

Institutions Using the Framework for Critical Thinking Developed by the Foundation for Critical Thinking

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.

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. The following link is to our video of University of Louisville faculty talking about their efforts at explicitly incorporating critical thinking instruction into their courses. All the faculty were participants in a Faculty Learning Community on Critical Thinking here at UofL. The list of questions that we asked are posted on this website as well.

To learn more about the i2a critical thinking work at University of Louisville, go to:
<http://louisville.edu/ideastoaction/resources/media>

<https://louisville.edu/ideastoaction/resources/faculty-exemplars>

For more information, contact:

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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 *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 fair-minded 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:
www.surry.edu/about/critical_thinking/index.html

For more information, contact:

Connie Wolfe at wolfec@surry.edu

In 2006, Surry Community College received an institutional award for excellence in critical thinking from the Foundation for Critical Thinking.

Wilkes Community College

Wilkes Community College (WCC) was reaffirmed by the Southern Association of Colleges and Schools (SACS) in June 2006. As part of the reaffirmation, WCC developed a Quality Enhancement Plan (QEP) with the overall goal of increasing students' disposition to use critical thinking in their academic, professional, and personal lives. WCC selected the Foundation of Critical Thinking (Paul and Elder) Model of Critical Thinking to create a common language among WCC students, faculty, and staff. WCC chose to emphasize four elements of the model: information, questions, assumptions, and point of view. Students are introduced to the critical thinking model in one of the first courses they take at WCC, Success and Study Skills. *The Miniature Guide to Critical Thinking Concepts and Tools* by Paul and Elder is one of the two texts in the course.

Wilkes Community College continues its critical thinking implementation efforts and the following are a few specific examples that may illustrate that the critical thinking focus is very much a part of the WCC culture.

1. ACA 115 is the student success course that students take within their first thirteen hours at WCC. In this course, students are introduced to the critical thinking model that they encounter in other courses and services. The language of the Paul and Elder model is used in this course and students focus on information, questions, assumptions, and point of view. Students purchase *The Miniature Guide to Critical Thinking Concepts and Tools* by Paul and Elder along with an in-house text. Martin Moore, ACA Lead Instructor, and Shenele Wagoner, Lead Geography Instructor, teach the majority of the ACA 115 courses. This course was scheduled to be fully implemented during fall 2009 but we implemented it a year early due to instructor and staff expectations of students. Service learning and global education and cultural awareness are now part of the course.
2. WCC instructors submitted critical thinking assignments and student work during fall semester 2008. Assessment of these assignments and student work will begin this semester by faculty members from the different divisions and the QEP Director.
3. Learning Circles continue to be well attended at WCC. Three cycles of Learning Circles are offered each semester with approximately eight times to choose from. Faculty and staff members participate in one hour dialogue using *The Art of Strategic Thinking Guide*, published

by the Foundation for Critical Thinking. Facilitators guide the Learning Circles and meet monthly to plan approaches. This is one comment that was made recently: "These sessions have kept me focused on the varying implications of the QEP model."

4. Learning Conversations is a new effort involving our Vice President of Instruction and Student Services, Dr. Dean Sprinkle, and a seasoned faculty member from each of the four divisions as well as a relatively new faculty member from each division. Dr. Dean Sprinkle serves as a facilitator and the conversations relate to higher education and our role in student learning.
5. Two new online workshops have been developed that provide faculty and staff opportunities to work with the language of critical thinking as well as the four outcomes dealing with information, questions, assumptions, and point of view. Blackboard is the platform that participants use to access workshop material. Video clips are also included and a discussion board is available through Blackboard. These workshops were developed for adjunct faculty, new faculty, and new staff members. They also may be helpful for seasoned faculty and staff who are interested in reviewing concepts. Scheduling professional development activities is often difficult so these workshops will allow faculty and staff to participate at a time convenient to them.
6. The QEP Open Line continues to be published monthly in electronic format and includes critical thinking news and strategies of interest to both faculty and staff.
7. WCC faculty members have been involved in the development of student learning outcomes in their academic programs. A critical thinking learning outcome is expected in each program.
8. WCC Advisory Board members assist WCC faculty in reviewing their academic programs. Advisory board members represent organizations and businesses connected to the programs and these members were asked in fall 2008:
 - (a.) Our QEP focus is critical thinking or the skills associated with looking at one's own thinking for the purpose of improving it. We sometimes use the phrase "reasoning through" a problem, issue, or topic. In your profession or field, what role does critical thinking play in effective performance?
 - (b.) What suggestions do you have for us as we create experiences for students to "reason through" topics, ideas, or situations? How might we better prepare students for the thinking they will be expected to do in the workplace?

9. The QEP Director recently spent two three hour sessions introducing the Paul and Elder critical thinking model to intermediate Emergency Medical Technology students through our continuing education division.

For more information see:

<http://www.wilkescc.edu/wcccms>

You may also contact:

Jan Huggins at jan.huggins@wilkescc.edu

Eastern Kentucky University Developing Informed, Critical and Creative Thinkers Who Communicate Effectively

Eastern Kentucky University has developed the student learning theme to "develop informed, critical and creative thinkers who communicate effectively" as the Quality Enhancement Plan component of their accreditation process with the Southern Association of Colleges and Schools (SACS). In that effort, EKU has embraced the work of The Foundation for Critical Thinking, promoting the Richard Paul/Linda Elder model of critical thinking and the work of Gerald Nosich. Dr. Nosich has presented numerous workshops and conducted consultations with EKU over the last few years. This has resulted in a three part program including developing critical thinking "Coaches" (faculty trainers) for each unit, developing a broad range of programs with critical thinking as their foundation, and developing assessment of critical thinking at the course and programmatic level. Resources purchased from The Foundation have been distributed widely to EKU faculty, staff, and students, including hundreds of the Thinkers Guides, bookmarks, poster sets, etc. EKU is making progress being more intentional about improving student critical and creative thinking and communication.

For more information see:

<http://www.qep.eku.edu/>

For information about the program, contact

Kate Williams

Director / Quality Enhancement Programs

University Programs / Academic Affairs

Eastern Kentucky University

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Lampton School, London, UK

Lampton School is a mixed comprehensive school in West London, serving an ethnically and socially diverse community of students from the ages of 11 to 18. Paul and Elder's model of Critical Thinking has been developed within the school since September 2006 not as another initiative, but as the mechanism by which the school aims to realise its developmental priorities, namely: promoting independent learning, raising further standards of achievement, and developing the capacity for our students to become active citizens in the 21st century global society.

The approach adopted to implement the model has been 'bottom up', starting with a small study group of volunteer teachers organised after a member of staff attended the Critical Thinking Foundation's Cambridge Academy, April 2006. Teachers have adopted an enquiry approach to developing Critical Thinking in their particular subject areas which so far have included: History, Modern Foreign Languages, English Literature, Geography, Science, Business Studies, Philosophy and Ethics, Sociology, Psychology, Design and Technology, and ICT. Since 2006, the programme has continued to develop, with the original group exploring the model in more depth, whilst new teachers have created new study groups.

The three year programme has developed as follows:

Year 1 – focus on standards, elements and dispositions

Year 2 – deepening understanding of the model through a focus on Socratic questioning, 'Fundamental and Powerful Concepts', and 'remodelling' lessons.

Year 3 – individual class based enquiry based on teacher's choice of their own thinker's guide to explore in detail.

The original focus for the Critical Thinking programme was Y12 and Y13 students, as preparation for Higher Education and/or the world of work. However, once teachers had started to develop their own practice using the critical thinking principles, they automatically used them to inform their teaching beyond that of a particular group. In addition, many of the teachers involved have applied the principles to other roles they may hold within the school, such as pastoral roles, leadership roles, training new teachers etc.

Lampton is at an exciting point where there will soon be a critical mass of teachers who have engaged with Critical Thinking so that it can 'go to scale' more widely across the school.

If you wish to find out more about the work at Lampton School, please contact:

Lynne Isham at
lisham@lampton.hounslow.sch.uk

Thompson School District

In the Thompson School District located in Loveland, CO we have implemented a targeted focus on critical thinking at a district level and specific focus schools for 5 years. Accountability for progression with critical thinking is embedded in the district strategic action plan. The district has supported this emphasis with two Teachers on Special Assignments (TOSA's). The district TOSA's provide professional development and coaching for teachers Pre-K to 12th grade, English Language Learner teachers, Special Education teachers, Gifted Education teachers, principals and administrative staff. In addition, we provide training for all classified staff. Trainings include: a five day seminar series (Introduction to Critical Thinking, Intermediate Critical Thinking, and Advanced Critical Thinking). We have also provided the district with discipline specific trainings such as: Critical Thinking and Writing, and Thinking Like a Historian. The implementation of new literacy and social studies curriculum includes embedding the Paul and Elder Elements of Thought and Intellectual Standards for robust learning.

At the focus schools the TOSA's provide support for leadership teams, monthly in-services and trainings, and individual teacher coaching. The focus on leadership teams is to provide internal expertise, training, enthusiasm and support for sustainability at the building level. Monthly in-services vary from focus on the Elements of Thought, Intellectual Standards and Traits, to application of critical thinking using Socratic dialog, active and cooperative learning strategies, the Three Thinkers, cultures of thinking and re-designing curriculum. Coaching with teachers can include: co-planning lessons, modeling critical thinking infused lessons, co-writing conceptual curriculums, observing lessons and responding with constructive feedback.

This year we are excited to have invited exceptional classroom teachers to further their depth and application of quality reasoning in the classroom by participating as lab classrooms. These teachers open their classrooms for the purpose of seeing and hearing critical thinking in action.

Aside from our district focus, we are currently working with Colorado State University and a focus group on what critical thinking entails at the post-secondary education level. As well as providing a voice for strong-sense reasoning on the redesigning of the Colorado Reading and Writing Standards sub-committee.

If you are interested in learning more about our efforts in Thompson School District, please contact:

Dr. Paul Bankes, Bob Raney or Carmen Polka at
(970) 613-5000 or polkac@thompson.k12.co.us

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 the 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 see:

<http://www.beaconcollege.edu/qualityenhancementplan.asp>

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

Winthrop University

Placing Critical Thinking at the Heart of a Liberal Arts Education

In 2003, Winthrop University in Rock Hill, South Carolina, began a process of re-conceptualizing and restructuring its General Education core courses in order to provide students with a common set of intellectually rigorous courses intentionally focused on critical thinking, critical reading, and writing skills. With sensitivity to the fact that employers increasingly note a lack of “soft skills,” including critical thinking, written communication and analytical reasoning, in recent college graduates, Winthrop faculty members decided to replace a required second-semester composition course with a new General Education course titled *CRTW 201: Critical Reading, Thinking, and Writing*. This course was carefully designed to provide sustained, focused instruction in critical thinking as well as instruction in advanced composition, research methods, construction of arguments, and rhetorical analysis.

After careful research and assessment of many critical thinking models, Winthrop faculty members elected to teach the Paulian model of critical thinking developed by Dr. Richard Paul and Dr. Linda Elder and promoted and taught by Dr. Gerald Nosich and other scholars associated with the Foundation for Critical Thinking. Not only is Dr. Paul an internationally recognized authority on critical thinking, with eight books and over 200 articles on the subject, but the Paulian approach to critical thinking is an internationally acclaimed and widely-referenced model of critical thinking; this practical, accessible, and well-researched model has enabled faculty members to provide Winthrop students with constructive, functional strategies to improve their thinking in multiple contexts and disciplines.

Winthrop University's *CRTW 201: Critical*

Reading, Thinking, and Writing is a rigorous, writing-intensive course that includes instruction in fundamental components of academic research and advanced composition and focuses on critical reading strategies and the close analysis of claims and evidence in non-fiction prose texts. However, the primary focus of the course is on teaching and reinforcing the concepts and practices of critical thinking as taught and espoused by Dr. Paul. Students are taught the Elements of Reasoning, the Intellectual Standards, the Impediments to Critical Thinking, the Universal Critical Thinking Character Traits, and the SEE-I strategy; and emphasis is placed on applying these critical thinking concepts and strategies in students' academic disciplines. All *CRTW 201* students are required to read Gerald Nosich's text *Learning to Think Things Through: A Guide to Critical Thinking Across the Curriculum*. In addition, instructors also assign texts by Richard Paul, Linda Elder, Carol Tavis, and other scholars and thinkers who integrate critical thinking into their academic disciplines. Ongoing internal assessment processes have demonstrated that this deliberate focus on critical thinking produces measurable and significant gains in students' analytical reasoning skills, and Winthrop alumni attest to the benefits of this critical thinking instruction in their professional careers.

Winthrop University has invested considerable resources in training faculty members in the Paulian approach to critical thinking; faculty members have both attended and presented at the Foundation's annual International Conferences on Critical Thinking and Educational Reform; Dr. Gerald Nosich has provided intensive training to faculty members on campus; and *CRTW 201* instructors participate in ongoing training designed to reinforce critical thinking concepts developed by the Foundation for Critical Thinking. Winthrop University's *Teaching and Learning Center* (TLC) offers faculty training sessions focused on critical thinking topics such as Socratic questioning, active and engaged classroom activities, and the role of critical thinking skills in today's workplace. And Winthrop University's 2014 Hornsby Lecturer, Dr. Carol Tavis, will spend several days speaking to students and faculty members about critical thinking and its broad application in the sciences, the media, and in popular culture.

In addition, faculty members and administrators have worked to promote and integrate critical thinking across the campus in intentional, sustained ways. In 2009, Winthrop University's designated Thompson Scholar focused on critical thinking and presented a series of lectures

and talks throughout the academic year to both students and faculty members on the application of critical thinking in varied academic disciplines. Starting in 2013, Dr. Paul's critical thinking concepts and strategies were integrated into Winthrop's *ACAD 101: Principles of the Learning Academy* course, a required first-semester General Education course designed to equip students with the intellectual skills they will need to be successful in college. And Dr. Paul's critical thinking strategies, including textual analysis integrating The Elements of Reasoning, have been applied by many instructors in Winthrop's required General Education course *HMXP 102: The Human Experience*. This continued integration of critical thinking instruction across the university and into an increasing number of courses attests to the belief on the part of Winthrop faculty members that these analytical skills are crucial to students' success both in their academic endeavors and in their lives outside of the classroom.

Ultimately, Winthrop University's decision to modify the required General Education program to include a course devoted to the Paulian model of critical thinking has had pervasive, transformative effects on the university, creating an academic environment where every student is trained in the intellectual strategies of critical thinking and is encouraged to develop the intellectual habits and values of the strong-sense, Socratic critical thinker. Winthrop University, one of few universities that require a General Education course focused on the Paulian approach to critical thinking, seeks to create an intellectual environment where critical thinking is embraced, taught, and cultivated across the campus and where students are equipped to become thoughtful, responsible, and fair-minded ethical citizens.

If you wish to find out more about the work at Winthrop University, please contact:

Amanda Hiner
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Thinking, and Writing
hinera@winthrop.edu

**You can read about our
Professional Development plans
for K-12, Higher Education, Business,
Government and other organizations
at this link:**

**[www.criticalthinking.org/
professionalDev/index.cfm](http://www.criticalthinking.org/professionalDev/index.cfm)**

Professional Development Programs

The Foundation for Critical Thinking has offered on-site faculty training and staff development for more than a quarter century. The following is a sampling of institutions and organizations where our Fellows have presented Professional Development Workshops on Critical Thinking.

Ascension Christian High School (TX),
Foundations of Critical Thinking

Bemidji State University (MN),
The Concept of Critical Thinking
and Instructional Strategies

Doane College (NE), Integrating
Critical Thinking into Instruction

Dunman High School (Singapore),
Foundations of Critical Thinking
and Socratic Questioning

Eastern Kentucky University (KY), Critical
Thinking Across the Curriculum

**Fashion Institute of Technology-SUNY
(NY),** Foundations of Critical Thinking

Georgia Military College (GA),
Socratic Questioning: Formulating
and Asking Questions utilizing
Tools of Critical Thinking

Haddonfield Public Schools (NJ),
Introduction to Critical Thinking
and Instructional Strategies

**Hawaii State Department of Education
(HI),** Foundations of Critical Thinking

KIPP Foundation, Critical Thinking
and the Process of Assessment

Lee College (TX), Motivation for
Teaching Critical Thinking; Critical
and Creative Thinking Assignments

Miami Country Day School (FL),
Foundations of Critical Thinking

**Nebraska Wesleyan University
(NE),** Critical Thinking and
Instructional Strategies

**NorthWest Organization of Nurse
Executives (OR),** Leadership Through
Critical Thinking: Finding Our Way
in an Increasingly Complex World

**Oregon Employment Department
(OR),** Critical Thinking as it
relates to Adjudication Work

Palmdale Unified School District (CA),
Introduction to Critical Thinking
and Instructional Applications

Salisbury University (MD),
Foundations of Critical Thinking

South Texas College (TX),
Foundations of Critical Thinking

Temecula Preparatory School (CA),
Foundations of Critical Thinking
and Instructional Strategies

Thompson School District (CO),
Introduction to Critical Thinking
for Secondary Teachers

**Tidewater Community College-
Chesapeake Campus (VA),**
Introduction to Critical Thinking and
Teaching it Across the Curriculum

University of Louisville (KY), Critical
Thinking Across the Curriculum

**University of Texas of the Permian Basin
(TX),** Implementing and Evaluating
Critical Thinking in the Classroom

Virginia State University (VA),
Foundations of Critical Thinking;
Infusing into the curriculum;
Application to Teaching Writing

**Von Steuben High School-Metropolitan
Science Center (Chicago),** Foundations
and Classroom Strategies

**West Kentucky Community and
Technical College (KY),** Foundations of
Critical Thinking, Competency Standards

Western Kentucky University (KY), WKU
Critical Thinking Scholars Initiative

▶ FOR INFORMATION ON BOOKING OUR PRESENTERS AT YOUR INSTITUTION,

please contact Rachael Collins at
collins@criticalthinking.org or
707-878-9100 x11.

You can also fill out and submit the
request form at this link:

[www.criticalthinking.org/
professionalDev/inservice_request.cfm](http://www.criticalthinking.org/professionalDev/inservice_request.cfm)

**For more information on institutions using
our approach – visit: www.criticalthinking.org
and select *Professional Development***



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