

QUALITY  
ENHANCEMENT  
PLAN

## IDEAS TO ACTION:

Using Critical Thinking to Foster Student Learning  
and Community Engagement



UNIVERSITY of LOUISVILLE<sup>®</sup>

QUALITY ENHANCEMENT PLAN 2007

Prepared for the Commission on Colleges  
of the Southern Association of Colleges and Schools



QUALITY ENHANCEMENT PLAN (QEP)

IDEAS TO ACTION:  
USING CRITICAL THINKING TO FOSTER STUDENT  
LEARNING AND COMMUNITY ENGAGEMENT

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EXECUTIVE SUMMARY





## EXECUTIVE SUMMARY

From its founding in 1798, the University of Louisville has made considerable contributions to the community, state, and world. Our mission statement declares our commitment to the “intellectual, cultural, and economic development of our diverse communities and citizens.” Our ultimate purpose is to prepare students to be good citizens and to take their places within their larger communities. Toward this end, UofL has chosen for its Quality Enhancement Plan (QEP) to focus on improving the critical thinking skills of undergraduate students and to more effectively prepare them to contribute to society. The focus of this initiative will be to foster critical thinking as a habit of mind. Our goal is to provide an education that is centered on a student’s ability to bring together skills and knowledge from a variety of disciplines to solve complex problems. This plan acknowledges that the development and application of critical thinking is an “intellectually disciplined process” rather than one that occurs by chance or happenstance.

We have titled our QEP, *Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement*. To implement the QEP, we will increase the focus on critical thinking within our General Education Program and

undergraduate courses and establish culminating experiences for practical application of the critical thinking skills students have developed throughout their education. During the spring of 2007 we will work to raise awareness within the university community about our *Ideas to Action* plan.

The ability to think critically calls for a higher-order thinking than simply the ability to recall information. University curricula, therefore, must provide not only opportunities to learn and recall information but must also give students increasing opportunities to practice and advance toward higher-level reasoning. For students to be prepared for practical application beyond the university, their critical thinking skills have to be regularly exercised in day-to-day classroom experience, even when course content appears to be remote from real-world problems. Thus, UofL’s faculty will play an important role in the success of our *Ideas to Action* program, and plans have been made for encouraging faculty involvement in the critical thinking initiative, for providing development opportunities to help faculty incorporate more critical thinking activities into their classrooms, and for aiding units in developing culminating experiences appropriate to their disciplines.



Assessment of UofL's efforts relative to the QEP will include direct and indirect assessments of student learning, national instruments, specifically developed assessments, and tracking of QEP-related activities. Our five-year budget considers funding for the implementation and assessment of the plan, for new personnel costs, for faculty development and incentive programs, and for the development of culminating experiences.

Our QEP was chosen by our campus community and fits our university very well. It reflects the mission assigned to us by the Commonwealth of Kentucky, builds upon our General Education Program's continued commitment to critical thinking, and targets an area that past assessment has indicated could use improvement. But, more important than all of these reasons, our QEP will benefit our students by enabling them to be better citizens of the world outside of the university.



## INTRODUCTION

At the birth of our nation, Thomas Jefferson linked education to democracy, writing, "I know no safe depository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion by education." Jefferson's "informed discretion," known in contemporary civic, popular, and academic language as "critical thinking," has become a cause célèbre in our culture, and with good reason. Study after study has shown that critical thinking and its accompanying conceptual skills are not only necessary for individual maturity but are essential intellectual elements needed to sustain and facilitate a democratic society (Friere, 1973; Brookfield, 1987; Sullivan, 1984; Hooks, 1994; Halpern, 1996; Gratton, 2001; Bereiter, 2002; Fasko, 2003; Dean & Kuhn, 2003; and others).

The University of Louisville's mission statement confirms our own commitment to the "intellectual, cultural, and economic development of our diverse communities and citizens." Our ultimate purpose is to prepare our students to be good citizens and to take their places within their larger communities and world. Toward this end, UofL has chosen for its Quality Enhancement Plan (QEP) to focus on improving the critical thinking skills of its undergraduate students so that they will be better prepared to contribute to society.

We will structure a program that gives students the opportunity for practical application of the knowledge they are gaining, a process that will develop their critical thinking skills so that they can form concepts and make applications that would have been beyond their reach otherwise. Our focus will be on fostering critical thinking as a habit of mind. Critical thinking will be instilled into our students so that they can address problems, seek solutions, and understand that their education culminates in use outside the classroom. As our students leave the university, they will take this problem-solving approach into the world, where they will have a better understanding of how their abilities can be used to interact with their communities and to address problems they encounter there.





## UOFL'S STUDENT BODY

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U of L has a diverse student body of more than 20,000 enrolled in both undergraduate and graduate/professional programs. In the fall of 2006, total undergraduate enrollment was 14,995 (11,450 full time, 3,545 part time) (*Common Data Set*, p. 2). First-time freshmen totaled 2,366 (*Just the Facts*, p. 3). Although UofL's graduation rate has been increasing over the past few years, it is still far from what we would like it to be. Of the initial cohort of first-time, full-time bachelor's-degree-seeking students in 2000, 40.6 percent took six years to graduate, and many took eight years or longer (*Common Data Set*, p. 3). Past history has shown that the longer students take to finish their course work the more likely they are to stop before finishing.

Contributing to the lower graduation rate is the fact that UofL students are not "typical" college students. While approximately 60 percent of all UofL first-time freshmen live in college-owned or affiliated housing, 81 percent of UofL's total student body commute to school (*Common Data Set*, p. 15). In addition, many of them attend part time and also juggle family and work commitments. Thus, UofL's student body tends to be made up of non-traditional students with many priorities and responsibilities apart from

school. These students are working toward their degrees in less-than-perfect circumstances, piecing together an education that fits into their available time. This situation causes their education to be extended and disconnected, making it harder for them to infuse their learning from the classroom with their lives outside of the university. An increased focus on critical thinking practice within the classroom can ease some of the pressure they experience and can help to make their education more meaningful. Practical classroom application will better equip them to tackle their overall course work and will increase their ability to incorporate their learning into their everyday lives. In addition, seeing the connection between the classroom and the outside world, which a critical thinking focus can highlight, can help them to assign more value to their educational experiences and give them further incentive toward finishing their degrees.





IDEAS TO ACTION:  
UOFL'S QUALITY ENHANCEMENT PLAN

Definitions of critical thinking, its elements, and its associated activities fill the educational literature of the past forty years. Critical thinking has been described as an ability to question; to acknowledge and test previously held assumptions; to recognize ambiguity; to examine, interpret, evaluate, reason, and reflect; to make informed judgments and decisions; and to clarify, articulate, and justify positions (Hullfish & Smith, 1961; Ennis, 1962; Ruggiero, 1975; Scriven, 1976; Hallet, 1984; Kitchener, 1986; Pascarella & Terenzini, 1991; Mines et al., 1990; Halpern, 1996; Paul & Elder, 2001; Petress, 2004; Holyoak & Morrison, 2005; among others). After a careful review of the mountainous body of literature defining critical thinking and its elements, UofL has chosen to adopt the language of Michael Scriven and Richard Paul (2003) as a comprehensive, concise operating definition:

*Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.*

(See Table 1 for further explanation of the major components of critical thinking.)

By this choice, we hope explicitly to recognize that the development and application of critical thinking in our students must be an “intellectually disciplined process” rather than one that occurs by chance or happenstance. Skillfully carrying out the processes associated with critical thinking will require the guidance of a faculty of mentor-facilitators who can model critical thinking as a learned skill that is acquired over a significant time frame and that requires a significant amount of energy and dedication (Halpern, 1996). We propose our plan, therefore, aware that it promotes a life skill to be nurtured and developed in students and faculty alike, and we expect that significant effort will be required within the university to accomplish the pedagogical transformation that a critical thinking commitment will require. We acknowledge, however, that the actual test of our success will come not altogether during our students’ academic formation but throughout their lifetimes as active workers, engaged citizens, and thoughtful contributors to the resolution of problems and concerns in the larger community.

TABLE 1 MAJOR COMPONENTS OF CRITICAL THINKING	
ANALYZE	To break up a whole into its parts, to examine in detail so as to determine the nature of, to look more deeply into an issue or situation.
APPLY	To put to use, especially for some practical purpose.
ASSESS	To evaluate (a person or thing); to estimate (the quality, value, or extent of); to gauge or judge.
COMMUNICATION	The exchange of ideas, opinions, and information through written or spoken words, symbols, or actions.
CONCEPTUALIZE	To form a concept or idea of.
CONTRAST	To compare or appraise in respect to differences.
EVALUATION	The act of ascertaining or fixing the value or worth of.
EXPERIENCE	The actual observation of facts or events, considered as a source of knowledge.
INQUIRY	The action of seeking, especially for truth, knowledge, or information concerning something; search, research, investigation, examination.
OBSERVATION	The act of recognizing and noting a fact or occurrence, often involving measurement with instruments.
PROBLEM SOLVING	The application of critical thinking to solve a problem that cannot be solved formulaically or robotically. First, the nature and dimensions of the problem are examined, and then, in the light of the first, considerations, points of view, concepts, theories, data, and reasoning relevant to its solution are determined.
REASONING	To exercise the rational faculty; to deduce inferences from premises; to perform the process of deduction or of induction; to reach conclusions by a systematic comparison of facts.
REFLECTION	Thinking about experiences, concepts, etc., with a view to discovering and considering new relationships.
RELATIONSHIP	What one entity has to do with another. Any significant way in which two things of the same or different type may be associated.
SYNTHESIZE	To put together or combine into a complex whole; to make up by combination of parts or elements.

We have titled our QEP *Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement* and propose to implement it in three coordinated endeavors:

- The General Education Program will increase its focus on building critical thinking skills.
- Undergraduate courses in the major will build upon the critical thinking skills developed in the General Education Program.
- Students will complete a culminating experience in which they can apply their knowledge and skills toward addressing practical problems.

While some programs may choose to develop the culminating experiences earlier, it is expected that these three stages will be phased in over approximately five to six years.

Culminating experiences will be appropriate to students' individual programs and goals. Therefore, a range of options for fulfilling the culminating experience will be offered and could include internships, research projects, service learning projects, senior theses, and capstone projects within the major or interdisciplinary capstone projects that draw upon the skills of students from different units across the university.

We also recognize the importance of a sustained and substantive program of faculty development in each phase of the QEP implementation.

## GENERAL SUPPORT FOR FOSTERING CRITICAL THINKING







## GENERAL SUPPORT FOR FOSTERING CRITICAL THINKING

In choosing *Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement* as our QEP topic, we were informed by the considerable literature on best practices in learning-centered undergraduate education. Robert B. Barr and John Tagg (1995), who describe a shift from an “Instruction Paradigm” to a “Learning Paradigm,” write that “in the Learning Paradigm, . . . a college’s purpose is not to transfer knowledge but to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems. The college aims, in fact, to create a series of ever more powerful learning environments” (p. 15). Barr and Tagg quote and endorse Howard Gardner’s definition of “education for understanding”: “a sufficient grasp of concepts, principles, or skills so that one can bring them to bear on new problems and situations, deciding in which ways one’s present competencies can suffice and in which ways one may require new skills or knowledge.” Barr and Tagg note that “this involves the mastery of functional, knowledge-based intellectual frame-

works rather than the short-term retention of fractionated, contextual cues” (p. 22). The ideal is an education that is centered on a student’s ability to bring together skills and knowledge from a variety of disciplines to solve increasingly complex problems. Many other sources also highlight the importance of critical thinking—the National Institute of Education’s *Involvement in Learning* (1984), the Association of American Colleges’s *Integrity in the College Curriculum* (1985), the *National Education Goals Report* (1991), and the Business-Higher Education Forum’s *Building a Nation of Learners* (2003), just to name a few.

It is no longer sufficient to focus undergraduate education on the transfer and recall of information. Research studies spanning the last forty years repeatedly demonstrate that students retain little of what they hear in lectures (Gardiner, 1994). For example, a study at England’s Norwich University found that students tested on material from lectures they had just heard could recall only 42 percent of the content even when allowed to use their notes. A week later, a subgroup of these same students was given the same test and could recall only 20 percent (MacLeish, as cited in Gardiner, 1994). A 1980 study measured the



knowledge students retained from a two-semester economics course compared with the knowledge of students who had never even taken the course and found that immediately after finishing the course students scored only 18.7 percent higher than those who hadn't taken the course, and after seven years only 9.8 percent higher (Saunders, as cited in Gardiner, 1994). These and similar studies demonstrate that knowledge gained only to be recalled on tests can be too ephemeral to meet the needs of students in the broader world. What is learned is likely to be forgotten unless it is used and built upon—unless students can be taught and encouraged to construct conceptual frameworks into which the new knowledge can be integrated. It is time for the university to reevaluate the goals it sets for its students and to work toward exercising a student's ability to

apply knowledge rather than just memorize. It is time for us to develop systems that will help students take the first steps on a path toward a life of deep and critical thinking. University curricula, therefore, must be designed to help students construct conceptual frameworks.

Our goal, then, must be to further our students' cognitive development by providing a structure that will foster their ability to think critically and to address issues. Thus, the progressive development of critical thinking skills throughout a student's university experience—through both general education classes and major course work—will culminate in work on a project that will prepare the student to approach issues encountered as a worker or citizen within the wider world. Our yoking of critical thinking and a culminating experience is therefore purposeful and emphatic.

## IDEAS TO ACTION: WHY IS IT A GOOD CHOICE?







## IDEAS TO ACTION REFLECTS UOFL'S METROPOLITAN MISSION

The University of Louisville has been charged by the Council on Postsecondary Education of the Commonwealth of Kentucky with a metropolitan mission, a charge clearly reflected in our Mission Statement:

*The University of Louisville shall be a premier, nationally recognized metropolitan research university with a commitment to the liberal arts and sciences and to the intellectual, cultural, and economic development of our diverse communities and citizens through the pursuit of excellence in five interrelated strategic areas: (1) Educational Experience, (2) Research, Creative, and Scholarly Activity, (3) Accessibility, Diversity, Equity, and Communication, (4) Partnerships and Collaborations, and (5) Institutional Effectiveness of Programs and Services.*

Our QEP topic, *Ideas to Action*, ties directly to a number of themes in this mission statement. The focus of *Ideas to Action* is to improve our students' educational experiences by making education more meaningful to them. The plan will increase the involvement of undergraduate students in research, which is a goal of our current Strategic Plan, Challenge for Excellence: Full Speed Ahead. The issues addressed by the students could be those affecting local

neighborhoods or the larger community, which relates to the partnership and collaboration goal in our mission statement. Moreover, these partnerships and research projects could also help to increase research activity among faculty across campus, our mission statement's second major goal. Finally, by increasing our students' engagement with critical thinking and by enhancing the quality of their university experience and enlarging their satisfaction with that experience, *Ideas to Action* will support many of the items under our fifth mission statement goal, that of enhancing institutional effectiveness of programs and services.

In addition, the focus of the QEP ties nicely with specific university activities that have been initiated in support of our strategic plan. For example, the University of Louisville formalized its commitment to the community in 2006 by creating the Signature Partnership Initiative, which focuses on:

- targeting a geographical area of the Louisville community that has significant social and human disparities in the areas of education, health, economic development, and human and social services.



- coordinating and directing multi-disciplinary academic, research, and service activities of the university toward meeting critical needs of the targeted community.
- engaging community partners to enhance existing programs and/or to create new programs that include community partners such as Metro Government, Jefferson County Public Schools, Metro United Way, Jefferson County Health Department, Louisville Urban

League, Greater Louisville Inc., Louisville Central Community Centers, faith-based institutions, healthcare organizations, and others.

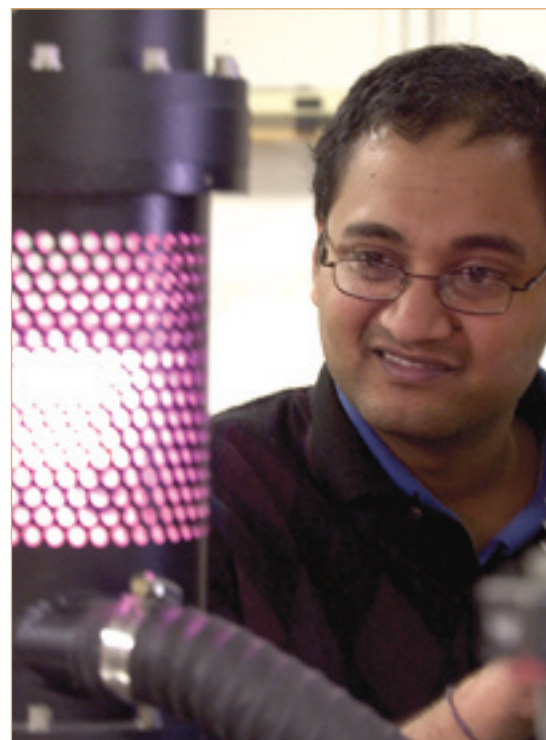
Our OEP is in line with our mission and strengthens the commitment of the university to community partnership. The Signature Partnership Initiative is just one of the many opportunities for faculty to design culminating experiences.

## IDEAS TO ACTION REFLECTS UOFL'S CONTINUED COMMITMENT TO CRITICAL THINKING AS A LEARNING OUTCOME

In the most recent (2002) revision of the General Education Program, faculties of all units of the university endorsed three overarching goals for the program: critical thinking, effective communication, and the understanding of cultural diversity. The choice of critical thinking as one of the program's goals indicates a recognition by university faculty of its centrality both in general education and in undergraduate education as a whole. The 34-credit hour General Education Program thus lays a foundation of critical thinking that both the programs in the major and the culminating experiences called for by the OEP can build upon.

In 2001, a presidential committee was appointed (composed of representatives from faculty, administration, advising, and student government) to make recommendations for improving the learning environment at UofL. The recommendations of that committee, which can be found in UofL's *Vision\*Focus\*Action* report, included a strong call for "the use of inquiry-

based teaching methods in more undergraduate courses" (p. 9). The efforts related to the OEP will support that recommendation.



## IDEAS TO ACTION TARGETS AN AREA THAT NEEDS IMPROVEMENT

Several recent indirect measures of our students' perceptions of their educational experiences at UofL indicate that we have room for improvement in the area of critical thinking. In the 2005 NSSE results, UofL freshmen continued to rate key items lower, including "synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships" (2c) and "making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions" (2d). Also in 2005, our senior results reflected significantly lower scores on item 7h, "culminating senior experience." UofL results were lower than many comparison groups on the percentage of seniors reporting that they had participated in a community-based project as part of a regular course. An internal analysis of the 2005 NSSE indicated that senior students' rating of a university's contribution to their ability to "think critically and analytically" was the strongest predictor of satisfaction with their entire educational experience. Reinforcing the areas of concern identified from the NSSE, *Measuring Up: The National Report Card on Higher Education* reported in 2005 that Kentucky students at four-year institutions scored 18 points below the participating states' benchmark in problem-solving skills (Hunt et al., 2005).

In the 2005-2006 academic year, critical thinking was assessed using a sampling of student

work in selected general education courses. While students generally did well in some aspects of critical thinking (i.e., demonstrating recognition of the problem or question and articulating a purpose), they scored lower in other key areas (such as analysis and synthesis of information). Critical thinking and problem solving are certainly not absent from the undergraduate education at UofL, but we could be focusing more on enhancing our students' analysis skills and helping them to apply those skills in the larger community. Our goals as educators should be to aid students in advancing from knowledge of concepts to application, analysis, synthesis, and evaluation. We can do this by providing opportunities for the application of critical thinking within the classroom and for culminating experiences that will further allow students to use and refine their skills in problem solving.

As the previous discussion shows, *Ideas to Action* is a good choice for the University of Louisville. It is consistent with our mission and our other priorities; we have already explicitly expressed a commitment to critical thinking; it is already a key outcome for our General Education Program; and it focuses on areas that prior surveys have indicated need improvement. Furthermore, as the next section will demonstrate, strong support for the topic of critical thinking emerged from surveys and focus groups across our own campus.



## IDEAS TO ACTION WAS CHOSEN BY OUR CAMPUS COMMUNITY

In January 2005, Provost Willihnganz appointed a QEP Team to make recommendations for the QEP. This committee included the Vice Provost for Diversity and Equal Opportunity, the Associate Provost for Undergraduate Studies, the Associate Provost for Academic Planning and Accountability, the SACS Coordinator, faculty representatives from all schools and colleges of the university, a faculty member from University Libraries, the Executive Director of Campus Life, the Associate Director of the Delphi Center for Teaching and Learning, an undergraduate student in Electrical Engineering, an undergraduate student in Arts and Sciences, and a graduate student in the College of Education and Human Development. The Team solicited QEP ideas from students, faculty, staff, administrators, and alumni (see Appendix A for a list of those involved).

In the spring of 2005, President Ramsey invited all members of the university community to submit QEP topics to a dedicated e-mail account. QEP Team members met with their constituencies to explain the QEP process and to encourage submissions to the website. The QEP Team also gathered student opinion from across the university through focus groups. When this phase of the process ended in April 2005, over a hundred ideas had been submitted through the website. In the summer of 2005, two members of the Team, Professors Riaan Van Zyl (Kent School of Social Work) and Celeste Shawler (College of Nursing), did a content and frequency analysis of these ideas and reported their results to the Team (see Appendix B for a more detailed description of the development of the QEP).

Four themes were repeated most often in the suggestions submitted: critical thinking (including problem-based learning and application of theories); integrated learning (including in-

volving students in active use of knowledge to benefit the university and community); quality education (including smaller classes, improved facilities, and “opportunities to apply classroom learning to practical experiences”); and community/society focus (including service learning).

In September 2005 the Team recommended to the provost and the SACS Leadership Team that our QEP focus on “Improving Students’ Critical Thinking Skills, Leading to the Ability to Address Real-World Community Problems.”

The provost invited response to this proposed topic from the vice presidents, deans, Faculty Senate, Staff Senate, and Student Government Association. In spring 2006, Provost Willihnganz held three university-wide forums to discuss the proposed topic, two on the Belknap campus and one on the Health Sciences Campus. With a request for a more focused title (*Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement*), the provost and the SACS Leadership Team approved the topic, and it was presented to the Board of Trustees. In May 2006, each unit of the university appointed a QEP facilitator to develop and lead the implementation plan in the unit.

The frequency with which “critical thinking” and “learning to address community issues” were suggested through all avenues of response suggests that our QEP topic responds to a strongly felt need. Our extensive consultation with all university constituencies yielded a surprisingly strong and clear call for education focused on the skills and knowledge needed to deal with real-world issues and problems.

Overall, *Ideas to Action* is most appropriate for U of L and will help us in the future to contribute to our students’ success in a more focused and meaningful way.

## BEST PRACTICES IN TEACHING CRITICAL THINKING AND IN CULMINATING EXPERIENCES





## BEST PRACTICES IN TEACHING CRITICAL THINKING

Critical thinking “entails awareness of one’s own thinking and reflection on the thinking of self and others as objects of cognition” (Dean & Kuhn, 2003, p. 2). It calls for the management of one’s own thought or cognition. Critical thinking further involves the integration of information into personal experience and previous knowledge (Paul, 1993) and arises from a holistic college experience (Boyer, 1987; Pascarella, 1989). Dean and Kuhn (2003) point out that some students make little progress toward critical thinking because “their pre-existing theories entirely determine the data they choose to examine” and the data they choose to examine are often incapable of challenging their preconceived beliefs and interpretations (p. 4).

The ability to think critically calls for a form of higher-order thinking than simply the ability to recall information (Tsui, 1999). In 1956, Benjamin Bloom classified six intellectual behaviors important to the learning process. Moving from the lowest level to the highest, they are knowledge, understanding, application, analysis, synthesis, and evaluation. An alternative construction to Bloom’s taxonomy has been constructed by Fink (2003), whose “Taxonomy of Significant Learning” demonstrates an interaction between six components

of learning: learning how to learn, foundational knowledge, application, integration, human dimension, and caring. Both Bloom and Fink indicate that the acquisition of critical thinking skills should be viewed as a progression toward intellectual complexity. University curricula, therefore, must provide not only opportunities to learn and recall information but must also give students increasing opportunities to practice and advance toward higher-level reasoning.

For students to be prepared for practical application beyond the university, their critical thinking skills have to be regularly exercised in day-to-day classroom experience, even when course content appears to be remote from real-world problems. Therefore, instructors in all disciplines will need to integrate critical thinking at every level of instruction and promote learning activities that use discipline- or content-based critical thinking and that point toward application in real-world circumstances. Discussions and small-group work will need to be designed to bring practical situations into classroom activities and assignments. In addition, faculty will need to work to design a variety of capstone projects and to provide guidance so that students can begin to prepare for a culminating project from the beginning of their college careers.



## BEST PRACTICES IN CULMINATING EXPERIENCES

In designing an appropriate institutional model for an experiential learning experience that will allow students to apply their critical thinking skills, we assessed award-winning and best-practice institution-wide models at other universities, gathered examples of successful departmental- or field-specific projects to use in faculty development workshops, and searched the literature for project assessments and potential pitfalls. Because information only becomes knowledge when it is applied—that is, when students are continually forced to ask what the information they are acquiring means and how they can use it—practical application should be built into each course that prepares the student for the culminating experience. Such application will assure that students are continually involved in recursive learning at increasing levels of complexity and will help them to avoid being unprepared for the culminating project. If our proposed marriage of critical thinking and a culminating experience is to be successful, it is vitally important that critical thinking be established as a primary objective in the earliest planning stages of the culminating experience.

The university has chosen to take an expansive approach to culminating experiences and expects participating units to develop a mix of approaches, which could include:

- Capstone Courses/Projects
- Internships
- Senior Theses
- Research Projects
- Service Learning Projects

The experiences of other urban universities that have embraced a responsibility to their surrounding communities can serve as examples for UofL. For example, Portland State University has developed capstone projects that are providing avenues for cumulative application of its students' acquired knowledge and skills (Iannozzi, Portland, 1997), and Alverno College has directed student learning away from class content and toward a more integrated, performance-based learning that develops the individual student's abilities in communication, problem solving, decision making, social interaction, and citizenship (Iannozzi, Alverno, 1997).

Service learning, a form of learning that accomplishes academic goals through community service, is linked by several studies to significant gains in student learning and achievement (Checkoway, 2001). Service projects can be powerful tools for improving critical thinking skills and for applying them to the community if students are guided in imagining and developing projects that will ensure critical thinking practices. But, as Checkoway (2001) notes, students must be intellectually prepared to begin service-learning projects, which reinforces the importance of infusing earlier course work with practical application of critical thinking skills.

The QEP process may initiate the development of many interdisciplinary learning models that allow students from different disciplines to work together. Interdisciplinary learning is a methodology wherein students from different



disciplines contribute their knowledge, skills, and experiences to enhance the disciplines of the others. For example, nursing, public health, social work, and geography students might collaborate in the opening of a family services center for a particular neighborhood. Such a project could be organized as part of a class or as an out-of-class experience. Interdisciplinary learning initiatives are increasingly being used throughout higher education (DeZure, 1999; Creamer & Lattuca, 2005). Connors and Seifer (2005) note that interdisciplinary learning initiatives “can be found in general education, replacing and augmenting distribution require-

ments; in emerging disciplines, such as cultural and gender studies, environmental studies, and neuroscience; in new pedagogies, such as collaborative learning, discovery and problem-based learning; in the use of technology, such as distance learning and web-based instruction; and in new curricular designs, such as learning communities, capstone courses, and service-learning.”

## FACULTY DEVELOPMENT PLAN







## FACULTY DEVELOPMENT PLAN

U of L's faculty will play an important role in the success of our *Ideas to Action* plan. Input from different constituencies across the university has alerted us to issues we will need to deal with in implementing the QEP. We know, for example, that professional development for faculty will have to address the “we’re doing that already” response in regard to both the culminating project and the teaching of critical thinking. We recognize too that we want to give units the greatest freedom in the ways in which they achieve the goals of the QEP (for instance, the freedom to design culminating projects that meet the goals of the individual unit).

We will also need to provide very clear operational definitions of both critical thinking and the culminating project. Research conducted by the Center for Critical Thinking on faculty involved in teacher education in California found that, although an overwhelming majority (89 percent) of faculty claimed critical thinking as a primary objective of their teaching, only 19 percent could provide a clear explanation of what exactly critical thinking is or express a clear understanding of the critical thinking skills they thought most important for their students to develop (Paul, Elder, & Bartell, 2006). Thus, our

faculty will need to educate themselves about critical thinking and cognitive development in order to create learning experiences appropriate to their students’ stages of cognitive development. The work of transforming curricula to provide critical thinking activities will also become the means for each instructor’s reorientation and habituation to critical thinking in the academic experience. Since students often prefer to rely on pre-existing theories, faculty will need to be prepared for their resistance to a critical thinking approach to learning. Faculty will have to work diligently to instill within their students the sense that rigorous intellectual work is a valuable and integral part of a rich and responsible personal and public life. They will also need to ensure that questions invited by learning experiences both relate to and challenge students’ previously held “intellectual theories.”

In developing the critical thinking activities for the classes leading up to the culminating project, and even in developing the projects themselves, faculty will need to keep many things in mind. Their class assignments will need to be designed so that they are more successful in enhancing critical thinking and problem-solving skills. They will need to understand



how the critical thinking definition applies to their classes and the relationship of the critical thinking and culminating experience rubrics to their courses. They will also need to assess a student's progress toward developing critical thinking ability.

Faculty will also need to work on their students' awareness of the necessity of critical thinking and understanding of the purpose of their classroom assignments and activities. They will need to help students to see the relationship between the activities they are doing in the classroom and their experiences outside of the classroom, to help them understand that the steps they are taking in the classroom will also be the steps they will take when faced with a problem in the community at large. This transference of skills from the educational setting to the community will be important to fully developing the ability of students to think critically. Problem transfer must be explicit for students to capture the critical thinking experiences that will lead to action. Faculty, therefore, will need to explain the problem being addressed in terms of logical thinking, assist students in identifying the steps taken in breaking a problem into its parts, and help students to actually see the purpose and logic in what they are doing. If students can be convinced of the value of critical thinking in solving their real-life problems, they will be more receptive and eager to participate in critical thinking activities in the classroom. Reflection will be crucial to this transference and will need to be built into critical thinking exercises, assignments, and projects. Learning the terminology associated with critical thinking will also be important to the students' understanding of the process and value of logical thinking.

The culminating experiences planned for the QEP will further ground and expand our students' capacities for critical thinking. Culminating experiences that units choose to

offer should illustrate the use or enhancement of critical thinking skills. Therefore, in helping students design their projects, faculty and staff will need to ensure that critical thinking appears among the project's outcomes and is intentionally incorporated into the project's design. In addition to developing projects within a given major, faculty across the university can work together to develop experiences that will foster interdisciplinary learning. Also, faculty and staff will need to work together to make experiences outside of the university available to students.

Faculty development programming will be provided by the Delphi Center for Teaching and Learning, which provides support for teaching and learning at UofL. The Delphi Center will be available to assist in the development of culminating experiences and will serve as a support mechanism for faculty who wish to integrate critical thinking concepts into their courses. Additionally, each college will be expected to offer training and development for their faculty.

Kecskes, Kerrigan, and Patton (2006) offer the following suggestions for helping faculty participate in a critical thinking approach:

- Assume a scholarly approach when working with faculty.
- Use internal and external incentives for the work.
- Recognize that substantial commitment to faculty development is essential.
- Value diverse disciplinary and pedagogical approaches.
- Consider having faculty—rather than staff—identify, develop, and sustain curricular partnerships.
- Make sure all efforts are well-communicated and integrated. (p. 59)

The Delphi Center, mindful of these principles, will offer a number of different programs



targeting different faculty groups in support of each of the three implementation phases of the QEP: general education, the major course work, and the culminating project. Some of the following programs are currently ongoing, and additional programming will be scheduled in response to QEP objectives and other areas identified by the university.

- **PART-TIME FACULTY INSTITUTE.** This Institute, which began in the fall of 2005, was specially designed to meet the learning needs of UofL's part-time faculty with topics that focus on helping instructors to individualize their teaching and create more opportunities within their classes for active, higher-level learning to occur. Topics currently being offered include: using PowerPoint effectively in the classroom to aid retention of learning; understanding students' learning styles to teach them more effectively and in ways that will help them learn to think more critically; keeping students motivated to learn and problem solve; and encouraging active discussion and participation in class so that students feel comfortable and confident in sharing their

views and critically reflecting upon what they have learned. Each topic in the Institute is taught twice to maximize the ability of the part-time faculty to attend, food is provided, and faculty who attend five of six sessions are offered a \$300 stipend at the end of the Institute as an incentive for attending.

While many of the current Institute topics relate to the QEP topic, the future Part-Time Faculty Institute will focus on preparing instructors to contribute specifically to the goals of the QEP in a meaningful way. This is particularly important because of the critical role that part-time faculty will play in the success of the QEP. Many UofL part-time faculty teach general education courses. If UofL is going to be successful in improving critical thinking skills within the General Education Program (the first stage of the QEP), then further professional development activities that relate to the goals of the QEP must be offered to part-time faculty and ways to encourage their participation in those activities will need to be addressed.

- **LUNCH AND LEARN PROGRAMS.** These programs are available on both the



Belknap and Health Sciences campuses and are designed to bring teaching pedagogy to our faculty so that they may become more effective classroom educators. Belknap and Health Sciences Center faculty at UofL are offered a “Lunch and Learn” program tailored to their specific learning needs based on a previously completed needs assessment of both groups. During the 2006-07 academic year, the Health Sciences and Belknap faculty are meeting on a monthly basis to discuss topics such as making the lecture an active learning strategy, making the most of instructional aids and technology, assessing students’ learning, leading an effective discussion, and teaching problem solving. Many of the sessions during the spring semester will be tied to the QEP topic of promoting critical thinking and problem-solving skills. The use of the “Lunch and Learn” programs to help with the faculty development needed for the QEP will continue in future years as well.

- **TEACHING WITH TECHNOLOGY.** This program will also be coordinated with the faculty development efforts of the QEP. Faculty must learn how to actively engage students and how to inspire them to think critically in the online environment just as in the traditional classroom. The techniques used are different, however, so faculty must expand their teaching-related knowledge base when they move into online education. The Delphi Center for Teaching and Learning, under the direction of Assistant Director Joni Allison, will offer numerous courses to help prepare faculty to teach effectively online. Currently, courses focus on helping faculty use the Blackboard Learning System, Breeze (a PowerPoint conversion software), PowerPoint, and Podcasting for a variety of online and traditional-setting classes. As with the other programs offered by the Delphi Center, future “Teaching with

Technology” programs will also be designed to place greater emphasis on supporting the goals of the QEP.

- **FACULTY TEACHING CIRCLES.** This program is being developed for the creative teaching of diversity content within the curriculum. In this model, selected faculty will be trained as diversity trainers to lead faculty teaching groups in discussion and learning about diversity content. Teaching circles will meet monthly on both campuses to read books or articles about diversity and to discuss how this content might be most effectively and creatively taught in the undergraduate and graduate curricula. Diversity content is critical to the QEP in that faculty must find better ways to help students learn to live and work with people within the community who are different from themselves.
- **CELEBRATION OF TEACHING AND LEARNING.** This is an annual event at UofL and is sponsored by the Delphi Center. Over 150 faculty, students, and administrators attend sessions on a variety of topics related to teaching. As with the other activities previously discussed, the Celebration in the past has not focused specifically on topics related to the QEP, but many of the topics covered certainly support the QEP. For example, the 2006 Celebration of Teaching and Learning showcased nationally known educator and author Dr. L. Dee Fink. Dr. Fink focused his morning sessions on helping faculty to formulate significant learning goals for their courses, to apply the principles of active learning and educative assessment to course activities, and to select or create powerful teaching strategies for their courses.

The Delphi Center plans to build on the 2006 Celebration by bringing Dr. Fink back to the university in January 2007 to work with the early implementers and champions of his

ideas in a more in-depth workshop. Faculty will be invited to bring their newly developed or in-process courses to the full-day workshop for supportive critique, suggestions, and fine-tuning by Dr. Fink and other faculty interested in formulating significant learning goals for their students and applying principles of active learning and educative assessment in their courses.

The 2007 Celebration of Teaching and Learning will be directly focused on topics related to the QEP, including courses or teaching methodologies that focus on critical thinking and/or problem solving; interesting culminating experience/capstone courses that demonstrate how students have assisted in community problem solving; and service learning courses created to help address community issues. Future Celebrations will also have topics that will prepare faculty to contribute to the QEP.

- **PAUL WEBER AWARDS FOR DEPARTMENTAL EXCELLENCE IN TEACHING.** These awards were established in 2006 to focus on and reward both Departmental Achievement in Teaching and Departmental Teaching Development. In 2007, the awards will focus on the QEP. Awards will go to departments for curricula or courses that most effectively promote critical thinking and/or problem solving; culminating experience courses that demonstrate how students have assisted in addressing community problems; and/or curricula designed to involve students in addressing community problems.

- **CRITICAL THINKING WORKSHOPS.** This program will include critical thinking seminars and workshops. The Delphi Fellow for Critical Thinking will be responsible for ensuring that critical thinking training is developed and that it is ongoing. The university plans to engage external experts on critical thinking to design, train, and assist in the continuous provision of faculty development programming.
- **CULMINATING EXPERIENCES WORKSHOPS.** The Delphi Center will develop culminating experiences workshops and will serve as the central support mechanism for faculty who wish to develop culminating experiences in-line with the goals of the QEP. The workshops will provide strategies for meeting the QEP goals and will discuss alternative culminating experience models so that programs can develop experiences that are best for their areas.

In addition to the programming provided through the Delphi Center, independent, unit-based faculty development training will take place. These unit faculty development activities will help to integrate QEP instructional design into each unit’s curriculum. Also, as stated earlier, linkages to the Signature Partnership Initiative, which many units are already supporting, will also provide opportunities for faculty to tie critical thinking instruction to practical applications in the community.

## IMPLEMENTATION PLAN







## IMPLEMENTATION PLAN

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The University of Louisville will have to take a number of steps to create the environment in which our QEP will succeed.

First, critical thinking and problem-solving skills must be explicitly taught in the general education courses, and the ways in which general education courses lead to upper-division course requirements must be evident. The General Education Curriculum Committee and the schools and departments that offer general education courses will be responsible for working to ensure that courses in the General Education Program connect directly with the QEP's emphasis on critical thinking and problem solving.

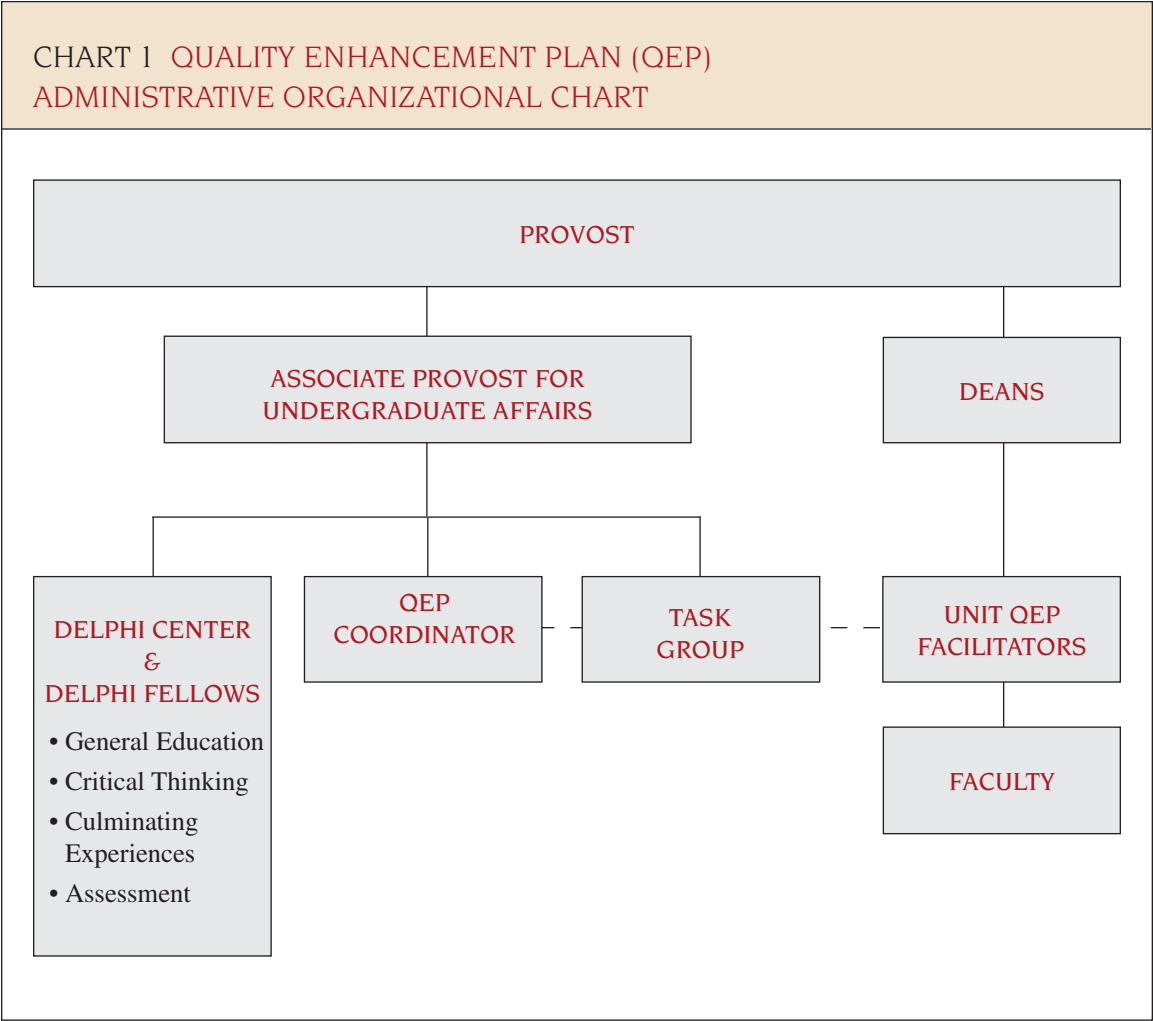
Second, building on the work in the General Education Program, the focus on enhancing critical thinking and problem-solving skills will need to continue in the major course work in order to prepare students for their culminating experiences. Collaboration with other units such as the Service Learning Program, International Service Learning Program, and other departments with outreach functions will provide much of the necessary infrastructure needed for many of the community-based opportunities. Co-curricular and community-based projects will provide opportunity for reflection by the student, an activity vital to

ensuring his or her progression toward critical thinking. Co-curricular activities with the residential housing population, recognized student organizations, Greeks, and student government could also provide additional opportunities for infusing critical thinking skills into the lives of students.

Third, schools and departments will develop culminating experiences for graduating students that will provide them with opportunities to further develop their critical thinking skills. While there will be specific criteria for culminating experiences, they may take the form of capstone courses, internships infused with new critical thinking objectives, senior theses, service learning projects, research projects, or other types of culminating experiences. Academic units may adapt existing courses or create new courses to support the culminating experiences they develop. Each student will be expected to participate in a culminating experience, either inside or outside of the classroom, in order to meet graduation requirements. Each department will be responsible for providing opportunities for their students to complete the culminating experience graduation requirement, either within the major or by coordinating interdisciplinary courses or experiences with other units.



Chart 1 illustrates the general organization of administrative responsibility for implementing the QEP. Also see Appendix C for the responsibilities associated with each position.



During the spring 2007 semester we will be working to raise awareness among the university community and helping faculty and students to understand what the *Ideas to Action* plan is and the roles they will play in its success. A number of activities, many of which will be ongoing, are also planned.

TIME FRAME	ACTIVITY
JANUARY 2007-JUNE 2007	1. The provost will appoint members for an ongoing university QEP Task Group, which will serve in an advisory capacity. The QEP Task Group will be composed of faculty, students, and staff, and its role will be to work closely with the Associate Provost for Undergraduate Affairs, the QEP Coordinator, and the Delphi Center to monitor the progress of the QEP and to recommend changes when needed.
	2. A search will be conducted for the QEP Coordinator, who will report to the Associate University Provost for Undergraduate Affairs. The QEP Coordinator will be charged with managing the budget for the QEP, overseeing the QEP website, working with each unit QEP facilitator on implementation, seeking external funding for QEP-related activities, and assisting the Delphi Center with the implementation of the QEP faculty development plan. The Coordinator will also prepare an annual report on the QEP.
	3. The university will hire four Delphi Fellows, who will be assigned to work on the QEP initiative. These four individuals will work (50 percent) in the Delphi Center for Teaching and Learning to support activities related to the Quality Enhancement Plan. Each will have a distinct role, as follows: <div><div>a. <b>DELPHI FELLOW—GENERAL EDUCATION</b>—This person will assist in the redesign of the general education courses so that they are refocused to connect more directly with the QEP theme and work with faculty and academic units to incorporate critical thinking concepts into the curriculum. Some units may have introductory courses that parallel general education courses, and this Fellow will work with those units on any necessary redesign of those courses to follow the QEP emphasis on critical thinking.</div><div>b. <b>DELPHI FELLOW—CRITICAL THINKING</b>—This person will work to design the Critical Thinking Workshops, the components of which will include the application of critical thinking concepts to service learning, undergraduate research, and various types of culminating experiences. This person will also develop programs for faculty development and provide training to faculty to help them incorporate critical thinking activities into their courses.</div><div>c. <b>DELPHI FELLOW—CULMINATING EXPERIENCES</b>—This person will work with academic units and other university programs to develop culminating experiences that best fit the discipline—capstone courses, internships, research projects, and/or other activities that help to utilize and apply critical thinking concepts.</div><div>d. <b>DELPHI FELLOW—ASSESSMENT</b>—This person, in conjunction with the Assistant Provost for Institutional Research, Data Management, and Assessment, his office, and the QEP Coordinator, will direct the assessment activities used to monitor the progress of the QEP initiatives.</div></div>
Continued on next page	



TIME FRAME	ACTIVITY
JANUARY 2007– JUNE 2007 <i>continued</i>	4. The dean in each academic unit will begin to make necessary changes in the personnel review process to support faculty involvement in the QEP. Unit strategic plans will begin to reflect QEP goals. Additionally, the provost will include progress on the QEP in deans' future evaluations.
	5. The Delphi Center will set up a QEP website to provide information for faculty on QEP-related activities and possible capstone experiences in the undergraduate programs. This site will allow faculty across programs to be better informed about the approaches being taken by others.
JULY 2007– JUNE 2008	1. The QEP Task Group and the General Education Curriculum Committee will be charged with reviewing unit initiatives to ensure that they meet the goals of the QEP.
	2. The 4th Annual Delphi Center Celebration of Teaching and Learning will focus on QEP-related topics, and the first critical thinking workshop and first culminating experience workshop will take place.
	3. The Paul Weber Award will be awarded to a department that develops the best project related to the QEP. Other incentive funds for unit activities and faculty training will also be distributed based on guidelines to be determined.
	4. QEP assessment personnel will collect baseline data and set goals for many of the QEP-related assessments.
	5. The results of various assessments will be shared with the university community and compared with the goals for each assessment. Assessment results and goals will be part of an annual report developed by the QEP Coordinator that will be presented to various constituency groups around campus.
	6. The undergraduate units will be in the development or implementation stages of their QEP initiatives.
	7. The QEP Task Group will also be charged with determining whether culminating experiences meet the goals of the QEP.
JULY 2008– JUNE 2010	1. The QEP Coordinator will continue to review university-wide activities to ensure that they meet the goals of the QEP.
	2. The early implementers of the culminating experiences will offer and assess those experiences.
	3. The university strategic plan will begin to reflect the QEP goals.
JULY 2010– JUNE 2011	1. The first wave of students who have met the culminating experience requirement will graduate.
JULY 2011– JUNE 2012	1. The university will provide a report to SACS on the results of the QEP.

ASSESSMENT PLAN





## ASSESSMENT PLAN

The impact of the University of Louisville's efforts relative to the QEP will be assessed in multiple ways, including the use of direct and indirect assessments of student learning, national instruments, specifically developed assessments, and the tracking of QEP-related activities (see Table 2).

TABLE 2 QEP ASSESSMENT			
Outcome	Indirect Assessment	Direct Assessment	Activities
1. Critical Thinking	NSSE Items	UofL Critical Thinking Rubric	General Education Instructors - PD
	UofL Surveys (student, alumni, employer)	California Critical Thinking Skills Test	Other Instructors - PD
	UofL Course Evaluations	California Critical Thinking Dispositions Inventory	Classroom Activities
	CIRP Items	Collegiate Learning Assessment	Feedback on Training
	Student Satisfaction Inventory (critical thinking question added)		Feedback on Implementation
2. Community Problem Solving	NSSE Items	UofL Culminating Experience Rubric	Programs with Culminating Experiences
	UofL Surveys (student, alumni, employer)		Experiences with Signature Partnerships
	UofL Course Evaluations		Students with Culminating Experiences; Feedback on Training; Feedback on Implementation
3. General Assessments			Faculty Participation in QEP Activities
			Programs with Faculty Participation



Many of the assessments mentioned in the next section are part of the current university assessment system. For example, the university currently participates in NSSE, CIRP, and the Student Satisfaction Survey and conducts student course evaluations. The university also assesses critical thinking skills as part of the assessment of the General Education Program. Faculty are recruited from across campus and trained to participate in this assessment. In some cases, the data collected as part of these assessment activities will provide good assessments of the QEP (e.g., NSSE items). In other cases, the current approach will be modified to

meet the needs of the QEP assessment (e.g., by the addition of new items on the course evaluations; by having faculty assessors for the General Education Program also assess work products from freshman orientation; etc.).

The first step in developing the assessment plan was to identify the key student learning outcomes emerging from the QEP. UofL has identified two such outcomes:

- Students will be able to think critically.
- Students will develop the ability to address community issues.

## STUDENTS WILL BE ABLE TO THINK CRITICALLY

As previously discussed, the University of Louisville has chosen to adopt Michael Scriven and Richard Paul's (2003) language as a comprehensive, concise operating definition:

*Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.*

This definition was used as a guide in developing an assessment plan for the QEP, including the identification of survey items and the development of a rubric for assessing critical thinking skills.

### INDIRECT ASSESSMENT OF STUDENT LEARNING

1. National Survey of Student Engagement (NSSE)—UofL participates in the National

Survey of Student Engagement every two years. A number of items within this survey relate to critical thinking, including the following:

- a. Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in-depth and considering its components.
- b. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations or relationships.
- c. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions.
- d. University contribution toward the student's ability to think critically and analytically.

2. University of Louisville Surveys (student, alumni, employer)—The University of

Louisville has been surveying students, alumni, and employers as part of the QMS project since 1999. These surveys are done for each undergraduate program in the university. While most of these surveys do include items relative to critical thinking, there are no such items that are consistent across all surveys. As part of a campus-wide revision of the surveys in 2007-08, items have been developed to assess the student, alumni, and employer perceptions of the impact of the University of Louisville undergraduate programs on critical thinking skills.

3. University of Louisville Course Evaluations—The University of Louisville asks students to evaluate all undergraduate courses. However, the evaluations differ across academic units, and there are no common items related to critical thinking that are asked in all evaluations. Beginning in 2007–08, course evaluations will all include items related to the impact of the course on critical thinking skills.
4. Cooperative Institutional Research Program (CIRP)—UofL uses the CIRP survey when assessing the experiences of incoming freshman. Two items in the survey relate to critical thinking: the items that measure analytical and problem-solving skills and the ability to think critically.
5. Student Satisfaction Inventory—UofL also uses the Student Satisfaction Inventory and has added a question addressing critical thinking to the 2006-07 survey.

### DIRECT ASSESSMENT OF STUDENT LEARNING

1. Assessment using UofL's critical thinking rubric—In 2005, UofL began assessing critical thinking skills in the General Education Program using a faculty-developed rubric. The rubric has been revised in order to assess critical thinking in a manner that is con-

sistent with the definition of critical thinking being used for the QEP (see Appendix D).

The University of Louisville will now use rubrics to assess critical thinking at three points.

First, a sample of assignments from the freshmen orientation courses will be collected each fall. They will then be assessed using the critical thinking rubric. Two readers will assess each assignment, and a third reader will be used to assess assignments when there is a discrepancy greater than 1.

Second, a sample of general education assignments will be collected each semester. In addition to being used to assess the General Education Program, these assignments will be used as a mid-point assessment for the impact of the QEP initiative on critical thinking skills. The same approach will be used to assess these assignments as was used with the assignments from the orientation courses. In fact, the assessments will be done at the same time with the same readers, and readers will not be told which assignments are from the freshmen orientation course and which are from general education courses.

Third, a modified version of the critical thinking rubric will be used to assess the assignments from culminating experiences (see Appendix E). While the primary purpose of this rubric is to assess the problem-solving skills in the culminating experience, many of the elements in the rubric are the same or are very similar to those in the critical thinking rubric, so this will also allow us to evaluate changes in critical thinking skills from the earlier assessments. More detail on the process that will be used to assess the culminating experiences is discussed below under Direct Assessment, in the section titled "Students Will Develop the Ability to Address Community Issues."

2. The University of Louisville will use three

national instruments to assess the impact on the key aspects of critical thinking. The California Critical Thinking Skills Test (CCTST) is an instrument based on a Delphi study of experts on critical thinking. It is a well-constructed instrument designed to measure whether students have the skills necessary to engage in critical thinking. The California Critical Thinking Dispositions Inventory (CCTDI) is a companion instrument to the CCTST and is designed to assess whether students are disposed to thinking critically (i.e., when facing a problem are they more inclined to use critical thinking). The Collegiate Learning Assessment (CLA) is designed to measure the student's ability to actually apply critical thinking skills to a given scenario. Because each instrument measures a different aspect of critical thinking, using all three instruments will provide the best assessment. In addition, all three instruments have been used across the nation and will allow us to both examine trends here and compare our students' performance with national norms. A sample of students at both the freshman and senior levels will complete the instruments. In order to avoid test fatigue, students will

be asked to either complete the CCTST and CCTDI or the CLA.

### ACTIVITIES SUPPORTING THE QUALITY ENHANCEMENT PLAN

In addition to direct and indirect assessment of student learning, the University of Louisville will monitor its progress relative to building critical thinking skills by examining the quantity and quality of activities supporting the QEP goals. The following data will be accumulated annually by the Delphi Fellow for Assessment.

1. The number of general education instructors who participate in professional development activities related to critical thinking.
2. The number of other instructors who participate in professional development activities related to critical thinking.
3. The number of new classroom activities developed related to critical thinking.
4. Quantitative and qualitative feedback from faculty participating in professional development activities related to critical thinking.
5. Qualitative feedback from faculty who incorporate new critical thinking activities into their classrooms.



## STUDENTS WILL DEVELOP THE ABILITY TO ADDRESS COMMUNITY ISSUES

While some of the assessments planned also evaluate problem-solving skills, a number of assessments will be used specifically for this outcome.

### INDIRECT ASSESSMENT OF STUDENT LEARNING

1. National Survey of Student Engagement (NSSE)—A number of items within this survey relate to problem solving and culminating experiences, including:
  - a. Applying theories or concepts to practical problems or in new situations.
  - b. Participated in a culminating senior experience (capstone course, thesis, project, comprehensive exam, etc.).
  - c. Participated in a practicum, internship, field experience, co-op experience, or clinical assignment.
  - d. University contribution to students' solving of complex real-world problems.
2. University of Louisville Surveys (student, alumni, employer)—As previously discussed, the University of Louisville regularly surveys students, alumni, and employers as part of the QMS project. Because there are no stan-

dard items about culminating experiences or community impact, items will be developed to assess the student, alumni, and employer perceptions of the impact of UofL's undergraduate programs on the ability of students to apply critical thinking skills.

3. University of Louisville Course Evaluations—As previously discussed, UofL asks students to evaluate all undergraduate courses. However, the evaluations differ across academic units, and there are not currently any items related to addressing community issues. In courses that focus on community-based learning, course evaluations will be adjusted to include items related to the impact of the course on the students' ability to apply critical thinking skills.

### DIRECT ASSESSMENT OF STUDENT LEARNING

1. Assessment using UofL's culminating experience rubric (see Appendix E)—A rubric has been developed for assessing a student's ability to apply critical thinking skills toward a culminating experience. While faculty in each discipline will have some flexibility to adjust the descriptions in each square to



fit their disciplines, the categories being assessed and the scale will be the same. A sample of the assignments will be assessed by the instructor and at least one other faculty member, generally from the same program. Because many of the culminating experiences will be discipline based, it is believed that the assignments will be best assessed by those with expertise in that discipline. Training on the use of the rubric will be provided in each academic unit and the Delphi Fellow for Assessment will work closely with faculty to increase reliability.

ACTIVITIES SUPPORTING THE  
QUALITY ENHANCEMENT PLAN

The University of Louisville will monitor progress relative to the QEP goals for culminating experiences by examining the quantity and quality of activities that are supporting the QEP goals. This data will be accumulated annually by the Delphi Fellow for Assessment.

- 1. The number of instructors who participate in professional development activities related to culminating activities.
- 2. The number and percentage of undergraduate programs providing students a culminating experience that meets the goals of the QEP.
- 3. The number and percentage of QEP culminating experiences associated with the Signature Partnership Initiative.
- 4. The number and percentage of students participating in culminating experiences.
- 5. Quantitative and qualitative feedback from faculty participating in professional development activities related to culminating experiences.
- 6. Qualitative feedback from faculty who incorporate new culminating experiences into their classrooms.

GENERAL ASSESSMENT OF FACULTY  
INVOLVEMENT/PROFESSIONAL DEVELOPMENT

In addition to measuring faculty involvement in professional development activities, UofL will assess the general level of participation of faculty and programs across these activities. The following data will be accumulated annually by the Delphi Fellow for Assessment.

- 1. The number and percentage of faculty participating in QEP-related professional development activities.
- 2. The number and percentage of undergraduate programs with faculty participating in QEP-related professional development activities.

FINANCIAL PLAN



## FINANCIAL PLAN

A number of things must happen for the University of Louisville to successfully implement its *Ideas to Action* QEP plan. Our institutional leadership must commit substantial monetary and personnel resources to carry out the planning and implementation of this educational change.

### A. PERSONNEL

In order to meet the additional work of implementing the QEP, more staff will be needed. New staff will include administrative positions such as that of the QEP Coordinator and the four new Delphi Fellows. Persons filling the Delphi Fellows positions may have faculty status, with the goal being to maximize faculty involvement and leadership in the plan. See Appendix C for position descriptions.

The four Delphi Fellows will be assigned responsibility for developing, staffing, and supporting QEP activities related to: (a) general education, (b) critical thinking, (c) culminating experiences, and (d) assessment. These faculty members will provide a 50 percent commitment to the Delphi Center. Commitments would last two to three years and could be extended when appropriate.

### B. BUDGET IMPLICATIONS

The following represents a five-year budget, beginning with the 2007-08 school year. Current funding and items requiring new funding are identified. See Table 3 for a summary of new funding needed, Table 4 for a summary of currently funded projects, and Table 5 for total project costs.



CRITICAL THINKING WORKSHOPS (CTW)						
Center for Critical Thinking P.O. Box 220 Dillon Beach, CA 94929 (800) 833-3645 Website: <a href="http://www.criticalthinking.org">http://www.criticalthinking.org</a>  We propose to contract with the Center for Critical Thinking to provide faculty professional development training.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Facilitator/Scholar Dr. Gerald Nosich: honoraria for program/semester (2)	\$15,550	\$15,550	\$15,550	\$0	\$0	\$46,650
Estimated airline travel from New York: \$375 round trip/semester x 2	700	700	700	0	0	2,100
Food per diem for speaker meals:	500	500	500	0	0	1,500
300 participants (estimated meal cost)	19,200	19,200	19,200	0	0	57,600
50 participants (Leadership Team meal cost)	3,200	3,200	3,200	0	0	9,600
CTW Total Needs funding	\$39,150	\$39,150	\$39,150	\$0	\$0	\$117,450

CULMINATING EXPERIENCES WORKSHOPS (CE)						
The development and revision of culminating experiences will be critical to the QEP. The goal of the workshops will be to assist faculty leaders from various disciplines in developing culminating experiences for students in their degree programs or for students from various degree programs. The Culminating Experiences Workshops will take place each spring.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Faculty Release for 12 with a 3-credit hour course	\$0	\$36,000	\$36,000	\$36,000	\$0	\$108,000
Two master teachers to teach the institute (fourteen 2-hour sessions @ \$200/session)	0	2,800	2,800	2,800	0	8,400
Marketing for the Culminating Experiences Workshops	0	2,000	2,000	2,000	0	6,000
Food for sessions (14 sessions @ \$150/session; taught 5-7 PM weekly)	0	900	900	900	0	2,700
CE Total (per semester) Needs Funding	\$0	\$41,700	\$41,700	\$41,700	\$0	\$125,100

PERSONNEL COSTS RELATED TO THE QEP						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
QEP Coordinator	\$60,000	\$62,400	\$64,900	\$67,500	\$70,200	\$325,000
Delphi Fellow (50%) To assist with CTW	45,000	46,800	48,700			140,500
Delphi Fellow (50%) To assist in QEP assessment	45,000	46,800	48,700	50,200	52,700	243,400
Delphi Fellow (50%) To assist faculty in the development of culminating experiences	22,500	46,800	48,700	50,200	26,350	194,550
Delphi Fellow (50%) To assist in redesign of Gen Ed courses	22,500	46,800	48,700	50,200	52,700	220,900
Personnel Total	\$195,000	\$249,600	\$259,700	\$218,100	\$201,950	\$1,124,350
Benefits (25% of personnel costs) Needs Funding	\$48,750	\$62,400	\$64,925	\$54,525	\$50,488	\$281,088

ASSESSMENT ACTIVITIES						
In addition to ongoing activities (course evaluations, student surveys, etc.) the QEP will require funding for new assessments. They will include:						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
National Exam	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
Faculty Assessors	20,000	20,000	20,000	20,000	20,000	100,000
Additional Surveys	2,000	2,000	2,000	2,000	2,000	10,000
Assessment Total Needs Funding	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000	\$160,000

UNIT QEP IMPLEMENTATION FUNDS						
Funds distributed to university units for the implementation of approved QEP Initiatives.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Implementation Total Needs Funding	\$20,000	\$100,000	\$200,000	\$200,000	\$200,000	\$720,000

FACULTY TRAINING INCENTIVE FUNDS						
Incentive funds will be used to encourage the participation of full-time and part-time faculty in professional development training programs for the QEP.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Incentive Funds Total <i>Needs Funding</i>	\$40,000	\$40,000	\$40,000	\$20,000	\$20,000	\$160,000

CELEBRATION OF TEACHING AND LEARNING (CTL)						
Strategies taught at the Celebration will be QEP-focused from 2007 on and will revolve around critical thinking, working effectively with community partners, and addressing real-world issues.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
CTL Total <i>Funded by the Delphi Center</i>	\$18,500	\$18,500	\$18,500	\$18,500	\$18,500	\$92,500

PART-TIME FACULTY INSTITUTE (Strategies taught in PTFI after 2006-2007 will focus on the QEP)						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Food	\$6,800	\$6,800	\$6,800	\$6,800	\$6,800	\$34,000
Stipends for 80 faculty	24,000	24,000	24,000	24,000	24,000	120,000
Marketing	500	500	500	500	500	2,500
Binders & supplies	650	650	650	650	650	3,250
PTFI Total <i>Funded by Delphi Center</i>	\$31,950	\$31,950	\$31,950	\$31,950	\$31,950	\$159,750

BELKNAP AND HSC “LUNCH AND LEARN” SESSIONS (12 months) (L&L)						
The purpose of these sessions is to bring convenient teaching pedagogy to faculty so that they may become more effective classroom teachers. The sessions will focus on QEP-related topics on Belknap after December 2006 and on HSC after May 2007.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Food per session (for 40) @ \$465/session x 20 sessions	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$46,500
Speaker honoraria (for 20) @ \$200/session	4,000	4,000	4,000	4,000	4,000	20,000
Marketing expenses	2,000	2,000	2,000	2,000	2,000	10,000
L&L Total <i>Funded by the Delphi Center</i>	\$15,300	\$15,300	\$15,300	\$15,300	\$15,300	\$76,500

TEACHING WITH TECHNOLOGY (TT)
The purpose of this program is to help faculty use technology to incorporate critical thinking concepts into their courses.
<i>Funded in-kind by Delphi Center</i>

FACULTY TEACHING CIRCLES (FTC)						
This program will train selected faculty to lead teaching groups, which will provide faculty with the opportunity to discuss and learn about the teaching of diverse student populations. The first twelve months of this program will be funded equally by three sources:						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Delphi Center	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
College of Arts and Sciences	5,000	5,000	5,000	5,000	5,000	25,000
Vice Provost for Diversity	5,000	5,000	5,000	5,000	5,000	25,000
FTC Total <i>Fully Funded by the Three Sources Above</i>	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000

PAUL WEBER AWARDS FOR DEPARTMENTAL EXCELLENCE IN TEACHING						
After 2006, these awards will focus on departmental curricula or courses that most effectively promote critical thinking and/or problem solving; culminating experience courses that demonstrate how students have assisted in community problem solving; or curricula designed to involve students in solving community problems.						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Departmental Achievement Award in Teaching	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000
Departmental Teaching Development Award	25,000	25,000	25,000	25,000	25,000	125,000
Paul Weber Awards Total <i>Currently funded by the Provost Office</i>	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000

Signature Partnership Initiative Funding has not been included in this budget proposal, but funding for that project may provide some indirect support to QEP efforts.



TABLE 3 SUMMARY OF NEW FUNDING NEEDED						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Critical Thinking Workshops	\$39,150	\$39,150	\$39,150	\$0	\$0	\$117,450
Culminating Experiences Workshops	0	41,700	41,700	41,700	0	125,100
Personnel Costs	195,000	249,600	259,700	218,100	201,950	1,124,350
Benefits (25% of personnel costs)	48,750	62,400	64,925	54,525	50,488	281,088
Assessment Activities	32,000	32,000	32,000	32,000	32,000	160,000
Implementation Funds	20,000	100,000	200,000	200,000	200,000	720,000
Faculty Training Incentive Funds	40,000	40,000	40,000	20,000	20,000	160,000
Total New Funding	\$374,900	\$564,850	\$677,475	\$566,325	\$504,438	\$2,687,988

TABLE 4 SUMMARY OF CURRENTLY FUNDED PROJECTS						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Celebration of Teaching & Learning	\$18,500	\$18,500	\$18,500	\$18,500	\$18,500	\$92,500
Part-Time Faculty Institute	31,950	31,950	31,950	31,950	31,950	159,750
Lunch & Learn Sessions	15,300	15,300	15,300	15,300	15,300	76,500
Faculty Teaching Circles	15,000	15,000	15,000	15,000	15,000	75,000
Paul Weber Awards	50,000	50,000	50,000	50,000	50,000	250,000
Total Currently Funded	\$130,750	\$130,750	\$130,750	\$130,750	\$130,750	\$653,750

TABLE 5 PROJECT TOTAL OF CURRENT AND NEW FUNDS						
	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Project Total	\$505,650	\$695,600	\$808,225	\$697,075	\$635,188	\$3,341,738

SUMMARY







## SUMMARY

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For over two hundred years, the University of Louisville has contributed to the Commonwealth of Kentucky and the larger world through the education it has provided for its students. Our mission is committed to the “intellectual, cultural, and economic development of our diverse communities and citizens.” UofL’s Quality Enhancement Plan (QEP), *Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement*, will strengthen this commitment by improving the critical thinking skills of our undergraduate students and by preparing them to make their own contributions to society. The focus of this initiative will be to foster critical thinking as a habit of mind, a concept that acknowledges the development and application of critical thinking as an “intellectually disciplined process” rather than one that occurs by chance.

Our General Education Program, which already emphasizes critical thinking, will have an increased focus on those skills. In addition, efforts will be made to incorporate more critical thinking activities into degree programs. To solidify students’ critical thinking ability, we will initiate a new culminating experiences program that will allow students to synthesize

skills and knowledge and apply them toward complex problems.

Faculty will play an important role in helping our students attain the higher-order thinking that critical thinking requires. A structure has been developed to encourage faculty involvement in the QEP, and a plan has been prepared to help faculty incorporate more critical thinking activities into their classrooms. Additional support is planned to help units develop culminating experiences that are appropriate to their disciplines.

An assessment plan has been developed that will help us determine how well we are reaching our goals. Our five-year budget provides adequate funding for the implementation, faculty and curricula development, and assessment of the critical thinking initiative.

UofL faculty and student body chose critical thinking as a worthy topic for our QEP, and we will work together to excel in this endeavor. UofL is committed to helping its students reach their highest potential. Critical thinking practice and application will better prepare them to address problems they encounter outside of the university and will help them to be better citizens of the world.



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## APPENDIX A QEP TEAM

### QUALITY ENHANCEMENT PLAN TEAM

- Sidney Baxendale**  
Professor, CBPA-School of Accountancy
- Dale Billingsley**  
Associate Provost for Undergraduate Affairs
- Anthony Cash**  
Undergraduate Student
- Michelle Clemons**  
Executive Director of Campus Life
- Susan Crim**  
Director, Dental Hygiene Program, School of Dentistry
- Julia Dietrich**  
Associate Dean and Professor,  
College of Arts and Sciences (Chair)
- Mary Donnelly**  
Undergraduate Student
- Rick Feldhoff**  
Professor, School of Medicine
- D. Joseph Hagerty**  
Professor, Speed School of Engineering
- David Howarth**  
Associate Provost for External Academic  
Affairs and Faculty Personnel
- Mary Hums**  
Professor, College of Education and Human  
Development
- Marianne Hutti**  
Associate Director, Delphi Center
- Anna Marie Johnson**  
Associate Professor, University Library
- Daniel Mahony**  
Associate Provost for Academic Planning  
and Accountability
- Gale Rhodes**  
Director, Delphi Center
- Dennis Robinson**  
Instructional Tech. Consultant Sr., Delphi Center
- Linda Shapiro**  
Associate Professor, College of Education  
and Human Development
- Kim Johnson Shaver**  
Director, Service Learning
- Celeste Shawler**  
Assistant Professor, School of Nursing
- Connie Shumake**  
SACS Coordinator; Director of Accreditation and  
Program Management

- Joseph Steffen**  
Professor, College of Arts & Sciences
- Mordean Taylor-Archer**  
Vice Provost for Diversity
- Edith Tidwell**  
Professor, School of Music
- Riaan Van Zyl**  
Associate Dean and Professor,  
Kent School of Social Work
- Carole Wastog**  
Director of Academic Support Services,  
Brandeis School of Law
- Evelyn Woods**  
Graduate Student, College of Education and  
Human Development

### ADDITIONAL MEMBERS OF QEP SUBCOMMITTEES

- Mary Barbosa-Jerez**  
Assistant Professor, University Library
- Il Barrow**  
Graduate Student, College of Education  
and Human Development
- Michael J. Curtin**  
Vice President for Finance
- James W. Henson**  
Director of Assessment
- Bruce Kemelgor**  
Associate Professor, Management Department,  
College of Business
- Ann Larson**  
Associate Professor, College of Education  
and Human Development
- Nathanael Mitchell**  
Graduate Student, College of Education  
and Human Development
- Kathryn Rudolph**,  
Graduate Assistant, College of Education and  
Human Development
- Thomas Tretter**  
Assistant Professor, College of Education  
and Human Development
- Bob Urekew**  
Part-time Faculty, Philosophy Department,  
College of Arts and Sciences



## APPENDIX B DEVELOPMENT OF THE QUALITY ENHANCEMENT PLAN

Since January 2005, the University of Louisville has been working on the development of the Quality Enhancement Plan. The following outlines the steps that were followed and includes future activities planned to implement the QEP.

JANUARY-MARCH 2005	The QEP Team was appointed by Provost Shirley Willihnganz and began meeting regularly. The Team included faculty representatives from each academic unit, as well as student representatives and representatives from the University Libraries, student affairs, undergraduate studies, and various other groups (see Appendix A for a listing of Team members). The QEP Team focused on reviewing the results of prior university assessments and developing a plan for involving the university community in selecting the QEP topic.
APRIL-MAY 2005	The QEP Team implemented the Big Idea campaign to gather information from the university community. President James Ramsey sent a request for ideas to all faculty, and flyers were posted across campus. For a week, attention was focused on the Big Idea campaign via the university's electronic mail system. A link was established from the email announcement to the flyer. In addition, nine focus group meetings were conducted with various student groups.
JUNE 2005	The responses to the Big Idea campaign and the ideas that emerged from the focus groups were analyzed and a number of themes were identified. Some ideas were only indirectly related to student learning (e.g., quality of the classrooms), so those ideas were deemed inappropriate for the QEP and were forwarded to central administration. However, four consistent themes did emerge related to a possible QEP topic: critical thinking, problem solving, community engagement/service learning, and integrated learning.
JULY-SEPTEMBER 2005	QEP Team members were split into four groups and each group was assigned to review the available literature in one of the four areas identified and to write a report. The four reports were reviewed and the entire QEP Team discussed how to incorporate some of these ideas into a QEP topic.
OCTOBER-DECEMBER 2005	The QEP Team worked on developing a proposal for the recommended QEP topic, <i>Ideas to Action: Using Critical Thinking to Foster Student Learning and Community Engagement</i> . It was also initially presented to the SACS Leadership Team at this time.
JANUARY-MARCH 2006	The QEP proposal was completed and was presented formally to and approved by the SACS Leadership Team. The proposal then was shared with various groups around the university community, including student government, Faculty Senate, and deans. Based on a variety of discussions, the decision was made to focus on the undergraduate degree programs and to involve graduate programs that were interested in participating.
APRIL 2006	Three open forums were held to discuss the QEP topic with faculty, staff, and students. Two of the forums were held at different locations on the Belknap campus, and one was held on the Health Sciences campus.

MAY-SEPTEMBER 2006	<p>The QEP topic was presented to the Board of Trustees, which gave initial support for the topic.</p> <p>QEP facilitators were identified in each academic unit.</p> <p>The QEP Team was split into four committees to begin work on the formal Quality Enhancement Plan to be submitted to SACS. The committees included: rationale and background, plan development, assessment, and finance. In all cases, the committees included original members of the QEP Team and other people with expertise in specific areas. Their reports were due by October 2006.</p> <p>The rationale and background committee built on the reviews of literature conducted by the four topic area groups during the previous summer. This committee not only focused its research on topics related to the QEP, but it also reviewed internal documents and assessment efforts in order to support the appropriateness of this QEP focus for UofL. The focus of the plan development committee was to identify the activities necessary for the QEP to be successful and to develop a long-term plan for the QEP. The focus of the assessment committee was to identify the major goals of the QEP and means for assessing each goal. The finance committee was to develop a budget sufficient for covering the costs of the personnel and activities necessary for the QEP to be successful.</p> <p>Marianne Hutti, Associate Director of the Delphi Center for Teaching and Learning, began to focus her efforts on the faculty professional development programming needed to support the QEP.</p> <p>It was decided that incoming students be given the opportunity to participate in community service activities during Welcome Weekend. This involvement in service is to be an ongoing part of the university's Welcome Weekend activities in order to introduce students to the needs of the local community and to begin their preparation for the capstone experience.</p>
OCTOBER-DECEMBER 2006	<p>A summary of the Quality Enhancement Plan was shared widely with the university community. Each of the major constituency groups was provided with the summary and a presentation on the QEP and given a chance to comment on the plan. These groups included the deans, Faculty Senate, Staff Senate, Student Government Association, General Education Curriculum Committee, and the Board of Trustees.</p> <p>The QEP Team chair met with the General Education Curriculum Committee to elicit its involvement in working to improve the teaching of critical thinking skills in the General Education Program.</p> <p>Each academic program completed a survey reporting on critical thinking practices and culminating experiences already taking place within its department and offering insight into changes and support that will be needed to incorporate more of these activities into the curriculum. A team reviewed this material and compiled information to aid in enhancing the QEP plan, to further address the needs for faculty development, and to identify first implementers of the plan.</p>
DECEMBER 2006	<p>The Quality Enhancement Plan was submitted for formal approval by the SACS Leadership Team.</p> <p>The Delphi Center offered the first professional development program specifically related to the QEP.</p> <p>Presentations of the final QEP were given to the Student Government Association, Faculty Senate, and Staff Senate.</p>

JANUARY-MARCH 2007	<p>Presentations of the final QEP were given to the Board of Trustees and the academic deans.</p> <p>The dean and QEP facilitator in each academic unit began working with their faculty to develop QEP initiatives.</p> <p>Another information campaign was conducted and included announcements in UofL Today (the daily email), flyers around campus, and bookmarks for students and faculty. Articles appeared in the main alumni magazine, the student newspaper (<i>The Cardinal</i>) and other publications highlighting the topic of the QEP and discussing how the university community can be involved.</p> <p>The Quality Enhancement Plan was submitted to SACS.</p>
APRIL 10-12, 2007	<p>The on-site visit by SACS will occur and feedback will be provided on the QEP.</p>

## APPENDIX C QEP RESPONSIBILITIES

### ASSOCIATE PROVOST FOR UNDERGRADUATE AFFAIRS

The associate provost supervises the activities of the Delphi Center and the QEP Coordinator. This person will be the primary contact to the provost for the QEP Task Group and other personnel working on the QEP project.

### QEP COORDINATOR

The Coordinator will work with the deans, Delphi Fellows, and unit facilitators to develop QEP initiatives; with academic units to document and monitor progress; and with Delphi Center staff on programming to support the process. The Coordinator will also develop annual reports on QEP initiatives and seek funding for the QEP.

### DEANS

The deans will be responsible for developing a QEP initiative in their academic units. Deans will work to adjust curriculum and personnel evaluation processes to support QEP efforts and will work with their unit QEP facilitators to monitor progress toward QEP initiatives. Progress on the QEP initiative will be included in unit strategic plans and in the provost’s annual review of deans.

### QEP TASK GROUP

The QEP task group will include faculty, staff, and students. The task group will have an advisory role and will work closely with the QEP Coordinator and the Delphi Fellows to monitor the progress of the QEP and to recommend changes. The group will also be charged with determining whether culminating experiences meet the goals of the QEP.

### DELPHI FELLOWS

Delphi Fellows will be doctoral-level faculty or other faculty with strong skills in teaching and curriculum design. These individuals will work (50 percent FTE) to support critical thinking activities. Each will have a distinct role in developing critical thinking objectives for general education, the critical thinking workshops, culminating experiences workshops, and assessment. They will work with the QEP Coordinator and Delphi Center staff to design the QEP programming.

### UNIT QEP FACILITATORS

Each academic unit will have a facilitator designated by the dean. The deans will work with their unit faculty and the facilitators to develop specific QEP activities. They will monitor progress and complete unit reports.

### FACULTY

Faculty involvement and support for the QEP project is critical.



APPENDIX D  
RUBRIC FOR ASSESSING CRITICAL THINKING

	1. Not Evident	2. Occasionally Evident	3. Evident	4. Clearly Evident
<b>Demonstrates recognition of problem or question.</b>	No discernible thesis or does not identify and state the nature of the problem or the related issue(s).  Represents the issues inaccurately or inappropriately.	The thesis states and identifies the main question but does not explain why or how it is a problem or question.  Represents the issues accurately and appropriately.	The thesis identifies the main question and subsidiary aspects of the problem or question.  Articulates some understanding of the scope of the problem and the related issue(s) involved.	Thesis articulates a clear understanding of the scope of the problem and issue(s) involved.  Identifies embedded or implicit issues, addressing their relationships to the thesis.
<b>Uses reasoning skills to develop and analyze arguments and evidence.</b>	Does not develop an argument based on available information or evidence.  Does not identify the key assumptions and/or evaluate the given information that underlies the issue.	Applies relevant thinking skills (e.g. comparing, contrasting, classifying, abstracting, analyzing, criticizing) in presenting information but without clear reference to context, assumptions, data, and evidence.	Applies relevant thinking skills (e.g. comparing, contrasting, classifying, abstracting, analyzing, criticizing) in presenting information with reference to context, assumptions, data, and evidence.  Suggests implications and consequences but without development.	Applies relevant thinking skills in presenting information.  Develops solutions by using all available and applicable information.  Identifies and clearly discusses implications and consequences, considering relevant assumptions, contexts, data, and evidence.
<b>Shows awareness of multiple points of view and integrates knowledge gained from different sources.</b>	Does not acknowledge other possible perspectives or that other options were considered in developing the argument.  Does not acknowledge and integrate information derived from other sources.	Acknowledges other possible perspectives although they are not clearly stated, developed, or evaluated.  Acknowledges information derived from other sources but does not evaluate or integrate that information into the argument.	States clearly other salient perspectives and positions that are important to the analysis of the issue.  Acknowledges and examines information derived from other sources and integrates that information into the argument.	Clearly states and develops responses to other salient perspectives and positions that are important to the analysis of the issue.  Acknowledges, examines, and evaluates information from other sources and integrates that information and other points of view into the argument.
<b>Draws conclusions based on evaluation of reasons, arguments, and evidence.</b>	Conclusions are not provided.  Fails to reflect, identify, or develop implications, consequences, and conclusions.	Conclusions are provided, but without discussion of implications or consequences.  Little or no reflective thought is provided with regard to the assertions or to the key relationships between the other elements such as context, assumptions, or data and evidence.	Conclusions are stated and discussed.  Implications and consequences of the conclusion are reflected in context, assumptions, and supporting evidence.	Stated conclusions are based on a thorough examination of evidence, a clear explanation of reasonable alternatives, and/or an evaluation of possible consequences.  Reflection and evaluation develop and challenge solutions by using relevant information.

Appendix D Rubric for Assessing Critical Thinking

APPENDIX E  
RUBRIC FOR ASSESSING CULMINATING EXPERIENCES

	1. Not Evident	2. Occasionally	3. Evident	4. Clearly Evident
<b>Demonstrates recognition of problem or question.</b>	No discernible thesis or does not identify and state the nature of the problem or the related issue(s).  Represents the issues inaccurately or inappropriately.	The thesis states and identifies the main question but does not explain why or how it is a problem or question.  Represents the issues accurately and appropriately.	The thesis identifies the main question and subsidiary aspects of the problem or question.  Articulates some understanding of the scope of the problem and the related issue(s) involved.	Thesis articulates a clear understanding of the scope of the problem and issue(s) involved.  Identifies embedded or implicit issues, addressing their relationships to the thesis.
<b>Uses reasoning skills to develop and analyze arguments and evidence.</b>	Does not develop an argument based on available information or evidence.  Does not identify the key assumptions and/or evaluate the given information that underlies the issue.	Applies relevant thinking skills (e.g. comparing, contrasting, classifying, abstracting, analyzing, criticizing) in presenting information but without clear reference to context, assumptions, data, and evidence.	Applies relevant thinking skills (e.g. comparing, contrasting, classifying, abstracting, analyzing, criticizing) in presenting information with reference to context, assumptions, data, and evidence.  Suggests implications and consequences but without development.	Applies relevant thinking skills in presenting information.  Identifies and clearly discusses implications and consequences, considering relevant assumptions, contexts, data, and evidence.
<b>Shows awareness of multiple points of view and integrates knowledge gained from different sources.</b>	Does not acknowledge other possible perspectives or that other options were considered in developing the argument.	Acknowledges other possible perspectives although they are not clearly stated, developed, or evaluated.	States clearly other salient perspectives and positions that are important to the analysis of the issue.	Clearly states and develops responses to other salient perspectives and positions that are important to the analysis of the issue.
<b>Integrates multiple sources of theoretical and research knowledge gained.</b>	Does not integrate theoretical and research knowledge derived from multiple sources.	Acknowledges theoretical and research information derived from other sources but does not evaluate or integrate that information into the argument.	Acknowledges, and examines information derived from multiple sources and integrates that information into the argument.	Clearly synthesizes theoretical and research information within context of the culminating experience.
<b>Includes critical reflection on knowledge gained in the academic program.</b>	No connections made among knowledge gained in the academic program and culminating experience.	Few connections made among knowledge gained in the academic program and culminating experience.	Connections are made between the knowledge gained in the academic program and culminating experience, but it lacks specificity of application.	Recognition of applicability of knowledge gained from the academic program and culminating experience
<b>Develops possible solutions based on evaluation of reasons, arguments, and evidence.</b>	Possible solutions are not provided.  Fails to reflect, identify, or develop implications, consequences, and conclusions.	Conclusions are provided, but with little or no reflection of the assertions or of the key relationships between the other elements such as context, assumptions, or data and evidence.	Conclusions are stated and discussed.  Implications and consequences of the conclusions are reflected in context, assumptions, and supporting evidence.	Stated conclusions are based on a thorough examination of evidence, a clear explanation of reasonable alternatives, and/or an evaluation of possible consequences.  Reflection and evaluation develop and challenge solutions by using relevant information.

Appendix E Rubric for Assessing Culminating Experiences





