. Emphasis will be placed on incorporating Intellectual Standards and the Elements of Thought into the process. Participants will work in small groups and will be offered instructional methodologies that encourage the evaluation of expository and argumentative discourse, and that develop students' critical thinking, reading, and writing skills.

Teaching Critical Thinking to Students from Different Cultures: Pitfalls and Remedies

Nancy Burkhalter

Adjunct, Language and Culture Bridge Program
Seattle University

Napa 2

Teaching critical thinking is challenging for any instructor. However, the task is made exponentially more difficult if learners come from a culture with a sociopolitical and educational background that never included critical thinking, or may have even discouraged it. Because of this lack of exposure to these concepts and practices, there can often be profound and unexpected differences in these students' learning styles and cognitive abilities that make it difficult to handle critical thinking concepts. This session details: 1) problems you might encounter when teaching students from different cultures, such as resistance to open-ended questions, collaboration, and student-centered activities; 2) possible



causes for this reluctance, e.g., authoritarian policies that inform many pedagogies; 3) strategies to circumvent this resistance. Participants will come away with a keener appreciation of how these students' backgrounds have shaped their thinking and how to best tailor instruction.

Conference Concurrent Sessions Continued

Whistle-blowing as the Epitome of Critical Thinking

Herschel Greenberg

Adjunct Professor
English Department
Mount San Antonio College

Lanai 1

Whistle-blowing is the epitome of critical thinking. If whistle-blowing is defined as witnessing a great injustice in society, and then taking action to alert the world of that injustice, then many layers of critical thinking are involved. The analysis of the wrong-doing and its affect on society requires critical thinking, including asking one's self to deal with the consequences of the whistle-blowing, which may include the loss of a job (fired by the company you blow the whistle on) or death threats (if the whistle is blown on large corporations or the government). While exploring the whistle-blower's dilemma, both traditional and modern ethics are involved as a person weighs the risks and rewards. Whistle-blowing also includes the projection of consequences to others and the benefits to society: how might my action change the lives of others is a core question of critical thinking and whistle-blowing.

The Lesson: "I Think, Therefore, Who Am I?"

Janice Conti Taraborelli

Associate Professor
Johnson & Wales University

Lanai 2

This session embodies a critical thinking activity that will engage participants as both "students" and "educators." The exercise will use a current and relevant social issue and apply the 'Elements of Thought' along with the 'Intellectual Standards' and a form of Socratic questioning to arrive at a greater understanding of how to reason intelligently through a complex problem. This exercise can be used in the classroom or applied to the "global" classroom as well.



Conference Concurrent Sessions Continued

Concurrent Sessions II

(9:40 am – 10:40 am, Wednesday)

Developing a Sustainable Model for Faculty Development in the Pedagogy of Critical Thinking

William Reynolds

Associate Professor of Social Work
The Richard Stockton College of New Jersey

Mark Berg

Associate Professor of Psychology
The Richard Stockton College of New Jersey

Empire Ballroom



The goal of our session is to use our experiences in implementing a professional development program to help conference participants generate institution-specific strategies for increasing and improving critical thinking pedagogy. As indicated by Cosgrove (2013), “the most positive contributing pedagogical element [for improving teaching and learning] was the ‘learning community’ model” (p. 231). This emphasis on a supportive group of faculty who share a commitment to a values-based (e.g., intellectual humility, courage, fair-mindedness, etc.) approach to teaching and learning, which was built into our model from project conception, will be emphasized in our session.

The session will be interactive, with participants engaging in brief small-group activities in which they use the Framework to help them think deeply and broadly about aspects of the cultures of their own institutions – aspects that might either facilitate or inhibit the development of institution-wide efforts to improve students’ critical thinking disposition and skills. Participants should leave the session with a beginning plan for improving critical thinking pedagogy at their institutions.



Conference Concurrent Sessions Continued

Making Critical Thinking Visible: Critical Thinking in the Literature Classroom

Amanda L. Hiner

Assistant Professor of English
Coordinator, Critical Reading, Thinking, and Writing
Winthrop University

John C. Bird

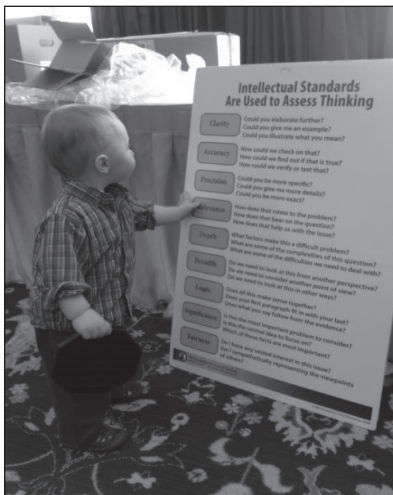
Professor of English
Director, Winthrop Teaching and Learning Center
Winthrop University

Napa 1

Literary analysis offers English teachers an ideal vehicle for modeling, practicing, and teaching critical thinking skills. Though the study of literature has traditionally emphasized the application of literary elements such as setting, characterization, form, meter, and theme, we believe that an explicit, deliberate, and careful application of the ‘Elements of Reasoning’ and the ‘Intellectual Standards’ of critical thinking – along with a focused emphasis on metacognitive inquiry – produces deeper textual analysis and leads to more significant conclusions about literary texts.

Drawing on our years of teaching both literature and critical thinking at the college level, we will share practical teaching tips and strategies to incorporate critical thinking explicitly into the literature classroom. In this session, we

will discuss the theory and practice of our own integration of critical thinking strategies into our literature classrooms. We will also share helpful handouts, discussion questions, and application exercises suitable for integration into literature classrooms ranging from middle school to graduate school. Finally, our session will include an integrative workshop experience in which participants can practice applying critical thinking skills and analysis to selected, short works of literature.



Conference Concurrent Sessions Continued

Intellectual Perseverance: Life Inside the Elements Wheel

Fred May

Safety, Security & Emergency Management

Eastern Kentucky University

Sonoma Room

Students at Eastern Kentucky University are taught to solve life's problems inside the 'Elements of Thought' wheel, surrounded reassuringly by the eight Elements of Thought and the additional 27+- synonyms, plus the 'Intellectual Standards' and 'Intellectual Traits.' Students are taught to enter the Elements wheel at the position of "Problem," remaining inside the wheel until the problem is solved, developing and analyzing alternative solutions, and finding preferred solutions by applying all Elements. Students exit the Elements wheel at the position of "Solution," or remain inside to solve additional problems. Student success in life and career requires problem-solving perseverance reassuringly from inside the Elements wheel.

Critical Thinking Skills for Individuals with Special Needs: A Key Component to a Fully Inclusive Society

Arshdeep Shinh

Mathematics Instructor

Education Program for Gifted Youth

Stanford University

Rona Margaret Relova

SPECTRUM

Stanford University

Kimberly Tran

Research Assistant

Veterans Affairs Palo Alto Health Care System

Napa 3



Developing critical thinking skills in students with special needs is not an indulgence but rather a necessity if they are to become productive citizens of our society. People with learning disabilities are vulnerable, and therefore it is essential to teach them mechanisms that will prepare them for real-world challenges. As educators, we need to ensure that their contributions to the community are not tokenistic, but rather of real value to them and to those

Conference Concurrent Sessions Continued

they serve. Our discussion will focus on Intellectual Independence, Intellectual Perseverance, and Intellectual Empathy as cardinal building blocks in honing critical thinking among individuals with special needs. We will also discuss the measurable outcomes of this goal.

Thinking Critically about Educational Quantification

Facilitator: Bob Schlim

Spokane University

Claremont Room

Critical thinking is not just for the classroom. It is crucial to the ethical conduct of life itself. To stimulate, even to provoke, some of that thinking, we include concurrent program sessions that emphasize the importance of thinking critically about ethical, social, and political issues. In this session we offer an engaging intellectual process for thinking through such issues using core critical thinking concepts and principles; this process can be replicated and modified in any number of ways for instruction and intellectual discussions of any type. This session relies on the reasoning abilities of participants, guided by a facilitator. Debate is invited, assuming it demonstrates fairminded and empathic critical thinking.

This year's social and educational issues session focuses on quantification in "education," which is a growing reality for faculty and administrators across disciplines and teaching levels.

In considering this issue, we should first ground ourselves in a rich conception of education. For this purpose, we might begin with these brief – but deep – thoughts on the idea of education, published in 1852, and written by Cardinal John Henry Newman (*The Idea of a University*):

Truth, of whatever kind, is the proper object of the intellect; its cultivation then lies in fitting it to apprehend and contemplate truth... the intellect in its present state, ...does not discern truth intuitively, or as a whole. We know, not by a direct and simple vision, not at a glance, but, as it were, by piecemeal and accumulation, by a mental process, by going round an object, by the comparison, the combination, the mutual correction, the continual adaptation, of many partial notions, by the employment, concentration, and joint action of many faculties and exercises of mind. Such a union and concert of the intellectual powers, such an enlargement and development, such a comprehensiveness, is necessarily a matter of training. And again, such a training is a matter of rule; it is not mere application, however exemplary, which introduces the mind to truth, nor the reading of many

Conference Concurrent Sessions Continued

books, nor the getting up of many subjects, nor the witnessing many experiments, nor attending many lectures. All this is short of enough; a man may have done it all, yet be lingering in the vestibule of knowledge: he may not realize what his mouth utters; he may not see with his mental eye what confronts him; he may have no grasp of things as they are; or at least he may have no power at all of advancing one step forward of himself, in consequence of what he has already acquired, no power of discriminating between truth and falsehood, of sifting out the grains of truth from the mass, of arranging things according to their real value. Such a power is an acquired faculty of judgment, of clearheadedness, of sagacity, of wisdom, ...and of intellectual self-possession and repose – qualities which do not come of mere acquirement. The eye of the mind, of which the object is truth, is the work of discipline and habit (p. 109)

With this conception as a starting place, participants, divided into small groups, will practice using concepts and principles of critical thinking to address these core session questions:

- To what extent do teachers, faculty, and administrators today tend to conceptualize education in the rich way that Newman and other deep thinkers tend to think of education? To what extent does such a conception interface with the notion of “quantifying education?”
- Can education in fact be quantified? Does it make sense to speak of “the educated mind” in terms of quantity or quantities? How might any of the following distinguished thinkers (or any others you might suggest) view the “quantification of teaching and learning” as it is largely conceptualized today: Socrates, Bertrand Russell, John Dewey, Jane Austen, Charles Dickens, Einstein, Da Vinci, Isaac Newton?
- What do administrators and teachers in schools, colleges, and universities tend to see as the primary purpose(s) of quantification in education? Why do administrators and others in schools tend to talk about learning in terms of quantification?
- In what ways does “education” tend to be quantified in this country? In any given country? Across the world? What methods are used by teachers to quantify student learning? What methods are used to rank educational bodies, institutions, and networks?
- How do teachers and administrators tend to conceptualize hierarchical rankings of instruction, of instructors, and of educational institutions? What subtle distinctions are sometimes made in the process of these rankings? To what extent are these distinctions justifiable?

Conference Concurrent Sessions Continued

- What are the historical roots of the quantification of “learning” in this country (or any given country)? What methods were used in the past to quantify student learning which are no longer used today? Why are these methods no longer used? What methods do we now use that might be replaced with assessment processes that better reveal student understandings and knowledge? How will people 100 years from now view quantification in education today?



Caveat: though participants are free to question or argue against any of the premises or assumptions in the formulation of the issue, such discussion should not be so drawn out as to prevent discussion of the issue itself, as presented.

You're Dogmatic About Dogmatism! No! You're Dogmatic About Dogmatism!

Don Ambrose

Professor of Graduate Studies

College of Liberal Arts, Education, and Sciences

Rider University

Lanai 2

Dogmatic thinking can lead to serious consequences – disastrous wars, economic collapse, genocide, and authoritarian rule, to name a few. Dogmatism is a powerful antihero in an ongoing conflict with critical thinking. This far-ranging, interdisciplinary exploration of dogmatism draws insights from recent collaborative projects involving eminent researchers and theorists from critical thinking, psychology, ethical philosophy, political science, history, legal studies, sociology, and creative studies. The following are some of the insights explored in the analysis: some forms of identity formation can make you more dogmatic than others; genocide arises from any combination of four causes; we often mistake our theoretical models for reality; dogmatic policymakers force millions of children to suffer from devastatingly shortsighted educational initiatives; smart academics certainly are not immune to dogmatism. In short, dogmatism pervades everything – academia, the newsroom, politics, and our personal lives. When we pull together as collaborators in interdisciplinary teams of critical thinkers, we have a chance to defeat dogmatism on the intellectual battlefield.

Conference Concurrent Sessions Continued

Educational Transformation for the Classroom Teacher

Carmen Polka

Elementary School Teacher and Independent Educational Consultant
Thompson School District

Lanai 3

If there is one question we need to be asking about classrooms today, it is “at what level can students be taught to think through content in a critical way?” Asking this initial question begins the fundamental shift in educators’ thinking from the typical classroom to a classroom that fosters the work from Paul and Elder at the heart of curriculum, instruction, and assessment design. When working through this necessary shift, educators must ask, “What is worthy of my time with students? What is worthy of the students’ time? And how will the students exhibit a level of criticality in assessment?” Using the Paul and Elder framework – specifically the ‘Elements of Thought,’ ‘Intellectual Standards,’ and ‘Intellectual Virtues’ – one can begin to rethink how students are asked to learn, what students are asked to learn, and how students can share their thinking. Additionally, close reading, Socratic dialogue, diads, and other instructional strategies will bring critical thinking to life, even in the youngest of students.

“The important thing is to not stop questioning,” Albert Einstein stated. This is the preface for my work as an educator in a primary classroom, utilizing the Paul and Elder framework as my primary source for restructuring the classroom, to help young children begin the journey of becoming educated persons.

Critical Thinking in Chile: Present Status and Suggested Improvements

Nicole Hansen

Head of the Critical Thinking and Debate Center
Andrés Bello University, Chile

Monterey Room

Programs of Critical Thinking in Chile and other Latin-American countries are insufficient, since they are only developed by a few institutions and are not mandatory for all students. With the purpose of evidencing the lack of these skills, the critical thinking abilities in freshman students at Andrés Bello University were studied, and the need to create and improve programs that promote and develop these skills from school through university was established. Also, two programs were created: one for college students in all levels, and one of critical thinking across the curriculum at the bilingual school Lincoln International Academy (from 5th to 11th grade).

Conference Concurrent Sessions Continued

Critical Thinking and Teacher Education

Zena Scholtz

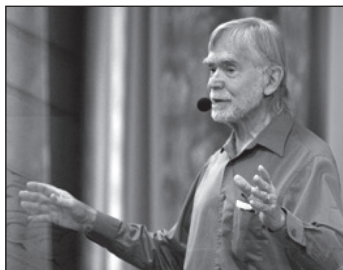
Lecturer

Cape Peninsula University
of Technology
Cape Town, South Africa

Napa 2



Since the establishment of a unified educational system underpinned by the transformative goals of the new constitution, following the ending of the apartheid era, the South African school curriculum has undergone a series of changes. One aspect that was emphasized in all the policy documents was the requirement for the development of critical thinking. Qualities such as the ability to think critically in order to make informed decisions and to solve problems in social, scientific, and economic contexts were highlighted. Despite the rhetoric, there were no clear guidelines which showed teachers how to develop critical thinking in their learners. In response to this, the Critical Thinking Group (CTG) was formed in 2003 comprising teachers, teacher educators at a university in Cape Town, curriculum advisors from the provincial education department, and researchers from overseas universities (York, England, and later, Wisconsin-Madison, USA). This core group of educators has been working consistently to introduce science teachers to methodologies that would develop critical thinking in their learners. The first three years of the CTG project focused on in-service teachers while subsequent years focused on pre-service student teachers. Some of the outcomes of research and development in critical thinking have been several journal articles, teaching and learning materials, as well as the development of a module on critical thinking in a teacher-education programme.



In my session I will report on the work of this professional learning community, formed to help teachers and student teachers develop pedagogies that would stimulate critical thinking – particularly argumentation – in school science and technology. I will also engage participants in activities that will give them some insights into the approach we used when working with the teachers.

Conference Concurrent Sessions Continued

Concurrent Sessions III

(10:55 am – 12:25 pm, Wednesday)

Enhancing Critical Thinking Across the Curriculum: Insights into the Long-Term Nature of Substantive Educational Reform

Trish Parrish

Assistant Vice President and Regional Accreditation Officer

Academic Affairs

Saint Leo University

Empire Ballroom

Saint Leo University is focused on helping students make better decisions using critical thinking and the institution's core values. To achieve this goal, the university has revised its general education program and infused several courses with the Foundation's approach to critical thinking. This presentation will share my personal experiences as a university professor and as the administrator of our critical thinking initiative. I have really transformed the way I teach based on what I have learned from attending the Foundation's events, and hope share how it is working (with traditional and non-traditional college students, both online and in face-to-face courses). Participants in this session would learn how to: 1) integrate critical thinking across the college curriculum in a meaningful way, including administrative processes and instructional strategies; 2) use student learning data to improve the process; and 3) explore lessons learned in Saint Leo's first year of full implementation. I believe this session would be of interest to college-level faculty and administrators who are interested in teaching for critical thinking, and participants would be actively engaged with some of the tools we are using (including SEE-I, critical reading, and a rubric for writing samples).



Conference Concurrent Sessions Continued

Historiography: The Application and Dissemination of Critical Thinking Within History

Mickey Del Castillo

Social Science Department
Gulliver Preparatory School

Lanai 3

Having taught in both the challenging setting of inner-city schools and in the affluent prep school environment, I find there is this continual neglect to think critically in teaching and learning history. I tend to believe this neglect stems from simple ignorance on the topic, fear of the skepticism and perceived subversion critical thinking is seen to represent, and a general misapplication of criticality. An example is the ability to score well on an AP (Advanced Placement) exam and assuming that because students were able to pass, they were actually applying critical thinking to history, when in reality they memorized information with – at best – only a superficial retention and understanding.

In my presentation, I seek to discuss and disseminate how the focus on historiography (the act of thinking critically in history) must be the main component when teaching any sort of course in the realm of history. I will also cover different historical perspectives that have been developed within a framework of critical thinking (i.e. historical forces, material dialectic, and orthodox vs. revisionist mindsets), and will see how aspects of *Student Guide to Historical Thinking* (Elder, Gorzycki, and Paul, 2013) compliment these said methods. In closing the presentation, I will open a dialogue focused on the significant obstacles that impede students cultivation of a *historical/critical* perspective, and how we might find solutions when faced with these obstacles.

Intellectual Values and Critical Thinking in a First-Year College Program

Heather Barrack

Writing Department
Bergen Community College

Claremont Room

This workshop is designed to introduce the Paul/Elder frame of ‘Intellectual Virtues’ for the ‘Elements of Thought’ and ‘Intellectual Standards’ in assignments and 32 support strategies for all first-year students.

The session will present the frame for visual, online, and print assignments connecting critical thinking methodologies from whole to parts and parts to

Conference Concurrent Sessions Continued

whole across the curriculum.

The focus will be on the following sequence:

- Introducing the frame in one class, in one department, for one semester.
- Developing pilot projects for classes in one department.
- Encouraging the frame in CT classes in the philosophy department.
- Adding the frame to all first-year seminar classes.
- Working to create a culture of CT awareness for better close reading and oral assignments across the curriculum.

Handouts for the different levels of development will be available.

Running Toward the Confusion: Making Intellectual Traits Central and Assessing Them Meaningfully

Kurt Weiler

English Teacher / ESL Coordinator

New Trier High School

Sonoma Room

‘Intellectual Traits’ (intellectual humility, intellectual courage, intellectual empathy, etc.) are fundamentally important to all of us who seek to cultivate critical thinking in our classrooms, but they can seem too abstract to be used in assessment. Using examples from a high school English class, this session will examine how teachers can fundamentally reorganize their classrooms to make the development of intellectual traits the central feature of student learning. The session will address the crucial role of student reflection in helping students to understand the intellectual traits, relate them to their own academic experiences, and create meaningful academic goals in a given subject area. It will also explore ways to cultivate critical thinking through the use of critical reading journals, which ask students to “run toward the confusion” instead of seeking the shelter of safe answers. In addition, the session will explore how student-teacher conferences can be used for assessment by requiring students to present evidence from their journals that demonstrates their growth in the intellectual traits. Finally, the session will examine how the shift to making intellectual virtues central in a classroom can result in creating a more personalized and meaningful learning experience for each student.

Conference Concurrent Sessions Continued

Glocalization of Critical Thinking

Mohammad Bagher Bagheri

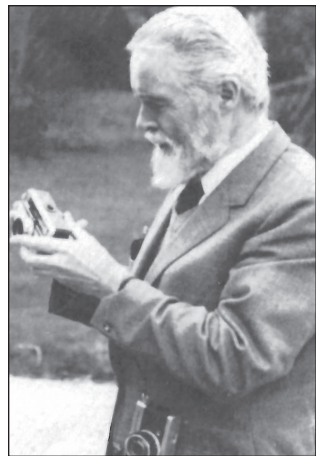
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Tehran Science and Research Branch, Islamic Azad University

Napa 1

The idea behind glocalization is thinking globally but acting locally. In fact, it is about a situation in which universalizing and particularizing tendencies co-exist. In the world of business and commerce, glocalization refers to the phenomenon in which a global product is specifically transformed to meet the needs of local consumers. Adapting farming techniques to local conditions and encouraging people to create websites in their native languages are examples of glocalization. Glocalization has also appeared in academic dialogue concerned with the response of education to a rapidly evolving, global environment. Jeffrey Brooks and Anthony Normore stress the need to incorporate a glocal perspective within the thinking, and therefore the practices, of academic leaders. Brooks and Normore propose that this occurs as “meaningful integration of local and global forces,” or glocalization.

Promoting critical thinking in different parts of the world can be successful, provided that local exigencies are taken into consideration. Asking for reasons and being open to alternatives, for example, conflict with the practices and principles of some cultures. According to Ennis (1998), the Inuit in Canada find it offensive to be asked for their reasons, and are reluctant to reveal their mental states such as desires or beliefs. Some cultures do not hold that the worth and dignity of every person should be upheld, but instead only those of a select group or select groups. Nazi and slave-owning cultures, and religious fundamentalism, are examples. For this reason, I believe sudden introduction and widespread promotion of critical thinking for all situations should be avoided. In this session we discuss how critical thinking promotion can be pursued with great discretion and with no apparent challenge to authorities.



Conference Concurrent Sessions Continued

Wiki-Ethics: Implications of the Mass Behavior of the Internet and Social Media for Critical Thinking and Ethics

Shawn Thompson

Professor Thompson Rivers University
Kamloops, British Columbia, Canada

Napa 2

The application of critical thinking and ethics is changed radically by the behaviour that the Internet and the social media allow for impulsive, unmediated, unfiltered publishing of information. From models like Wikipedia, Wikileaks, and #OccupyWallStreet, thinking and ethics in communication have become a process of revision while the event is happening with no dominant authority in control. That means a shift of power to the public citizen, both as an individual and as a group, acting in an unknown dynamic with the possibility of advancing critical thinking and ethics in ways never before possible. But the unpredictability of both innate human patterns of thought and particular group dynamics impede our ability to use the internet and social media to advance fairminded critical thinking. Wiki-ethics, an idea I am proposing, would be a collaborative, citizen-based internet effort focused on exploring ways to actively bring ethics – and specifically ethical reasoning principles – into internet communications and interactions, and to investigate ways to make goodness go viral.

Observation: The Earliest Critical Thinking Skill

Steve Coxon

Assistant Professor of Education and Director of Programs in Gifted Education
Maryville University

Monterey Room

Careful observation is fundamental to understanding the world, and is important to continue to develop in elementary students through increasingly challenging learning activities. In her book, *Emergent Science*, Johnston (2014, p. 8) refers to observation as the “first and most important scientific skill,” and suggests it begins to develop in the womb as the fetus learns to recognize familiar voices. While preschool curricula often focus on improving observational skills in early childhood, researchers Eberback and Crowley (2009) note that elementary classrooms neglect further development in middle and late childhood. This is unfortunate as it takes increasingly challenging experiences

Conference Concurrent Sessions Continued

to improve any skill, and careful observation is needed for well-developed habits of mind including clarity, accuracy, precision, depth, and breadth. Moreover, strong observational skills underlie such critical thinking concepts as comparing and contrasting viewpoints, evaluating evidence, and noting the sometimes subtle differences between fact and opinion. This discussion will provide a background on the development of observational skills in early childhood, connections between observation and critical thinking, and challenging activities to improve observational skills in elementary school students.

Empathy's Contribution to Critical Thinking

Kevin R. Cutright

Officer

U.S. Army

Lanai 2

Empathy improves critical thinking. It helps avoid logical fallacies, such as naïve realism, false consensus effect, mirror-imaging, confirmation bias, and the straw man fallacy. (Admittedly, it may encourage some others, like over-identification, over-rapport, naïve fallibility, and hasty generalization.) Empathy also helps identify hidden assumptions in one's reasoning.

This paper stems from a monograph written at a U.S. Army school. The monograph was a larger project focused on empathy's contribution to military planning. Thus, some examples refer to military circumstances.



Conference Concurrent Sessions Continued

Uncritically Organized: Improving Critical Thinking Development in Organizations

Richard King

Principal

Thinking in Organisations

Napa 3

The thinking environment in organizations is both complicated and complex. This is due to the interaction between individuals thinking for themselves, teams thinking cooperatively, and organizational structure, culture, and processes. This session will explore the barriers to critical thinking development in organizations, and will suggest strategies to overcome them. The session uses the eight 'Elements of Thinking' as a framework to analyze issues with thinking in organizations.



Conference Concurrent Sessions Continued

Concurrent Sessions IV

(8:00 am – 9:00 am, Thursday)

Content vs. Thinking? Challenges in Faculty Development and Insight into Institutional Improvement

Steven J. Pearlman

Director, Interdisciplinary Writing and Reasoning
University of Saint Joseph

David Carillo

Writing Portfolio Program Administrator
University of Saint Joseph

Empire Ballroom

Charged with faculty development around best pedagogical practices for critical thinking, the USJ IWR department runs a year-long course for select faculty in which faculty are first introduced to readings around the research on teaching critical thinking, and in which they later redesign courses around pedagogies for the same. One frequent obstacle that emerges for faculty is their perceived conflict between the need to teach content vs. the need to develop critical thinking skills. While acknowledging that some disciplines require “content push” in order to have their students meet a variety of needs and educational mandates, such circumstances fuel the question regarding how content functions in the classroom. Mandates aside, often, the conflict arises from the notion that students must acquire a certain amount of foundational knowledge before gaining the ability to think critically in their chosen discipline. Such perspectives not only challenge the notion of critical thinking but equally challenge the notion of literacy. This presentation will discuss the nature of this debate as it unfolds in faculty development, as well as the challenges and successes in helping faculty members understand that all “content” is a construction of thinking, i.e., that thinking creates “truths” as well as “falsehoods.”

Conference Concurrent Sessions Continued

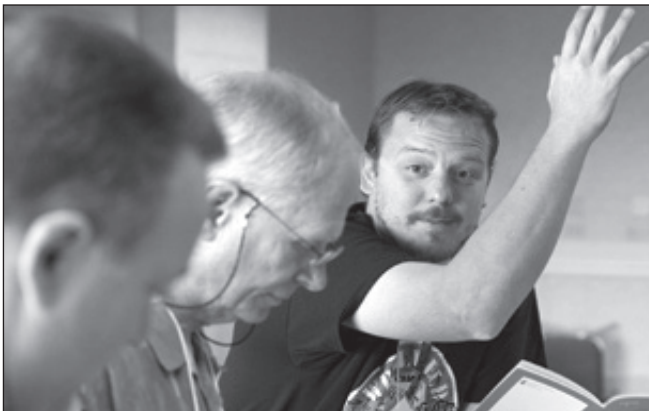
A Project Demonstration of Critical Thinking in Analyzing Students' Promoting Critical Thinking in the Public Speaking Course

Myra H. Walters

Chair, Speech Communication and Foreign Languages Department
Edison State College

Claremont Room

In this session, I will share how I transformed my class and rekindled my love affair with teaching the basic public speaking course by designing a series of activities to help students “think through” the steps necessary for developing ethical public speaking skills, with an emphasis on ‘Intellectual Traits.’ Key assignments include: a topic approval assignment to help students think through the process of identifying and formulating speech topics and purposes that are ethical, relevant, and significant for their audience; a web-based speech preparation outline tool designed to lead students through the process of developing their speech by applying critical thinking standards that more accurately reflect the way students should think through the speech preparation process; journal reflection assignments which prompt students to analyze presentations and apply critical thinking standards to evaluate their speech video and the speeches of their peers, and to reflect upon how well they “thought through” each step to develop their speeches. In the final reflection, students are asked to reflect upon the extent to which they believe they have developed intellectual traits during the public speaking course. Some of the journal entries produced by students will be shared as evidence that this course transformation is working to promote critical thinking skills in my public speaking classes.



Conference Concurrent Sessions Continued

Intellectual Courage, Whistleblowing, and the Public Citizen: A Well-Founded Fear of Persecution

Caroline Hunt-Matthes

Adjunct Professor

Webster University

Geneva, Switzerland

Napa 2

Nowhere is the issue of dissent more evident as a check to today's society than in the experience of the whistleblower who exposes misconduct, dishonesty, or illegal or unethical practice. Whistleblowers confront unique critical-thinking challenges, in particular the conflict between following orders and obeying their conscience. Moreover, the whistleblower must contend with "an uneven playing field" against wrongdoers in authority who use unfair fear-mongering tactics such as the cover-up of evidence, visceral attacks on the whistleblower's person and performance, the reinterpretation of facts, and the intimidation of witnesses. The final hurdle is all-too-frequently costly and lengthy litigation in the knowledge that the whistleblower will be "defeated" due to limited financial resources. Contemporaneously, the whistleblower must manage his or her own increasing isolation and marginalization from the world of work, community, and family.

This paper will elaborate the intellectual and moral virtues embodied by whistleblowers in making critical-thinking decisions about whether and when to blow the whistle – namely, intellectual humility, courage, integrity, perseverance, empathy, and fairmindedness. The seminal decision of a whistleblower must rest on the assessment and synthesis of available legal protection. This dichotomy will be illustrated by evidence from institutions in which whistle-blower protection is less than adequate: USA and UK national intelligence agencies as well as the United Nations. When the whistleblower is no longer protected under law, or is subject to criminal prosecution in retaliation for speaking out about wrongdoing, serious implications exist for a truly free society.

Can educational reform address this important issue, given that our hierarchical education systems are structured to reward the status quo and sanction dissent? Although the teaching of critical thinking skills is an imperative for future generations, perhaps their real-world application unfairly exposes dissenters to vested interests with potentially brutal consequences. Perhaps the optimal critical thinker would envisage comprehensive whistleblower protection laws and their proper implementation *ad interim*.

Conference Concurrent Sessions Continued

Fostering Critical Leadership in Teens: Cultivating Ethical Identity Formation and Emerging Social Conscience in Dialogue with Today's Leaders and Tomorrow's Challenges

Joseph Heyer

Executive Director
The Larger Context, Inc.

Sonoma Room

Our nation is desperate for a generation of inspiring leaders for national and international government and business positions, and for our communities. Often, our education system does not nurture independent decision-making and action in students who may aspire to leadership.

In this session, participants will be introduced to a highly interactive leadership development program designed for high school students who learn to see where there is need, and how to take the lead. Workshop attendees will understand how students cultivate understanding of the 'Elements of Thought,' 'Intellectual Standards,' and 'Intellectual Virtues' throughout this four-pronged program that offers coursework (in etiquette, Appreciative Inquiry, ethics, communication skills, team building, leadership styles, social and economic issues, and global perspectives), leadership seminars (deep conversations with local government and business leaders examining challenges they face, and approaches they find effective), weekly mentor meetings (in the workplace with an adult who has leadership responsibilities in her or his career), and community service (assisting needy organizations as well as creating and delivering a student-designed event).

Each facet of this program will be clarified along with underlying themes of diversity & inclusion, identity development, social-emotional learning, and maturing social conscience. The blueprint for this program can be replicated in any community or workplace of committed citizens.



Conference Concurrent Sessions Continued

Critical Thinking in the Elementary Classroom

Lindsey Wilkes

Grade Six Teacher

Rundle College Elementary School

Andrea Friesen

Assistant Principal

Rundle College Elementary School

Napa 3

21st-century learners require skills that will allow them to interpret, analyze, synthesize, and extend information. Embedding critical thinking activities into everyday practice makes this second nature to our students. Upper elementary is the exciting age where students begin to discover the world around them and start to explore diverse ways of thinking. We will share different projects and activities that our students in fourth through sixth grades have participated in to help stimulate critical thinking. All of our core subjects endeavor to help our students become lifelong critical thinkers. This will be a practical look at how you can embed critical thinking into your elementary classroom.

Using Social Media as an Access Point to Analyze Our Thinking

Shira M. Cohen-Goldberg

Lead Facilitator

Hill for Literacy

Napa 1

The Common Core State Standards establish that teaching practices and related tasks that help students cultivate their thinking are to be prioritized in classroom instruction. This presentation is designed to help participants explore novel ways to bring the core concepts of critical thinking to elementary and middle school students. By nature, digital information (including social networking sites and YouTube) is continuously accessible, abundant, and often requires careful analysis. Social media is a timely and appropriate means to help young students analyze new information, and is an engaging point of access for all students. This session will use digital media to help participants explore the concepts of information/inferences/assumptions, touch on Paraphrasing and Explication, and deeply engage in the analysis level by exploring the logic of an internet persona's thinking. It will also offer methods and tools to help students move their thinking beyond digital media and into textual analysis.

Conference Concurrent Sessions Continued

Bringing Data into the Classroom to Foster Quantitative Reasoning and Critical Thinking Development

Frederique Laubepin

Instructional Learning Senior

Inter-University Consortium for Political and Social Research

University of Michigan

Lanai 3

More than the minimal capacity to read, write, and calculate, quantitative literacy connotes the defining characteristics of an educated (literate) person: it suggests, of course, a level of comfort/ease with numbers, but more importantly, it involves the ability to assess the strength and implications of information presented in numerical terms. Acquiring these skills significantly contributes to people's abilities to control the quality of their lives, and to make important personal and professional decisions. Beyond that, quantitative literacy is also critical for a democratic society in that it empowers people by offering useful tools for developing intellectual autonomy, asking intelligent questions of experts, and confronting authority confidently.

Unfortunately, many students (and even adults) remain functionally innumerate because the increase in quantitative data and numbers has not been accompanied by an increase in competency with quantitative data and numbers. Consequently, people often struggle with tasks ranging from reading and interpreting tables or graphs, analyzing evidence, reasoning carefully, understanding arguments, questioning assumptions, detecting fallacies, and understanding and critically evaluating numbers presented in everyday life, to working within a scientific model and knowing what kinds of data might be useful in answering particular questions. This session will explore practical strategies for improving quantitative literacy and fostering critical quantitative reasoning through the use of research data and related tools in the undergraduate social science classroom.

Conference Concurrent Sessions Continued

Fledgling Programmes in Critical Thinking – The Challenges and the Triumphs

Justin Skea

Head of St. Cyprian's Preparatory School

Cape Town, South Africa

Lanai 2

Through this interactive session, I discuss the challenges, surprises, and rewards of introducing a school-based programme of critical thinking within the context of a 'Newly Industrialised Country' (in this case, South Africa). Though the notion and idea of teaching thinking has gained momentum over the past decade or two – and even appears in official curricula around the world – for many countries, particularly developing and newly industrialised countries, schools and education systems are only now beginning to fully grapple with the need to develop critical thinking skills and with the cultivation of core 'Intellectual Virtues.' The session takes the case study of a South African Preparatory/Primary school's introduction of an integrated programme of Philosophy for Children and Mindfulness exercises, and it explores – through visual media, anecdotal observations, and empirical data – the practical benefits, unforeseen challenges, cautionary tales, and inspiring journey that this school and others in South Africa have embarked on. This session is meant for those who share in the trepidation and fear of introducing a programme that seeks to develop critical and creative thinking skills in a country, education system, or school that embraces the concept but is unable to take it to a level beyond the realm of theory.



Concurrent Sessions

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Concurrent Sessions

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Evening Session

Roundtable Discussions

Wednesday, July 30, 2014

7:00 pm – 8:30 pm

Claremont Room

The evening roundtable discussions offer an opportunity for us to engage in lively informal discussion about important topics in education and society. Due to the large number of roundtable topics submitted for this year's conference, we have clustered the roundtables into group discussions by topic. Each roundtable will begin with brief (5-10 minute) introductions by each presenter. Following this will be lively questioning and dialogue by all participants in the roundtable. Join any discussion and move between and among tables and groups, as you wish.

Critical Thinking in Public Citizenship

- **Supporting Critical Thought by Building Resiliency** (Patricia Doerr and Carol Robinson Zañartu, Professor and Chair, Department of Counseling and School Psychology, San Diego State University)
- **Critical Thinking in Study Skills Training: Para Todos (For Everyone)** (Joseph Velasquez, Founder and CEO, OjoOido Academics, LLC)
- **Critical Thinking & Citizen Work** (Jennifer K. Greene, Associate Professor of Philosophy, St. Edward's University)

Critical Thinking Professional Development

- **Institutional Enhancement for Critical Thinking: Findings and Experiences from a Long-Term Quality Enhancement Plan** (Barbara Rodriguez, District Director, Quality Enhancement Dept., Broward College, and Nathalie Franco, Assistant Professor, Behavioral Science Dept., Broward College)
- **Saving Education: Why Teachers Need to be Taught How to Teach Thinking** (Jennifer Jo Mokiao, Sixth Grade Teacher and Educational Speaker, Del Mar Union School District)
- **Critical Thinking in the Classroom (and Online): A Transformative and Iterative Process** (Robert Kelley, Professor of Psychology, MiraCosta College)

Evening Session

Roundtable Discussions Continued

Skepticism, Science and Critical Thinking

- **Skepticism - An Essential Quality of Critical Thinking** (Danhua Wang, Associate Professor, Department of Developmental Studies, College of Education and Educational Technology, Indiana University of Pennsylvania)
- **Reconsidering the Sciences: Vision through a Cultural Lens** (Craig A. Hassel, Associate Professor & Extension Specialist, Department of Food Science & Nutrition, University of Minnesota)

Critical Thinking in Elementary Instruction

- **“I Say, You Say, and Confucius Says”: Engaging Upper-Elementary-School Children in a Philosophical Inquiry into the Teachings of Confucius in the Analects** (Jessica Ching Sze Wang, Associate Professor, Department of Education, National Chiayi University, Taiwan)
- **Teaching Kindergarteners Math through Questioning and Storytelling** (Ivy Randle, Doctoral Candidate, Argosy Online University)

Innate Barriers to Criticality

- **Obstacles to Critical Thinking: Human Biological (Neurological) Nature** (Burt Stillar, Assistant Professor of Social Sciences, West Coast University, Los Angeles)
- **The Human Mind: Limited and Suspect** (Sam Karras, Mathematics Instructor and Interventionist)

Approaches to Critical Thinking in Research and Teaching

- **Critical Thinking Skills in Fitness-Wellness Courses: A Preliminary Study** (John H. Downing, Associate Professor, Kinesiology, Missouri State University)
- **Thinking About Validity and Reliability in Grades 4-13** (Theo Dawson, Executive Director, Lectica, Inc.)
- **The Use of a Critical Thinking Research Rubric for Grading Graduate-Level Research Proposals** (Juanita Holliman, Critical Thinking Curriculum Specialist, Chicago State University)

Evening Session

Roundtable Discussions Continued

To What Extent Can Debate, Informal Logic, and Alternative Approaches Such as Chess Lead to Critical Thinking?

- **A Direct Approach to Teaching Critical Thinking Skills** (Scott Sprouse, Former Adjunct Professor, Graduate School of Business, Columbia University)
- **Quantification of Debate-Style Learning** (Robert W. Nithman, Assistant Professor, Midwestern University)
- **Cultivating Educated Citizens through Fallacy Analysis of Presidential Debates: A 10-Year Case Study of the 2014 Bush-Kerry Debate** (James A. Snyder, Chair of the Philosophy Department, Mercyhurst University)
- **Chess and Critical Thinking in the Classroom with a Special Emphasis on Native American Students** (Mark C. Anderson, Instructor, Humanities and Liberal Arts, Blackfeet Community College)

Cultural and Linguistic Barriers to Critical Thinking

- **Critical Thinking in an Intercultural Scoping: Politeness Strategies: Intercultural and Language Barriers** (Katherine Flores, Legal Interpreter, Educational Projects Development & Tutorship)
- **Infusing Critical Thinking into L2 Writing Instruction** (Yanning Dong, Ph.D. Candidate, Department of Language and Literacy Education, University of British Columbia)

Critical Thinking and Business

- **Critical Thinking – Smart Thinking for Peak Performance** (Valerie Pierce, Founder and Director, Clear Thinking in Action)



Fostering Critical Thinking Across the Curriculum Must Be Given Priority in Education

During the past three decades, those of us at the Center and Foundation for Critical Thinking have articulated central concepts of critical thinking (in as simplified a form as we believe possible) within an integrated theoretical framework. We have distinguished the difference between thinking critically in a weak-sense (selfish critical thought) and thinking critically in a strong-sense (fairminded critical thought). We have articulated the issues that emerge when we focused critical thinking skills on the subject of teaching critical thinking in every subject and at every grade level. All of our work has been based on these premises:

- that the fundamental need of students is to be taught how, not what, to think
- that all knowledge of “content” is generated, analyzed, organized, applied, and synthesized by thinking
- that gaining knowledge is unintelligible without such thinking
- that an educated, literate person is fundamentally a seeker and questioner rather than a “true believer”
- that classroom activities are question-, issue-, or problem-centered rather than memory-centered; that knowledge and truth can rarely be transmitted by verbal statements alone
- that students need to be taught how to listen critically – an active and skilled process
- that critical reading and writing cannot be effectively taught without critical dialogue
- that those who teach must actively model the intellectual behavior they want
- that teachers must routinely require students to explain what they have learned
- that students who have no questions typically are not learning
- that students must read, write, and talk their way to knowledge
- that knowledge and truth is heavily systematic and holistic, not atomistic and piecemeal
- that people gain only the knowledge they seek and value
- that without motivation, learning is superficial and transitory
- that all genuine education transforms the values of the learner
- that students must reason their way dialogically and dialectically out of ignorance and prejudice
- that students learn best if they have to teach others what they are learning
- that self-directed recognition of ignorance is necessary to learning
- that when possible, teachers should allow students to express their own ideas
- that the personal experience of the students is essential to all learning

In our work with teachers and administrators, we have tried to help them see that it is important to be clear about the goal of critical thinking on three levels:

1. the ideal level (what is our vision of ideal success?)
2. the realistic level (what stands in the way of achieving that vision?), and
3. the pragmatic or practical level (what strategies have we devised for moving from where we are to a closer approximation of our goal?)

Many people are not clear as to what they are trying to achieve (in integrating critical thinking across the disciplines). Most people are not clear as to what stands in the way of achieving this goal. An even larger number are confused as to what strategies, if pursued, would enable them to maximize their success. Finally, an even larger number of people are resistant, irrespective of which analysis one favors, to doing the intellectual work – the sheer intellectual drudgery – essential to success.

If critical thinking is to play a leading role in the reform of education, the problem of bringing critical thinking across the disciplines must become transparent and intuitive to faculty and students. If critical thinking is to become transparent and intuitive to faculty and students across the disciplines, teaching and learning must be re-thought within an integrated theoretical framework. The result of such “rethinking” must demonstrate what it would look like for faculty and students to work together toward the cultivation of intellectual skills, abilities and traits. It must show them what it would be like to apply critical thinking concepts and principles in practical ways to everyday teaching and learning. Faculty must be able to picture the reality in their minds’ eyes. And they must believe in the reality they are picturing. Then they must work together toward that reality in the spirit of fairminded criticality.

This may be put another way. If students are to gain insight into how the basic concepts of critical thinking apply in the disciplines they study, they need to be taught by faculty who themselves grasp that application. This presupposes faculty going through a process of learning in which they come to increasingly grasp this insight for themselves. But such a transformation of teacher-learning, such transfer across the disciplines, requires deep-seated motivation and intellectual perseverance. How can we win the hearts and minds of educators so they become committed to living an examined life? It is only through this commitment that they will develop the requisite skills and dispositions to effectively foster critical thinking across the disciplines and across the curriculum? These are the questions we faced 50 years ago when Glaser conducted the first “official” study on critical thinking and these are the questions we still face today.

History and Outreach

The Center for Critical Thinking was established in 1981 to advance the idea of fairminded critical societies in education and every dimension of life; the Foundation for Critical Thinking was established in 1991.

From the beginning, our work has emphasized the need for three things: 1) a substantive conception of critical thinking based in ordinary language, accessible to all, 2) an approach that fosters and encourages critical thinking (in a strong-sense) across all disciplines, subjects, domains of human thought and life, and 3) barriers and challenges to critical thinking and ways of dealing with them. Our work can be broadly categorized into these areas:

1. theoretical development, scholarship and research
2. outreach through conferences, academies and workshops
3. outreach through onsite training for schools, colleges and universities
4. development of testing and assessment tools in critical thinking
5. development, publication and dissemination of books, instructional materials, videos and thinker's guides on critical thinking
6. outreach through a dynamic website which offers many complementary resources for educators at all levels, including a large online library
7. outreach through multi-language translations of our work

Theoretical Development, Scholarship and Research

Theoretical development in critical thinking has been a primary focus of our work at the Foundation for Critical Thinking. All of this theory has been pursued in an attempt (ultimately) to answer the question: What is critical thinking (viewed globally), and how can it be contextualized to help people live more rationally, productively, fairmindedly? The theory in our approach is detailed in our many publications. We also conduct and support ongoing research in critical thinking (see our website for examples). We believe that a rich conception of critical thinking is one that is alive and in constant development; hence the need for continual development of the theory of critical thinking. Further, we believe that any field of study can potentially contribute to such a conception. Therefore, we invite scholars to contribute to this robust conception. We invite scholarly critique. All of our work should stand the test of scholarly assessment. It should grow and develop as a result thereof.

Conferences, Academies and Workshops

The First Conference on Critical Thinking, sponsored by the Center for Critical Thinking, marked the year of our birth (1981). Since that time, we have continued to host this conference every year. In addition, we sponsor and coordinate critical thinking academies (national and international), as well as regional workshops. More than 60,000 educators and administrators have attended these events, many from countries beyond the U.S. For instance, in the past four years alone, educators from the following countries have attended our events: Singapore, China, Canada, England, Australia, Germany, Hong Kong, Israel, Malaysia, Mexico, Nigeria, Philippines, Saudi Arabia, Denmark, Korea, Nepal, South Africa, Thailand, American Samoa, Czech Republic, Kazakhstan, Kuwait, Japan, Venezuela, Taiwan, Turkey, United Kingdom, Netherlands, Jamaica, Kuwait, Oman, Russian Federation, Spain, Sweden, and United Arab Emirates. At any given conference, more than 100 departments are represented from every major field of study, and from every grade level from elementary through graduate school, making our conference the most diverse conference on critical thinking in the world. We have provided national and international scholarships to our conferences and events for hundreds of educators.

Onsite Professional Development Programs

We develop and conduct onsite professional development programs for educators at all levels, both in the U.S. and abroad. In the past three decades, we have presented professional development workshops to more than 70,000 educators. All of our professional development programs are designed and developed with participating institutions in mind, as there is no formulaic way to develop substantive professional development in critical thinking. The actual context must always be taken into account.

Testing and Assessment Tools in Critical Thinking

The Foundation for Critical Thinking offers assessment instruments that share in the same general goal: to enable educators to gather evidence relevant to determining the extent to which instruction is fostering critically thinking (in the process of learning content). To this end, the fellows of the Foundation recommend:

- that academic institutions and departments establish an oversight committee for critical thinking, and
- that this oversight committee utilize a combination of assessment instruments to generate incentives for faculty (by providing faculty with evidence of the actual state of instruction in critical thinking at the Institution).

The following instruments are available through the Foundation for Critical Thinking to generate evidence relevant to critical thinking teaching and learning:

1. **Course Evaluation Form:** provides evidence of whether, and to what extent, students perceive faculty as fostering critical thinking in instruction (course by course).
2. **Critical Thinking: Concepts and Understandings:** provides evidence of whether, and to what extent, students understand the fundamental concepts embedded in critical thinking (and hence tests student readiness to think critically). Online test.
3. **Critical Thinking Reading and Writing Test:** Provides evidence of whether, and to what extent, students can read closely and write substantively (and hence, tests student ability to read and write critically). Short Answer.
4. **International Critical Thinking Test:** provides evidence of whether, and to what extent, students are able to analyze and assess excerpts from text books or professional writing. Short answer.
5. **Commission Study Protocol for Interviewing Faculty Regarding Critical Thinking:** provides evidence of whether, and to what extent, critical thinking is being taught at a college or university (can be adapted for high school). Based on the California Commission Study. Short Answer.
6. **Foundation for Critical Thinking Protocol for Interviewing Faculty Regarding Critical Thinking:** provides evidence of whether, and to what extent, critical thinking is being taught at a college or university (can be adapted for High School). Short Answer
7. **Foundation for Critical Thinking Protocol for Interviewing Students Regarding Critical Thinking:** provides evidence of whether, and to what extent, students are learning to think critical thinking at a college or university (can be adapted for high school). Short Answer. To view a sample student interview, please register to become a member of the critical thinking community.
8. **Criteria for critical thinking assignments.** Can be used by faculty in designing classroom assignments or by administrators in assessing the extent to which faculty are fostering critical thinking.
9. **Rubrics for assessing student reasoning abilities.** A useful tool in assessing the extent to which students are reasoning well through course content.

Publication and Dissemination of Instructional Materials

The Foundation for Critical Thinking develops and publishes instructional materials for faculty and curriculum materials for students that foster critical thinking across the curriculum. We also send complementary copies of our thinker's guides to educators to introduce them to critical thinking. In the past decade, we have sent (free of charge) more than a million thinker's guides to educators in the U.S. and abroad. (See our website bookstore for available resources.)

Dynamic Website - Free Resources For Educators at All Levels

For more than a decade, the Foundation for Critical Thinking has been building an increasingly dynamic website, offering more and more resources to educators, including the following:

1. More than one hundred articles under eight headings; all accessible freely; all aimed at making clearer the idea of critical thinking, its history, and its possible uses in classrooms of various subjects and grade levels;
2. research studies conducted by the FCT on the application of our work;
3. free translations of all our work for which we own the rights. Included languages: Spanish, German, Arabic, Chinese, Japanese, Korean, French, Greek, Persian, Polish, Thai, and Turkish. Spanish is the leading group with 12 works translated;
4. over 100 interviews, editorials, news articles, and other visual and aural media; again, all aimed at explaining and applying critical thinking in various directions and in numerous contexts;
5. scores of hours of critical thinking videos freely accessible;
6. an online college credit course for teachers that focuses on integrating critical thinking across the curriculum.

Our website is visited by more than a million people each year from more than 200 countries.

Translations of Our Work – 25 Languages

The works of the Fellows of the Foundation for Critical Thinking have been translated into many languages. Many of these translations are available free of charge on our website. Additional translations are being added to our online library each year.

Institutions Using Our Approach – A Sampling

The following institutions are making considerable efforts to foster critical thinking using our approach to critical thinking. This conception is based on the research of the Center and Foundation for Critical Thinking during the last 30

years and utilizes the work of Dr. Richard Paul, Dr. Linda Elder and Dr. Gerald Nosich. If your institution is not listed, but you think it should be added to this list, please let us know. Email cct@criticalthinking.org.

The University of Louisville Ideas to Action:

Using Critical Thinking to Foster Student Learning and Community Engagement

In 2007, the University of Louisville launched its quality enhancement plan (QEP) titled, *Ideas to Action: Using Critical Thinking to Foster Student Learning Community Engagement*. This ten-year initiative is centered upon the development and assessment of students' critical thinking skills and the promotion of community engagement across the undergraduate curriculum. The Ideas to Action (i2a) program is part of UofL's commitment to ongoing improvement as part of the regional reaccreditation process. The Paul-Elder critical thinking model provides the framework for the teaching and learning innovations faculty and staff are creating as part of i2a at UofL. These innovations include the development of new or revised learning tools, assignments, assessments, programs and teaching and learning strategies. The i2a staff and campus partners are promoting critical thinking infusion and "Paul-Elder integration" by facilitating new learning communities, developing workshops and small group sessions, offering individual consultations, creating resource materials and fostering cross-disciplinary conversations about critical thinking. To learn more about the i2a critical thinking work at University of Louisville, go to: <http://louisville.edu/ideastoaction>

For more information, contact:

Edna Ross, Ph.D.

Ideas to Action Specialist for Critical Thinking

Ideas to Action Delphi Center for Teaching and Learning

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University of Houston - Clear Lake:

Quality Enhancement Plan: Applied Critical Thinking (ACT) for Lifelong Learning and Adaptability

As the University of Houston-Clear Lake (UHCL) continues to prepare its students for the twenty-first century, it recognizes the necessity of equipping them with the relevant knowledge, skills, and dispositions to succeed in a rapidly changing environment where the ability to reason and adapt to new information is vital. To this end, UHCL has developed a Quality Enhancement Plan (QEP) topic of Applied Critical Thinking for Lifelong Learning and Adaptability. The

need for students to develop Applied Critical Thinking (ACT) skills has been identified through the internal analysis of student data, intensive discussion among UHCL constituents (i.e., faculty, staff, students), and several national reports conducted by external professional communities and organizations. By addressing this need, UHCL aspires to enrich the quality of its students' overall educational experiences.

The heart of UHCL's QEP for Applied Critical Thinking for Lifelong Learning and Adaptability is a curriculum revision project that will incorporate key critical thinking skills, concepts, and activities into courses, based on best practices. Such skills and practices will form the framework for redesigning the curriculum, helping the university to develop a common definition of Applied Critical Thinking, and for classroom activities that foster these skills in undergraduate students.

The goals of UHCL's QEP are:

- To increase the Applied Critical Thinking skills of students.
- To provide faculty the support and resources they need to develop the Applied Critical Thinking skills of students.

Thus, the key student learning outcomes of the QEP are:

- Students will use curiosity to identify a particular problem or area of interest within a discipline.
- Students will make connections to their particular issues or problems based upon evidence acquired by research methodologies and writing styles within the discipline.
- Students will demonstrate creativity through a divergent mental approach exploring original alternative views and solutions.
- Students will communicate outcomes through writing and/or presentations.

In order to ensure a successful implementation of the QEP, faculty will be afforded multiple opportunities to participate in professional development workshops and conferences, both on- and off-campus, that center on strategies for teaching and assessing ACT skills. Through these activities, the university hopes to instill critical thinking in all of its students, so that the knowledge they gain during their academic careers at UHCL can translate directly into real-world career experiences. In doing so, the university will enhance the educational quality of its graduates and, in fulfillment of its mission, provide a benefit to the larger community through the contributions of these graduates.

Contact: Kevin Barlow, Executive Director
Office of Institutional Effectiveness
barlowk@uhcl.edu

Oakwood University:

Critical Thinking Development through Writing

Oakwood University's Quality Enhancement Plan (QEP) was initiated in the Fall of 2012. *Critical Thinking Development through writing* was the topic selected by University stakeholder groups. The critical thinking curriculum is based on the work of Drs. Paul and Elder of The Foundation for Critical Thinking (FCT). The initial planning included consultation with FCT Fellow Gerald Nosich and follow-up workshops that included several Foundation consultants. The QEP initiative focuses on the development and assessment of students' critical thinking skills, as demonstrated in writing. To accomplish the goal, critical thinking competencies are embedded in four general education courses. The Paul-Elder approach provided the framework for revised syllabi, rubric assessments and teaching/learning strategies. In addition to course materials, display of critical thinking posters in departments across the University provided an added instructional value. Extensive on-going preparation of course instructors essential to the success of the initiative was implemented. Also, other faculty/ staff responded enthusiastically to open invitations to take advantage of the critical thinking professional development opportunities that included: FCT on-site workshops, an on-line course focused on critical thinking concepts – instructional applications and faculty representatives' attendance at several of the National and International Conferences hosted by the Foundation for Critical Thinking. Additionally, on going faculty-facilitated seminars that utilize FCT resources are conducted throughout the academic year. These professional development experiences stimulate cross-disciplinary conversations and promote the campus-wide initiative. The seminars ensure that instruction and learning objectives are deeply understood, systematically implemented, and appropriately assessed throughout the academic year. Continued progress in embedding critical thinking in the University curriculum and the common language reflected among faculty and students will contribute to sustaining this initiative.

For more Information about the program, please contact:
Jeannette R. Dulan, Ph.D., QEP Director, jdulan@oakwood.edu
Oakwood University, 256 726 7000, www.Oakwood.edu

Eastern Kentucky University:

Developing Informed, Critical and Creative Thinkers Who Communicate Effectively

Eastern Kentucky University is in its third full year of the implementation of its student learning Quality Enhancement Plan to “develop informed, critical and creative thinkers who communicate effectively” as a part of its accreditation.

In that effort, EKU has embraced the work of The Foundation for Critical Thinking, promoting the work of Richard Paul, Linda Elder, and Gerald Nosich. “Coaches” (faculty & staff trainers) continue to work with individuals, departments, and colleges to develop specific teaching and assessment strategies to help improve student critical/creative thinking. Professional Learning Communities are being used to promote professional development to both faculty and professional staff to improve student critical/creative thinking and communication skills, in and out of the classroom. Workshops, consultations, resource libraries, and brown bag sessions help promote this initiative. The Foundation’s booklets, posters, and bookmarks are widely distributed and displayed across campus. The new EKU five-year Strategic Plan is centered on student critical/creative thinking and communication and requires that each academic department develop student-learning outcomes to address these specific goals. You can find more information at this link:
<http://www.qep.eku.edu/>

For information about the program, contact Kate Williams
Director / Quality Enhancement Programs
University Programs / Academic Affairs
Eastern Kentucky University
Kate.Williams@EKU.EDU

Surry Community College:

Becoming a Learning College Built on Critical Thinking

In the summer of 2003, Surry Community College in Dobson, North Carolina, began an initiative to improve and expand student learning with a focus on critical thinking. Our first decision was to adopt a shared model of critical thinking.

A common model allows students to make connections between subjects and skill sets. If multiple models (different language, different definitions and frameworks) are used across campus, it is difficult for students to see those connections. In order for an institution to impact students’ thinking abilities college-wide, faculty must construct courses and design instruction around a common conceptualization of critical thinking, one that is precise and comprehensive, not vague, incomplete or narrowly defined.

After researching many conceptualizations of critical thinking, we chose the model originated by Richard Paul and developed by Paul, Linda Elder and Gerald Nosich. We believe that no other concept of critical thinking is as substantive or as accessible. At Surry Community College, we want to focus on education that moves people away from the past and facilitates new ways of

learning that will prepare our students for the 21st century marketplace. We realize that critical thinking plays a vital role in facilitating that kind of authentic, active learning. As a college focused on improving learning, we want to raise our academic standards to intellectually challenge our students on a daily basis through classroom activities and assessments that go beyond traditional lecture and rote memorization. Learning at Surry Community College should not only be rigorous but also transferable. Since our goal is for students to be successful critical thinkers for life, they must be able to transfer these skills to other venues – to future coursework, to their careers, and to their personal lives. To help achieve these goals, Surry Community College faculty continuously work to understand critical thinking and to rethink their teaching strategies, assessment methods, and even the nature of their discipline as a mode of thinking.

Using the approach developed by the Foundation for Critical Thinking, we recognize that all thinking consists of parts, or can be divided into elements: purpose, point of view, assumptions, implications and consequences, data and information, inferences and interpretations, concepts, question at issue. Paul and Elder explain in *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*, “Whenever you are reasoning you are trying to accomplish some purpose, within a point of view, using concepts or ideas. You are focused on some issue or question, issue or problem, using information to come to conclusions, based on assumptions, all of which has implications.” Critical thinkers analyze their thinking, and that of others, by identifying these elements of reasoning. All thinking can be measured against intellectual standards such as clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness. Paul and Elder note, “These are not the only intellectual standards a person might use. They are simply among those that are the most fundamental-... Thinking critically requires command of [these] fundamental intellectual standards.” Critical thinkers assess their thinking – and that of others – by applying these standards of reasoning. Paul and Elder also note, “As we are learning the basic intellectual skills that critical thinking entails, we can begin to use those skills in a selfish or a fairminded way.” All thinkers should cultivate positive intellectual traits such as intellectual humility, intellectual perseverance, intellectual integrity, intellectual courage, confidence in reason, intellectual empathy, etc.

To assist our faculty and staff in the work of critical thinking, we developed a website that explains the Surry Community College critical thinking initiative; both the thinking that shaped and continues to shape it, and the many ways in which faculty and staff have contextualized the model. You are invited to visit the site at: <http://www.surry.edu/About/CriticalThinking.aspx>

You may also contact Connie Wolfe at wolfec@surry.edu.

Angelina College:

Critical Thinking Skills: A Key for Successful Student Learning Outcomes in All Disciplines

Angelina College has identified three critical thinking learning outcomes consequent to the implementation of critical thinking skills in the curriculum:

1. Angelina College administration, faculty, and staff will have a common understanding of the tools and concepts of critical thinking
2. All divisions will execute tools for teaching critical thinking across the curricula
3. Graduates of Angelina College will have the ability to adapt and apply critical thinking skills and strategies in their academic, professional and personal lives.

To evaluate the implementation process and to assess student learning outcomes as they relate to critical thinking, six assessment tools will be utilized: the Community College Survey of Student Engagement (CCSSE), International Critical Thinking Basic Concepts and Understandings Test, Faculty Learning Community (FLC) Student Learning Survey, Student Perception of Critical Thinking in Instruction, Critical Thinking Rubrics, and the Student Learning Outcomes Assessment (SLOA).

Angelina College's plan included a Three Phase Implementation Cycle:
Phase I – (fall semester) – Professional Development Component

In the spring, representatives (division facilitators) from each division will begin consulting with the QEP Coordinator. In addition, these facilitators will attend the annual assessment conference that is held at Texas A&M University.

Beginning in the fall, the facilitators will attend a planning retreat to initiate the FLC process and schedule critical thinking training sessions.

The facilitators will be participating in several critical thinking training sessions. These training sessions involve compiling information and discussing content based on the Paul/Elder model of critical thinking. The curriculum followed is based on information from the text *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life, 2nd Edition* (2006) by Richard Paul and Linda Elder.

Phase II – (spring semester) – Course Development Component

The facilitators will use the spring semester to plan for critical thinking implementation. Each facilitator will select a course to implement formal strategies for teaching and measuring critical thinking based on the Paul/Elder model. Course portfolios will be utilized for planning. These portfolios will serve as lesson plans for the course. Each will include information specific to the course, such as the syllabus, course materials, sample assignments, and how the

teaching method and course materials will enhance learning outcomes. Critical thinking instruction and assessment will be delineated in these portfolios. Upon completion of these course portfolios, the facilitator will have designed a critical thinking enhanced curriculum (CTEC) course.

Phase III – (fall semester) – Implementation and Assessment Component

At the beginning of the semester, students enrolled in CTEC courses will be administered the International Critical Thinking Basic Concepts and Understanding Test as a pre-test.

One week prior to final exams, the International Critical Thinking Basic Concepts and Understanding Test will be re-administered to assess the attainment of critical thinking skills. In addition, the assessment of teaching strategies and learning outcomes will be measured by utilizing the FLC Student Learning Survey for Faculty and the Student Perceptions of Critical Thinking in Instruction.

The pre and post-test scores from the International Critical Thinking Basic Concepts and Understanding Test will be compared to baseline scores on the California Critical Thinking Skills Test that was collected in April 2007.

The QEP Advisory Committee and the facilitators will review all collected data and determine the effectiveness of instruction. The group will then use the compiled data to recommend additional strategies and any changes for continuous improvement for the teaching and learning of critical thinking skills.

Angelina College plans to continue their implementation process beyond 2010.

You can read more about Angelina College's QEP Plan and Implementation of critical thinking in their curriculum on their website:

http://www.angelina.edu/QEP/institutional_effectiveness.html

For more information about the program, please contact:

Monica Y. Peters, Ph.D.

Coordinator of Institutional Effectiveness and QEP

Angelina College

Lufkin, TX

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Beacon College:

Enhancing Critical Thinking for Students with Learning Disabilities

The goal of the Beacon College Quality Enhancement Plan is to improve student learning through the development of critical thinking skills by using the standards and elements of the Paul/Elder Model. The initial phase of the QEP is directed to implementing a comprehensive faculty professional development

program. Professional development activities will focus on educating faculty in the use of the elements and standards of the Paul/Elder Model.

The mission of Beacon College is to provide educational opportunities for college-able students with learning disabilities and to assist them in achieving their academic potential. Engaging students in critical thinking and fostering concept development is vital in addressing the characteristics that many students with learning disabilities bring to the classroom environment.

The student learning outcomes for the Beacon College QEP are to:

1. Improve student disposition toward critical thinking
2. Employ the elements of critical thinking to academic disciplines
3. Employ the standards of critical thinking to academic disciplines
4. Develop an understanding of the fundamental and powerful concepts of an academic discipline

Several benefits of implementation of the Beacon College QEP have already been realized. The College has strengthened as a community with a common goal and a shared language for improving the quality of the educational experiences of our students. Not only has the faculty embraced changes in which the Institution approaches instruction, but the participation of all units and departments has helped the College emerge as a learning community. Beacon College has also established an Institute of Critical Thinking, acting as a critical thinking resource center not only for the campus community, but also as a professional development resource for other institutions.

It is anticipated that implementation of the QEP will result in increased student disposition for using critical thinking skills in every aspect of their lives. Outcomes of the QEP will not only increase the quality of education provided our students, but will also contribute to research in the field of learning disabilities. Opportunity exists for the College to conduct a longitudinal study investigating five-year outcomes, as measured by the California Critical Thinking Disposition Instrument (CCTDI), between students with learning disabilities and their non-learning disabled peers using the databank of colleges and universities that have completed the outcomes of their QEPs measuring disposition toward critical thinking.

For more information about the development or implementation of the plan, please contact: Dr. Johnny Good, Vice President of Institutional Effectiveness and Accreditation Liaison. jgood@beaconcollege.edu

Please see this link for additional information:
<http://www.beaconcollege.edu/qualityenhancementplan.asp>

General Conference Information

Important Announcements

1. Please turn all cell phone ringers off during all sessions.
2. Please review all of the information included in this program and in your packet. You will find an area map, information about local restaurants, information about the workshop and room assignments, and general information about the Foundation for Critical Thinking.
3. Please bring all of your Thinker's Guides to every conference session. This enables the presenter (and you) to use any or all of them throughout the conference.
4. Place your name or initials on each of your Thinker's Guides, in case you get separated from your guides.
5. We also suggest that you place your name on your bag – you may use the markers we have in the Horizon Room Reception area.
6. Please wear your nametag at all times when you are in the conference sessions, so that we know you are a paid registrant, and for group activities. You will need your nametag to receive the \$5/day parking rate and 10% restaurant discount.
7. Please attend only the sessions you have registered for. All conference sessions are designed for deep learning. Activities within each session build upon one another. If you think the session you are registered for will not meet your needs, speak with one of the presenters to see if room is available for a change.
8. Our information desk is located in the Horizon Room. Please feel free to ask for assistance or information during breaks and at lunch.
9. Coffee and tea will be provided before the sessions as well as during the breaks, and water will be provided all day. If you would like anything in addition to this, including snacks, feel free to bring those as you wish. You may also purchase snack items in the lobby gift shop. All breaks are in the Horizon Room; see the schedule for break times.

10. We will have several of our materials and publications available for sale at the reception area, in the Horizon Room. Our bookstore is open during breaks and lunch, and at the end of each day's sessions. Our bookstore will close after the morning break on Thursday.
11. There are several food options in the hotel and a list of area restaurants in this program. Claremont restaurants will honor a 10% discount on food; please show your badge at point of purchase. Menus will be posted in the Horizon Room on the FCT Bulletin Board.
12. Please see Concierge for information on airport transportation.

Answers to frequently asked questions:

Can I purchase the PowerPoint presentations?

We have a PowerPoint CD available for purchase during the conference. It includes many, if not most, of the visual images used in focal sessions, as well as many more images. This CD is available for \$20 and contains the following files:

- Introduction to Critical Thinking
- Three Types of Questions
- Fostering the Disciplined Mind
- Elementary Instruction
- Elements of Reasoning
- Intellectual Virtues
- Key Concepts
- Questioning Mind
- Quotes and Statistics
- Role of Administration
- Relationship between Content and Thinking
- Self-Handicapping Behaviors
- Socratic Questioning
- Standards Primary
- Theory of Mind

Please ask at the Bookstore for information.

Why are the sessions being videotaped?

Many of the workshop sessions are videotaped for the following reasons: (1) to permanently document the sessions for the Foundation for Critical Thinking archives, (2) to provide video footage from the sessions for our website, and (3) to provide DVD video clips for educational purposes.

Can I get a list of all conference participants?

We design conference sessions so that participants frequently work with others in pairs and small groups. This enables those interested in establishing personal contacts at the conference to exchange contact information. In addition, feel free to put a message on the bulletin board that invites those sharing an interest in _____ (whatever category you please) to take down your email address and leave their own for you. The message board will be located near our information and sales area, in the Horizon Room.

How do the concurrent sessions work?

All concurrent sessions will be held on Wednesday and Thursday mornings. Please read the Concurrent Session Program in this program, in advance, to decide which sessions seem most relevant to your work and life. You will not need to pre-register for concurrent sessions.

What is the closing session?

This is a time for all registrants to come together, process what they have learned at the conference, and think about next steps for moving forward. This session will be led by the Fellows of the Foundation for Critical Thinking.

Does the Foundation for Critical Thinking offer on-site professional development programs in critical thinking?

Yes. You can obtain a College/University or K-12 inservice packet at the workshop desk, which explains our professional development programs. That information is also available on our website at this link:

<http://www.criticalthinking.org/professionalDev/index.cfm>

To discuss our professional development programs, email cct@criticalthinking.org

How can I establish an official affiliation with the Foundation for Critical Thinking?

By giving us your email we will make sure you are informed of the new membership possibilities we are presently considering. You can do this at the conference desk or by emailing us at cct@criticalthinking.org.



How can I gain access to a library of articles on critical thinking?

There is a library of articles on our website, which includes numerous articles you can download – www.criticalthinking.org/pages/index-of-articles/1021/

How can I get information on assessment regarding critical thinking?

Information is available on our website regarding tests and assessment. www.criticalthinking.org/pages/critical-thinking-testing-and-assessment/594. Also, you received two Thinker's Guides on assessment during registration – *Critical Thinking Competency Standards*, and *Critical Thinking Reading and Writing Test*.

Where can I get the chimes the presenters use?

The chimes can be purchased through the following website: www.seagifts.com



Foundation for Critical Thinking Books and Guides

The following publications have been written by Foundation for Critical Thinking Fellows and are available in our conference bookstore, or at www.criticalthinking.org/store:

- Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World
- Critical Thinking: Tools For Taking Charge of Your Learning and Your Life, Third Edition
- Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life, Second Edition
- Critical Thinking: Learn the Tools the Best Thinkers use
- Learning to Think Things Through: A Guide to Critical Thinking Across the Curriculum
- 30 Days to Better Thinking and Better Living With Critical Thinking
- Critical Thinking Handbook: K-3rd Grades
- Critical Thinking Handbook: 4th-6th Grades
- Critical Thinking Handbook: 7th-9th Grades
- Critical Thinking Handbook: High School
- The Aspiring Thinker's Guide to Critical Thinking
- The Thinker's Guide: A Glossary of Critical Thinking Terms and Concepts
- The Thinker's Guide to Analytic Thinking
- The Thinker's Guide to Intellectual Standards
- The Miniature Guide to the Human Mind
- The Miniature Guide to Critical Thinking for Children
- The Miniature Guide to the Art of Asking Essential Questions
- The Teacher's Manual for the Miniature Guide to Critical Thinking for Children
- The Thinker's Guide to Clinical Reasoning
- The Thinker's Guide to Engineering Reasoning
- The Miniature Guide to Critical Thinking Concepts and Tools
- A Critical Thinker's Guide to Educational Fads
- The Thinker's Guide for Students on How to Study and Learn a Discipline
- The Thinker's Guide to How to Write a Paragraph
- The Thinker's Guide to How to Read a Paragraph
- The Thinker's Guide to Fallacies: The Art of Mental Trickery and Manipulation

- The Thinker's Guide for Conscientious Citizens on How to Detect Media Bias and Propaganda
- The Thinker's Guide to the Art of Socratic Questioning
- The Miniature Guide to Understanding the Foundations of Ethical Reasoning
- The International Critical Thinking Reading & Writing Test
- A Miniature Guide to For Those Who Teach on How to Improve Student Learning
- A Miniature Guide for Students and Faculty to Scientific Thinking
- A Guide for Educators to Critical Thinking Competency Standards
- The Thinker's Guide to the Nature and Functions of Critical and Creative Thinking
- The Student Guide to Historical Thinking
- The Instructor's Guide to Critical Thinking
- Historical Thinking: Bringing Critical Thinking Into the Heart of Historical Study



Restaurant List

American

Barney's Gourmet			
Hamburgers	5819 College Av. Oakland	510-601-0444	Gourmet Hamburgers
Rockridge Café	5492 College Av. Oakland	510-653-1567	Diner
Wood Tavern	6317 College Av. Oakland	510-654-6607	Contemp. American, Bar
Rick & Ann's	2922 Domingo Av. Berkeley	510-649-8538	Great Breakfast, Dinner, American comfort food

Asian

Soi-Four	5421 College Av. Oakland	510-655-0889	Thai, Closed Sundays
Shen Hua	2914 College Av. Berkeley	510-883-1777	Chinese
Noodle Theory	6099 Claremont Av. Oakland	510-595-6988	Great Noodle House

Continental/California

A'Cote	5478 College Av. Oakland	510-655-6469	Serving choice, Romantic, dinner only
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Italian/Pizza

Trattoria La Sicilliana	2993 College Av. Berkeley	510-704-1474	Homemade pasta, No c/c
Oliveto	5655 College Av. Oakland	510-547-5356	Upscale Italian
Fillippos	5400 College Av. Oakland	510-601-8646	Kid friendly Italian, casual
A.G. Ferrari	2935 College Av. Berkeley	510-849-2701	Italian Deli
Zachary's Pizza	5801 College Av. Oakland	510-655-6385	Chicago deep dish pizza

Indian/Middle Eastern

Khana Peena	5316 College Av. Oakland	510-658-2300	N. Indian cuisine, upscale,
La Mediterranean	2936 College Av. Berkeley	510-540-7773	Middle Eastern Cuisine

Seafood

Marica	5301 College Av. Oakland	510-985-8388	Great Fish; Meat, Poultry
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Pubs

Barclays	5940 College Av. Oakland	510-654-1560	Eng. Pub, 30 beers on tap
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Delivery

West Coast pizza	delivery till 10:00pm	510-841-9378	Trad. or Thin Crust Pizza
North Beach Pizza	delivery till midnight	510-849-9800	Pasta and Pizza
King Dong Chinese	delivery till 9:00pm	510-841-6196	Cantonese
Berkeley Thai House	delivery till 10:00pm	510-841-8424	Thai
India Palace	delivery till 10:00pm	510-848-7252	Northern Indian
Dorsey's Locker			
Soulfood	delivery till 9:00pm	510-428-1935	Authentic Soulfood

What previous attendees say about the conference...

- Among the most stimulating days I've ever spent intellectually.
- Thanks for all the sharing. It's been a catalyst for self reflection, and the integration of all the ideas I've ever heard but never really thought seriously about.
- Taking time to evaluate the intellectual traits as they apply to ourselves and developing a deeper understanding of those traits.
- This conference stimulated "instructional" creativity. It also showed how to help students develop their understanding of, and appreciation for, asking questions.
- Recognizing/affirming the importance of significant ideas, which generate significant "live" questions.
- Your "stepping-out" on the proverbial "limb" in designing this conference was worthwhile. The info was clearly presented, usable, concrete, and even FUN!
- This session challenged my assumption about the actual reading abilities of my students. I feel equipped to take my teaching of reading up several notches. Thank you!
- Excellent identification of intellectual traits and introspection to identify barriers.
- Great suggestions on how to focus on students' strengths, not weaknesses, and how to apply the tools to empower them as critical thinkers.
- It provides a depth of understanding that isn't possible from reading.
- The conference is invigorating, both intellectually and emotionally, and it provides a wealth of practical strategies/methods.
- Every reading teacher/reading program director needs this booklet [*How to Read a Paragraph*]. Why have we been making the teaching of reading such a ridiculously difficult endeavor? Shameful!
- The most valuable thing was rebuilding a relationship with critical thinking methodology—which has reignited the flame!
- I have gained many good ideas from my colleagues. The conference has raised as many questions as it has given answers.
- My teaching is being transformed to inspire students' development of critical thinking skills through practice and effective facilitation.
- No one can possibly participate without changing (or learning) some aspect of how to improve their own thinking.

The Foundation for Critical Thinking seeks to promote essential change in education and society through the cultivation of fairminded critical thinking – thinking committed to intellectual empathy, intellectual humility, intellectual perseverance, intellectual integrity, and intellectual responsibility. A rich intellectual environment is possible only with critical thinking at the foundation of education. Why? Because only when students learn to think through the content they are learning in a deep and substantive way can they apply what they are learning in their lives. Moreover, in a world of accelerating change, intensifying complexity, and increasing interdependence, critical thinking is now a requirement for economic and social survival.



Contact us online at criticalthinking.org to learn about our publications, videos, workshops, conferences, and professional development programs.

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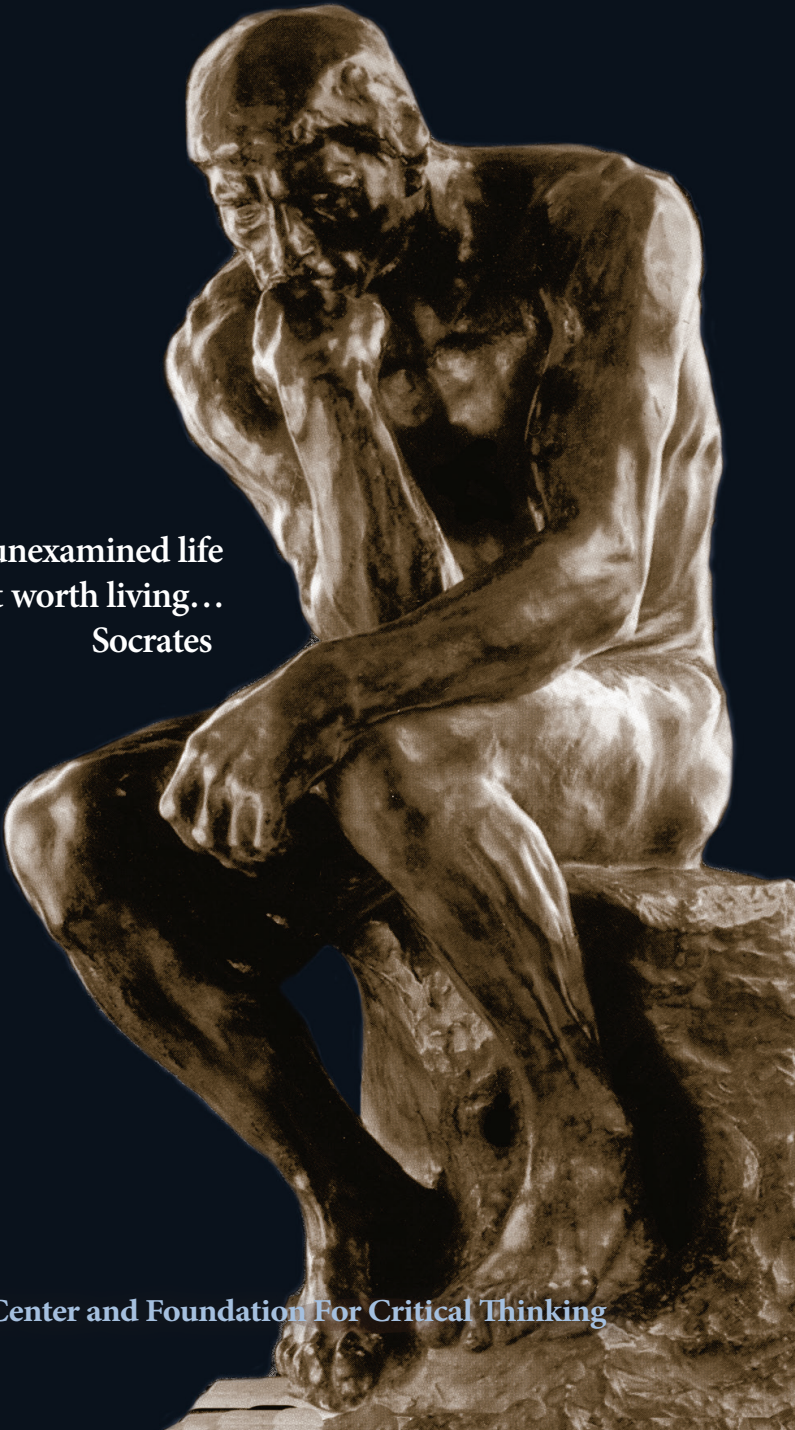
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The unexamined life
is not worth living...
Socrates

The Center and Foundation For Critical Thinking