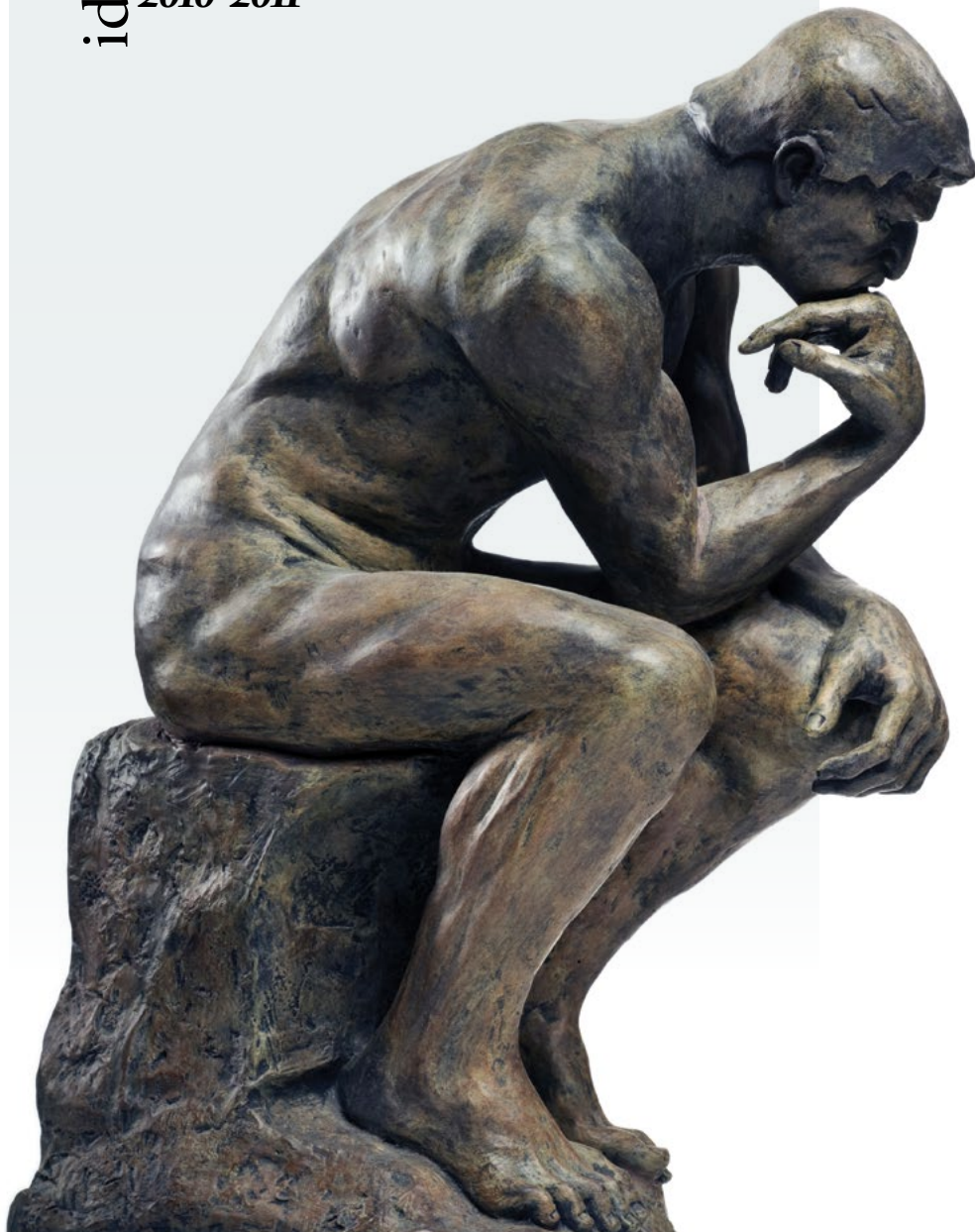# i2a

ideas to *action*

ANNUAL REPORT

2010-2011

10-11 Annual Report Executive Summary

Ideas to Action, also known as i2a, is the University of Louisville's multi-year commitment to continuous improvement of teaching and learning across the undergraduate experience. The i2a Task Group and the i2a staff team are leading the initiative across academic departments and our co-curricular, student services and academic affairs programs, to deliberately foster the growth of students' critical thinking skills. This effort is complemented by the component of i2a focused on integrative learning projects, known as culminating undergraduate experiences (CUEs), designed to guide upper-class students in applying their disciplinary knowledge in authentic and real-world context prior to graduation. The i2a initiative also reflects UofL's commitment to community engagement by supporting faculty, staff and students in applying relevant critical thinking frameworks, tools and assessment measures to help deepen students' community-based learning experiences and support their learning in and outside of the classroom.

The 2010-2011 academic year marked the fourth year of i2a implementation at UofL. This annual report provides a summary of significant i2a programs and events that took place in 2010-2011, reports on the new and existing partnerships and innovative projects, and provides relevant student learning data. One central focus of the 2010-2011 academic year was an effort to put curricular structures and sustainability into place to support long-term i2a integration of i2a priorities and outcomes. In Fall 2010, i2a facilitators collaborated with the i2a staff team to assemble the first i2a Integration Map that tracked i2a infusion across undergraduate units and as reflected in General Education, major and culminating undergraduate experiences. Similarly, significant groundwork toward long-term i2a planning was laid as a result of the CUE subcommittee's creation of the CUE Planning and Implementation Document that will support units' achievement of the newly-established CUE goal: by spring 2013, 50% of programs in each undergraduate unit will have their CUE courses in place.

Among the 2010-2011 i2a achievements itemized in this annual report, important milestones include the launch of the first i2a Part-Time Faculty Cohort group, the development and piloting of the customized critical thinking posters, and the new liaison structure to streamline planning and communication between i2a academic units and the i2a staff team. This fourth year of i2a implementation continues our momentum toward our ten-year i2a institutional goals, and yet provides evidence of new directions, partnerships and discoveries sparked by the energy and enthusiasm of our faculty, staff, students and community partners. The year's accomplishments in planning and assessment also supported our short-term goals to successfully develop and submit our Quality Enhancement Plan (QEP) Fifth Year Interim Report to Southern Association of Colleges and Schools (SACS) in March 2013.

i2a Task Group & Subcommittees

The i2a Task Group members, including i2a unit facilitators, departmental and student representatives, continued to meet twice monthly in 2010-2011 to guide the ongoing integration of the Ideas to Action initiative into the undergraduate curriculum. Subcommittees of the Task Group met throughout 2010-2011 and worked to create new programs and put forth recommendations for continued implementation of i2a priorities.
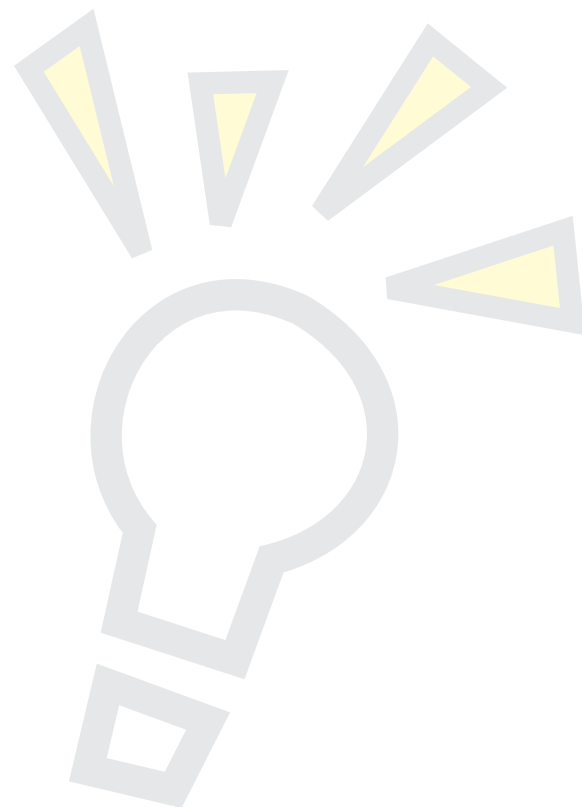
Table 1: Members of the 2009-2010 Task Group

Name	Campus Unit/Department
Michael Anthony	Cultural Center
Alan Attaway	College of Business
Cathy Bays	Ideas to Action
Dale Billingsley	Division of Undergraduate Affairs
Lynn Boyd	College of Business
E. Todd Brown	College of Education & Human Development
Marie Kendall Brown	Delphi Center for Teaching & Learning
Jill Butters	School of Dentistry
Henry Cunningham	Office of Community Engagement
Pam Curtis	Division of Student Affairs
Manav Das	Department of Mathematics
Christopher Doane	School of Music
Leslye Erickson	Career Development Center
Pamela Feldhoff	Office of the Vice President for Research/Biochemistry and Molecular Biology
Cheryl Gilchrist	Institutional Effectiveness
James Graham	J.B. Speed School of Engineering
Nisha Gupta	Ideas to Action
Marianne Hutti	School of Nursing
Anna Marie Johnson	University Libraries
Pat Martin	School of Nursing
Lee Mayer	School of Dentistry
Rose Mills	Part-Time Faculty
Judi Murray	Ideas to Action
Kathleen Otto	Office of Registrar
Patty Payette	Ideas to Action
Armon Perry	Kent School of Social Work
Harry Pickens	Office of Provost
Latisha Reynolds	University Libraries
Gale Rhodes	Delphi Center for Teaching & Learning
Edna Ross	Ideas to Action
Connie Shumake	Office of Provost
Terry Singer	Kent School of Social Work
Nancy Theriot	College of Arts & Sciences
Edith Davis Tidwell	School of Music
Riaan van Zyl	Kent School of Social Work
Joanne Webb	College of Education & Human Development
Joanna Wolfe	College of Arts & Sciences

The i2a Task Group Subcommittees in the 2010 – 2011 academic year included:

Assessment Subcommittee
Co-chairs:
- Cathy Bays
- Connie Shumake (through December 2009)
- Cheryl Gilchrist (January 2010 to present)

One of the major achievements of this subcommittee was the coordination of the use of the i2a Evaluation Protocol with the undergraduate units. Seven undergraduate units submitted implementation plans for 2009-2010, four of which included planned curriculum mapping.

Culminating Undergraduate Experiences Subcommittee
Co-chairs:
- Nisha Gupta
- Michael Losavio

Among the accomplishments of this subcommittee was the name change of the Culminating Experience (CE) component of i2a to the CUE (Culminating Undergraduate Experience) to better reflect the undergraduate nature of this component of i2a and to emphasize the distinction of the CUE from similar uses of the "CE" designation. The subcommittee was able to pilot CUE documents with faculty in a year-long Faculty Learning Committee (FLC) focused on the CUE. The focus of the FLC included ongoing work and discussion with applying, and providing feedback on, the CUE Defining Features and the CUE Rubric. The subcommittee produced a set of criteria to work in conjunction with the Defining Features to help units begin the process of determining which courses/ experiences might count as CUEs within their units. These criteria were approved by the i2a Task Group at the end of spring 2010.

SUN Grants Subcommittee
Co-chairs:
- Cathy Bays
- Pamela Feldhoff

For the 2010-2011 i2a SUN Grants cycle, nine grants totaling $53,965.46 were awarded to 13 UofL faculty and staff representing nine undergraduate departments. View the project summary for each funded i2a SUN grant. See page ___ for a complete list of grantees and projects funded during 2010-201.

Events and Programs Subcommittee
Co-chairs:
- Patty Payette
- Marie Kendall Brown

This subcommittee primarily focused on contributing to the shaping of key events, including the i2a Institute and i2a's participation in the annual Celebration of Teaching and Learning. This committee also worked closely with the i2a poster committee in the development, creation of customized critical thinking posters. The committee also consulted with Cathy Bays who was working on a Faculty Facilitation Framework (F3) that she was creating as part of a "train the trainer" model for promoting i2a integration at the unit level. Her F3 design met our needs for a "menu" of training and development for units, particularly in the area of providing a list of content for i2a integration that can be delivered in various formats and methods.

Key Collaborations

During the summer of 2011, the i2a specialist for assessment collaborated with staff from the university's **Office of Academic Planning and Accountability (OAPA)** to revise the Student Learning Outcomes (SLO) and select the assessment management software product, Compliance Assist. The i2a assessment specialist presented with OAPA staff the SLO process at a department chairs meeting. The outcome for the SLO project was the development of three documents and four Tegrity recordings for use by the units, which described the SLO and reporting expectations. These modules are available at (URL) louisville.edu/institutionalresearch/institutional-effectiveness/student-learning-outcome.html

In August 2011, as part of UofL's Welcome Week for new students, i2a served as a co-sponsor of the Student Outreach Uniting Louisville (**SOUL)** program. Over 300 students participated in service-based projects in the greater Louisville area in which intentional critical thinking reflection was designed in collaboration with i2a staff members.

The Book-in-Common program of the **First-Year Initiatives** offers an annual essay contest, based on a critical thinking prompt developed with i2a. The i2a staff team worked with the **Office of Admissions** to create and deliver classroom training sessions on promoting critical thinking through the SEE-I tool for secondary school teachers attending the Advance Placement Summer Institute on campus. i2a continued to collaborate with the **Office of the Vice President for Community Engagemen**t and **Office of Civic Engagement, Leadership and Service** specifically in relation the Community Engagement Steering committee's Internal Programming Committee, and the ongoing support for institution-wide community engagement events and awards. The **IT management team** worked with i2a staff to design and deliver a two-part training session in which managers learned to use the Paul-Elder framework to think through their revision of a funding request process used to propose new programs and projects across the entire IT division.

2011 UofL Undergraduate Research Symposium

Ideas to Action was represented on the planning committee for this event, which began a multi-year plan to meld together several programs held at the end of the academic year. The Community Engagement Showcase was melded with the Undergraduate Research Symposium in the 2011 event to pilot this merge. Six presentations with a "community engagement" focus were included in the 2011 UofL Undergraduate Research Symposium held April 19, 2011. These presentations included or involved 12 students. The partners for this pilot project were the Office of Civic Engagement, Leadership and Service, and the Office of the Vice President for Community Engagement. Over 250 people attended this event.

i2a Poster Project

The "Poster Project" began during the 2010-2011 calendar year and was an initiative to develop content for a new series of i2a posters that focused on the Paul-Elder Critical thinking framework. The purpose of the project was to meet the requests of faculty, staff, and students for i2a content that could be posted in classrooms, offices, and dorms. The posters will provide the university community with a visible tool for incorporating the Paul-Elder framework into academic work as well as everyday thinking, and help raise awareness about i2a among all segments of our university community. The new posters are customized specifically for UofL, and were designed to build upon the success of the critical thinking posters that were purchased from the Foundation on Critical Thinking who granted permission for the materials to be used for this project. The Poster Committee developed questions for each component of the Paul Elder framework to foster thinking using the Elements, Standards, and Traits.

The i2a poster committee was co-chaired by Patty Payette and Edna Ross. Committee members included:
- Brian Barnes: Department of Philosophy
- Lynn Boyd: College of Business
- Tim Hardin: Speed School of Engineering
- Rose Mills: English/ Delphi Center
- Margo Smith: University Libraries
- Pete Walton : Public Health

A pilot study was conducted during the 2011 summer terms in which "The Thinker's Elements" poster was printed and distributed/mounted in several classrooms across the campus. Twelve faculty and 206 students from the College of Business, College of Education and Human Development, College of Arts and Sciences, and the JB Speed School of Engineering participated in the pilot study.
Student responses to a Likert survey indicated that most students found "The Elements" poster to be at least somewhat effective in helping them in class discussions or assignments whether or not the instructor explicitly referred to the poster during lecture/discussions.

Final versions of "The Elements," "The Standards," and "The Intellectual Traits" will be printed and made available during the 2012 spring semester.

Lights, Camera, i2a

The Lights, Camera, Ideas to Action (LCi2a) program provided structure and support for faculty to design critical thinking digital assignments in their undergraduate courses in Spring 2011. This program was a collaboration between Ideas to Action and the Digital Media Suite (DMS). In April 2011, students' digital projects were screened throughout the day at the Rauch Planetarium in three different screens. Participating faculty and their students were invited to attend and share invitations with their friends/colleagues. Over 200 people attended the event throughout the day. Remarks by Gale Rhodes, Steve Dwinnells, and Patty Payette were delivered as part of a program acknowledging the innovative projects. The ten faculty members/instructors who participated in the program represented three units and six departments (with total student enrollments 238) see table 2.

Several instructors provided assessment data on the students' projects themselves, hence in some courses there is an aggregate form of data for the group members. The data do reflect a range of students' critical thinking levels, as demonstrated in the project completed. A customized Critical Thinking Rubric was developed and used by some faculty for this assessment. Overall, the assessment data demonstrates students' levels of critical thinking, at some point. However, the assessment protocol was NOT set up as a pre/post program comparison. The data provides evidence of the range of students' critical thinking at the end of the digital assignment. For more information and to see clips of the student film projects, visit louisville.edu/ideastoaction/programs/lci2a.

Think. Decide. Succeed!

In 2010, i2a launched Think.Decide.Succeed. (TDS), a campus-wide initiative to support students in applying critical thinking skills to create more successful, productive, and meaningful lives – both inside and outside the classroom. Harry Pickens led this effort by designing workshops, resources and training materials for faculty and staff to put into courses, trainings, or other student programs. The Smart Decisions workshops were piloted in the spring of 2011. It served 314 students, all of whom responded as being "highly satisfied" with their experience. The goal for the 2011-2012 year is to reach 2,000 students with the TDS program and train 200 more as "decision mentors."

CUE Accomplishments

The CUE subcommittee had three main goals for 2010-2011: 1.) Refine the CUE Assessment documents; 2.) Define a process to "take the CUE out to the programs" and; 3.) Finalize the i2a Glossary of Terms. The subcommittee completed the review and revision of the CUE Assessment documents for campus-wide distribution. In January 2011, the Unit Facilitators began the process of implementing the CUE across undergraduate programs via the "Unit Implementation for CUE Planning" document. Each academic unit creates a plan to reach the campus-

Table 2: Lights, Camera, i2a Participants

Name	Department/Unit	Course/Enrollment	CT data (if available)
Brian Barnes	Philosophy/A & S	PHIL211/40	N=40, 2.99/4
Kevin Chapman	Psychology/A & S	PSYCH582/18	N=6, 76.33/80
Carl Enoch	Social Work	SWK322/22	N=5, 2.9/3
Richard Fee	Health Promotion/CEHD	HSS532/27	
Lee Gibson	Math/A & S	MAT301/20	N=6, 18.5/24
Monique Jones	Social Work	SWK322/21	
Melinda Leonard	Psychology/A & S	PSYCH201/25	N=7, 32.85/40
Sena Naslund	English/A & S	ENG504/20	
Shyam Sharma	English/A & S	ENG301/22	N=21, 3.64/4
Deana Thomas	Theatre/A & S	THEA355/23	

wide CUE integration goal of 50% of programs having their CUE in place by spring 2013. The i2a Glossary of Terms is complete and will be made public, pending the distribution of the UofL Glossary of Community Engagement Terms.

Learning Communities

Faculty Learning Community—Culminating Undergraduate Experience (FLC-CUE):

The focus of the FLC-CUE is to develop and share strategies and tools for the implementation of culminating undergraduate experiences (CUEs). The emphasis was on transforming "capstones" to "CUEs" through a curricular development process, while also continuing to gather pilot data and feedback on usability of the CUE assessment documents. The Task Group created this pilot to bring together faculty participants across all the units.

Unit facilitators were asked to identify candidates for the program. The cohort included 10 faculty members from three units.

Collaborative Learning Community (CLC):
2010-2012

In fall 2010, i2a launched the second cohort of the Collaborative Learning Community (CLC). The CLC is a key strategic collaboration between i2a and the professional staff who serve students, primarily those staff working in student affairs, academic affairs, and student services. The goal of the CLC is to support the shared transformation of the curricular, co-curricular, and student-service experience for undergraduate students through the development, implementation and assessment of a critical thinking project in each CLC department or program. These projects are designed to become a permanent part of each department, thereby supporting the development of current and future students who are touched by the work of that program.

Occurring over the course of two full academic years—2010-2011 and 2011-2012—the 12 members of the CLC cohort met monthly with members of the i2a staff team from September-May. These interactive sessions in this first year of the program focused on the exploration of core critical thinking concepts, the Paul-Elder framework, and the applications of these concepts to the participants' professional contexts. Each CLC participant completed a proposal for a unique critical thinking-based project to be implemented and assessed in the 2011-2012 academic year.

The chart below provides a list of the CLC cohort members and the programs they represent. Members of the group are expected to present their CLC-inspired work at a campus-wide showcase or event in May, 2012.

Table 3: Faculty Learning Community–Culminating Undergraduate Experiences (CUE)

Teaching & Learning (2)	CEHD	Betty Doyle Caroline Sheffield
Leadership, Foundations, & Human Resource Education	CEHD	Jason Curry
Biology	A & S	Joe Steffen
English	A & S	Beth Willey
Modern Languages (French)	A & S	Mattieu Dalle
Philosophy	A & S	John Gibson
Sociology	A & S	Suzanne Hopf
Industrial Engineering	Speed	Suraj Alexander
Computer Engineering	Speed	Roman Yampoliskiy

Table 4: Collaborative Learning Community (CLC) Members, 2010-2012

Name	Unit/Department
Brian Buford	Lesbian, Gay, Bisexual, & Transgender Services
Chris Poche	University Libraries
David Shaw	Division of Student Affairs
Denita Campo	Information Technology
Jo Kaelin	Information Technology
John Smith	Division of Student Affairs
Julie Onnembo	Division of Student Affairs
Mark Woolwine	Resources For Academic Achievement (REACH)
Mike Abboud	Office Of Financial Aid
Pam Frank	Information Technology
Phyllis Clark	Cultural Center
Tony Robinson	Undergraduate Affairs

i2a Supporting Undergraduate iNnovation (SUN Grants)

The i2a SUN Grants program was created in 2008 to support the development and integration of i2a innovations at UofL. In 2010, the SUN Grant program was revised and expanded to fund small-scale individual projects and large-scale departmental projects. For the third cycle of SUN Grants, funding up to $12,500 per project was available for individual and teams of faculty and staff to develop, implement, and assess projects that directly and significantly support the sustained incorporation of selected i2a outcomes into undergraduate academic, co-curricular and student-support projects, programs, courses and curricula. Grant recipients are expected to share final project outcomes at a future i2a event or program. More information can be found at the SUN Grant homepage: louisville.edu/ideastoaction/programs/grants.
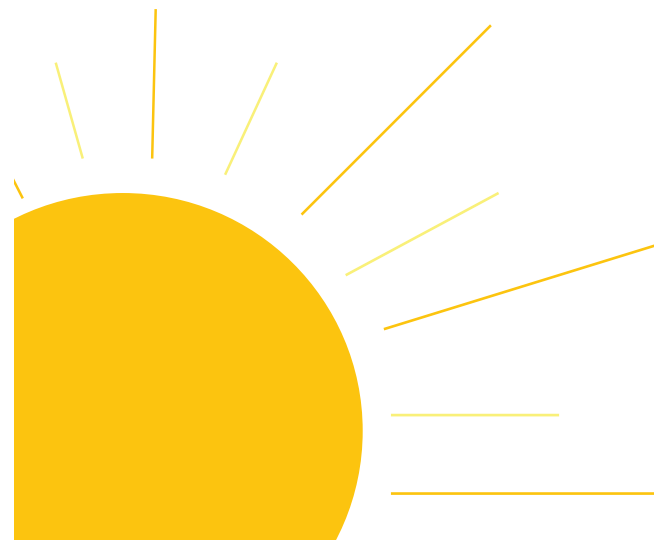
Table 5: 2010 Funded SUN Grants

Award Recipients	Project Title
Latricia Bronger and Nicole Fenty CEHD-Special Education	Leading the Discussions: Building a Background for Instructional Strategies
David Brown A&S-Physics	Formalizing Undergraduate Research as a Capstone Course in Physics and Astronomy
Theresa Hayden A&S-Justice Administration	Human Trafficking: Critical Thinking about Modern Day Slavery
Suzanne Hopf A&S-Sociology	Community Mapping Project: Exploring Resources for At-Risk Youth in Partnership with the Community
Diane Chlebowy and Judy Schreiber School of Nursing	ACTIONS: Assessing Critical Thinking in Outcomes of Nursing Students
Glynia Ridley A&S-English	Online Journal: Miracle Monocle
Alison Sommers and Pavel Zahorik A&S-Psychological and Brain Sciences	Assessing Critical Thinking in Psychology
Joe Steffen and Tommy Parker A&S-Biology	Laboratory Innovations for Enhanced Learning (LIFE Learning)
Joanna Wolfe A&S-English	Incorporating Critical Thinking into English 101 and 102

Table 6: 2010 i2a Institute Poster Presentations

At the 2010 i2a Institute, a poster session was added to highlight outcomes from the following seven i2a SUN grant projects:

Poster Session Participants	Poster Title
Pam Curtis and Natasha Ramsey Student Affairs-Civic Engagement, Leadership and Service	Creating Comprehensive Departmental Learning Outcomes with Critical Thinking as a Frame
Paula Kommor CEHD-Wellness	Interdisciplinary Wellness Coaching Minor Development Committee
Rich Lewine A&S-Psychological and Brain Sciences	Mood, Critical Thinking and Cognitive Flexibility
Stefanie Livers CEHD-Teaching and Learning	Critical Friends: Building a Professional Learning Community
Regina Roebuck. A&S-Modern Languages	Culminating Experience in Spanish
Janet Spence and Nora Scobie Undergraduate Advising Practice	Warning Intervention Program (WIP)
Mary Pat Wall, Karen Black, Diane Chlebowy, Vicki Hines-Martin, Patricia Martin, and Karen Singleton School of Nursing	Critical Analysis in Nursing Case Management

Table 7: 2008-2009 SUN Grant Project Final Reports

Project	Undergraduate Student Impact	Project Summary Excerpts
A System to Facilitate Capstone Course Culminating Experiences that Involve Community Engagement through Signature Partnership Community Partners Joe Hagerty J.B. Speed School of Engineering-Civil Engineering	300	To facilitate interaction among instructors and students involved in culminating experience courses and members of the community outside campus who might benefit by student efforts during those culminating experiences, a database that included all Speed culminating experience (capstone) courses was developed. Also included in the database are provisions by which service projects can be identified and categorized, so that developed software can match service project needs with capabilities and interests of students and instructors in Speed capstone courses. A user's manual was developed for the database.
Interdisciplinary Wellness Coaching Minor Development Committee Paula Kommor CEHD-Wellness	50-60	An interdisciplinary partnership of five faculty and staff met on a regular basis to develop a curriculum that taught both critical thinking skills and wellness coaching competencies. At each meeting the faculty and staff were engaged in a critical thinking activity. Outcomes from the partnership included syllabi revisions to emphasize critical thinking, wellness coaching competencies and interconnectedness of courses in the minor; creation of marketing materials to promote the minor; and development of a course evaluation. Students on average strongly agreed (4.88/5) that the courses "provided useful guidelines for developing critical thinking skills." Responses of the faculty and staff to the project included: "We are truly interdisciplinary—doing together what none of us could do separately." and "My thinking about critical thinking has enlarged to incorporate new ways of quick evaluation of meetings, classroom experience, and the importance of focusing on main points." The faculty and staff are writing a manuscript for publication on the project.
Developing Parental Support for Children's Early Language Development: An Intervention Plan Jon Lee CEHD-Teaching and Learning	15-30	Funds provided for this project directly benefited the VOA-FES in the purchase of Ages & Stages Questionnaire®, the Early Screening Inventory-Revised and for the training of the VOA-FES children's coordinator in the use of the tools. Additionally, a single subject design research study investigated the effect of the Language is the Key: Talking & Books video intervention on the storybook reading between parent/child dyads. Three families completed the research protocol before uncontrollable events necessitated the project be placed on hold.
Mood, Critical Thinking and Cognitive Flexibility Rich Lewine A&S-Psychological and Brain Sciences	140	Mood induction procedures (administered just prior to taking exams) significantly affected mood: student ratings of mood (sad-happy) and energy (low-high) remained the same after neutral mood induction, but increased significantly after positive mood induction. More importantly, students' critical thinking ratings (made by trained raters blind to instructor's grading of the essays) remained unchanged following neutral mood induction, but increased significantly following positive mood induction. Two implications from this study are 1) The context within which critical thinking is taught and evaluated, that is factors such as student mood and energy level, need to be considered in addition to the teaching of critical thinking skills and 2) The formal implementation and evaluation of critical thinking into courses is a complex, labor-intensive, and time-consuming process into which this study provides but a glimpse and, as a consequence, demands considerably more empirical, longitudinal study.

Critical Friends: Building a Professional Learning Community Stefanie Livers CEHD-Teaching and Learning	95	The objective of this project was to improve the critical thinking in the course, EDTP 201, "The Teaching Profession," in order to rethink background stories. Students were grouped into trios that provided critical friend support. These critical friends participated in a book study to challenge their background stories. In addition, they peer reviewed each other's work, completed collaborative activities, and provided feedback to each other on collaboration, critical thinking, and reflection. Preliminary findings include an increase in student engagement; evidence of critical thinking in assignments, discussions and questions; increased use of the Miniature Guide to Critical Thinking; improved quality of work – students using the rubrics to assess themselves; increase in reflection; and tighter bond/friendship among the triads.
Culminating Experience in Spanish Regina Roebuck A&S-Modern Languages	40	In spring 2010, a one-credit-hour culminating experience was piloted that engaged students in discipline-specific critical thinking skills and exposed them to current research in foreign language learning. As a result of the pilot students' research and recommendations, the curriculum of an entry level course (Spanish 321) was revised so that it now includes opportunities for community engagement, formal language assessment and instructional units on the language learning process. Additionally, the department created a new three-credit-hour course, "Spanish Capstone Seminar," which will be required of all graduating majors and offered each semester. The new course will continue to offer students the opportunity to engage in critical thinking and to investigate an authentic or relevant issue in Hispanic studies. Critical thinking activities, rubrics and an assessment created in the pilot course can be used or modified for the future effects of the course, regardless of its particular focus.
Warning Intervention Program (WIP) Janet Spence and Nora Scobie Undergraduate Advising Practice	28	Ten academic advisors, three Undergraduate Advising staff, and three i2a staff were involved with the initial pilot program that developed a new model of advising (Socratic Advising) that includes critical thinking, intrusive advising, teaching and learning, and Socratic questioning. For the 28 undergraduate students on academic warning who participated in a pilot study of the new advising model, they were significantly more likely to continue with their academic studies one year later than those in a comparable group who did not receive advising based on the new model. The new model of advising has been presented at NACADA conferences and is the focus of a chapter in an upcoming book on advising practices.
Critical Analysis in Nursing Case Management Mary Pat Wall, Karen Black, Diane Chlebowy, Vicki Hines-Martin, Patricia Martin, and Karen Singleton School of Nursing	160	This project supported the development of a DVD-based case study to teach the application of case management strategies. Faculty developed complementary and supplementary written cases that provided multiple alternative paths for follow-up. Project faculty amended the Delphi Center's critical thinking rubric to reflect the specific requirements of this project. The outcomes of this project have been shared with School of Nursing faculty in team and faculty meetings. In November 2009, this project was presented at the American Association of Colleges of Nursing Baccalaureate Education Conference.

2011 i2a Institute

The 2011 Institute delivered renewed energy and ideas for developing critical thinkers in its third consecutive year. Scaled back from four days to three, the conference provided faculty and staff with opportunities to understand, share, and incorporate the Paul-Elder framework of critical thinking into their work with students. Interactive, thought-provoking sessions encouraged participants to deepen their understanding and application of critical thinking in their undergraduate teaching and learning.

Days 1 and 2
Dr. Gerald Nosich returned to Louisville again this year to challenge faculty and staff to deepen their mastery in an advanced critical thinking session, "How Do You Know Your Students are "Getting It"? Assessing for Authentic Integration of Critical Thinking."

Day 3
The third day of the conference featured a structured Q&A session with Dr. Gerald Nosich, a reflection and application session with Harry Pickens, linger and learn at lunch from faculty and staff at UofL who are engaged in i2a SUN (Supporting Undergraduate Innovation) Grant projects, and new concurrent sessions featuring presenters from UofL, Eastern Kentucky University, and Thomas More College.

The 2011 Institute attracted more than 160 participants, with over 20% representing other schools and colleges in the region. Attendees continue to rate the overall quality of the conference highly, and i2a is working to enhance the experience for the 2012 Institute based on feedback from 2011.

Student Impact

Undergraduate students have experienced faculty and staff integrating i2a initiatives across the university during the 2010-2011 year. This student impact section provides a summary of critical thinking and culminating undergraduate experiences (CUE) data collected during the 2010-2011 year. For critical thinking, data are presented from student comments, i2a projects, general education critical thinking assessment, student responses to two national surveys, faculty and student response to a national survey, and institutional surveys. For culminating undergraduate experiences, data are presented from student comments, CUE student evaluations, faculty and student response to a national survey, and institutional surveys.

Critical Thinking
Student Comments

Undergraduate students have experienced faculty and staff integrating critical thinking in undergraduate courses, co-curricular activities and student support services. Specific student comments include Tom Mowen, undergraduate student, Sociology Department, "I like to think of i2a as a tool box and it gives you different tools to take out to apply to a given situation…so for me the ability to take out your tools in a situation is what i2a is about."

Spencer Scruggs, undergraduate student, "This class really has helped me understand and use critical thinking every day. I never realized how much I was missing by not using it. I particularly try to pay attention to the assumptions, point of view, and inferences sections of critical thinking. These sections have helped me with dealing with difficult situations and delicate situations. I have to think about how to approach someone and what assumptions are they going to have as I approach the situation. I also have to think what they are going to infer from what I say. Point of view always helps me in not being so one-sided about things and always thinking about how someone else can approach the situation."

Student Affairs and Co-Curricular Projects
Staff in student affairs and co-curricular departments have been infusing critical thinking concepts in their programs and services for undergraduate students. Three departments that will be highlighted are advising, student affairs, and REACH.

Undergraduate advising staff and academic advisors developed a Socratic advising model that includes critical thinking. For the 28 undergraduate students on academic warning who participated in a pilot study of the Socratic advising model, one year later their semester GPA was significantly higher $(F(3)=3.117, p=.031)$ than those in comparable groups who did not receive advising based on the Socratic model. Additionally, 59% of the students in the pilot returned to academic good standing after one year compared to 35% of the students in the control group.

Over the last several years the Division of Student Affairs has revised their student learning outcomes (SLOs) for student workers to have a greater incorporation of the Assessment Skills and Knowledge (ASK) content standards and critical thinking concepts. A rubric was created to assess the

performance of undergraduate student assistants in the Division of Student Affairs. Critical thinking scores were significantly higher for student workers at the end of their experience, compared to their score at the start of their experience (t=3.363, df=54, p=.001).

Staff in Resources for Academic Achievement (REACH) created a reading prompt and scoring rubric to assess critical reading in an intervention course developed in response to new statewide college readiness standards and regional accreditation standards. The scoring rubric is based on the critical thinking framework developed by Richard Paul and Linda Elder. There was also a statistically significant difference in the mean scores for the pre-critical thinking rubric and the post-critical thinking rubric (t= 10.51, df=151, p<.001). The post-critical thinking rubric score mean (19.05) was significantly higher than the pre-critical thinking rubric score mean (16.69). Additionally, a significant increase in the students' Critical Reading Rubric scores did occur across time (F (6, 678) = 30.86, p <.05).

General Education Critical Thinking Assessment
The general education program outcomes are assessed in a systematic manner using trained faculty raters and a critical thinking rubric. A schedule for assessing general education outcomes in selected courses over a period of several years has been established. The critical thinking rubric has the four dimensions of claim, evidence, inference, and point of view scored on a four-point scale: 4-Clearly Evident, 3-Usually Evident, 2-Minimally Evident, 1-Not Evident.

In fall 2010 general education courses in composition were randomly sampled for the critical thinking outcomes assessment. Out of a maximum score of four, the mean for claim was 2.63, evidence was 2.49, inference was 2.69 and point of view was 2.05. Assessment of critical thinking outcomes in general education courses has consistently revealed point of view as the lowest performing outcome. Dr. Joanna Wolfe, director of the Composition Program, planned on sharing the assessment results and critical thinking rubric with faculty teaching general education composition courses to raise their awareness of all outcome criteria but in particular, point of view.

In spring 2011, general education courses in history, humanities and English lLiterature were randomly sampled for the critical thinking outcomes assessment. Out of a maximum score of 4four, the mean for claim was 2.81, evidence was 2.47, inference was 2.71 and point of view was 2.18. The pattern was similar to previous assessments with point of view continuing to be the lowest performing outcome. Department chairs have expressed an interest in having the results disaggregated so they can see the results for their department's general education courses.

Cooperative Institutional Research Program (CIRP) and Your First College Year survey (YFCY)
The Cooperative Institutional Research Program (CIRP) was administered to incoming first-time, full-time freshmen for the fall 2010 semester. Your First College Year survey (YFCY), the complimentary survey to the CIRP, was administered to freshmen in the spring 2011 semester.

Ten items were identified that address critical thinking abilities on both the CIRP and YFCY surveys. UofL's mean scores were similar to or higher than the two comparison institutions (Comp1 and Comp2) for the CIRP and YFCY critical thinking items. The majority of responses to the identical critical thinking items on the CIRP and YFCY remained the same. The greatest change again this year from CIRP to YFCY administrations was an increase in the item "Ability to see the world from someone else's perspective." Two items that showed a decline from the CIPR fall administration to the YFCY spring administration were "Ask question in class," and "Support your opinions with a logical argument."

Six additional items were identified that address critical thinking abilities on the YFCY survey. A continued encouraging finding is respondents felt that since entering college their critical thinking abilities were strengthened.

Table 1 presents mean scres for the 10 identical critical thinking items on the CIRP and YFCY. Table 2 presents mean scores for six additional critical thinking items on the YFCY survey not included on the CIRP.

Table 1: CIRP and YFCY Identical Critical Thinking Items

Rate yourself on each of the following traits as compared to the average person your age: (1=Lowest 10%, 2=Below Average, 3=Average, 4=Above Average, 5=Highest 10%)		
	CIRP	**YFCY**
Self-confidence (intellectual) UofL Comp1 Comp2	3.75 3.68 3.76	3.76 3.71 3.70
Ability to see the world from someone else's perspective UofL Comp1 Comp2	3.87 3.82 3.85	4.03 4.00 3.96
Tolerance of others with different beliefs UofL Comp1 Comp2	4.05 3.98 4.00	4.05 4.08 4.06
Openness to having my own views challenged UofL Comp1 Comp2	3.76 3.66 3.70	3.77 3.74 3.75
Ability to discuss and negotiate controversial issues UofL Comp1 Comp2	3.89 3.78 3.81	3.77 3.75 3.79
How often in the past year did you: (1-Not at all, 2=Occasionally, 3=Frequently)		
Ask questions in class UofL Comp1 Comp2	2.57 2.53 2.52	2.18 2.09 2.21
Support your opinions with a logical argument UofL Comp1 Comp2	2.57 2.57 2.56	2.35 2.37 2.40
Seek solutions to problems and explain them to others **UofL** Comp1 Comp2	2.47 2.49 2.51	2.33 2.38 2.39
Evaluate the quality or reliability of information you received UofL Comp1 Comp2	2.34 2.32 2.34	2.43 2.37 2.38
Seek alternative solutions to a problem UofL Comp1 Comp2	2.42 2.41 2.42	2.37 2.35 2.35

FSSE/NSSE Comparison

For the first time in spring 2011 the university administered the Faculty Survey of Student Engagement (FSSE) to faculty who taught at least one undergraduate course during the fall 2010 semester. The results from the FSSE were compared with student response to similar items on the National Survey of Student Engagement (NSSE) that was administered to a random sample of freshmen and seniors during spring 2009. Responses by faculty teaching in lower division courses (100-200 level courses) were compared with responses from freshmen and responses by faculty teaching in upper division courses (300-400 level courses) were compared with responses from seniors. Table 3 provides a summary of the faculty and student responses to the critical thinking items on the two instruments.

Table 2: YFCY Additional Critical Thinking Items

	UofL	Comp1	Comp2
Compared with when you <u>entered</u> college: (1-Much Weaker, 2=Weaker, 3=No Change, 4=Stronger, 5=Much Stronger) **How would you describe your critical thinking skills?**	4.00	4.02	3.99
Since entering this college: (1-Not at all, 2=Occasionally, 3=Frequently) **How often have you felt that your courses inspired you to think in new ways?** **Indicate how often you applied concepts from courses to everyday life.**	2.20 2.05	2.27 2.09	2.25 2.11
Please indicate the extent to which you agree or disagree with the following statements: (1-Strongly Disagree, 2-Disagree, 3-Agree, 4-Strongly Agree) **My college experiences have exposed me to diverse opinions, cultures & values.**	3.20	3.21	3.18
Please rate your satisfaction with this institution on each of the aspects of college life listed below: (1-Can't Rate/No Experience, 2=Very Dissatisfied, 3-Dissatisfied, 4-Neutral, 5-Satisfied, 6-Very Satisfied) **Relevance of course work to everyday life** **Respect for the expression of diverse beliefs**	3.48 4.05	3.50 4.04	3.53 3.99

Table 3: FSSE and NSSE Comparison-Critical Thinking Items

	Faculty were asked "In your selected course section, how much emphasis do you place on engaging students in each of these mental activities?"	**Students** were asked "During the current school year, how much has your coursework emphasized the following mental activities?"
Memorizing facts	LD 41%	FR 75%
	UD 14%	SR 65%
Analyzing	LD 91%	FR 85%
	UD 94%	SR 87%
Synthesizing	LD 83%	FR 69%
	UD 94%	SR 75%
Making judgments	LD 70%	FR 70%
	UD 75%	SR 72%
Applying	LD 78%	FR 78%
	UD 86%	SR 81%

The comparative data have initiated conversations about how to narrow the gap between faculty and student perceptions on critical thinking, especially in the area of memorizing facts. The FSSE will be re-administered at the next NSSE administration to have comparative data from both groups at the same time.

Graduating Senior Survey

Since fall 2009, the Office of Institutional Effectiveness within the Office of Academic Planning and Accountability has administered the Graduating Senior survey. The goal of this survey is to gather exit information from graduating seniors about their experiences at UofL. In fall 2010, the majority of graduating seniors rated as "Excellent" (42%) or "Good" (46%) the preparation UofL provided in *thinking critically/resolving analytical problems*. Similarly in spring 2011, the majority of graduating seniors rated as "Excellent" (38%) or "Good" (48%) the preparation UofL provided in *thinking critically/ resolving analytical problems*.

Quality Measurement Systems (QMS) Survey

Beginning in 2009, a question was added to the Quality Measurement Systems survey asking students "To what extent did you have the opportunity to improve your critical thinking skills?" For 2011, the survey was administered online in spring to all undergraduates who had declared a major, except for College of Arts &Sciences undergraduates who were surveyed in the fall. The most frequent response to the question was "Quite a Bit" (43.57%), followed by "Very Much" (28.71%), "Neutral" (16.43%), "Some" (8.86%), and "Very Little" (2.43%).

i2a Unit Annual Report

Compared to the 2010 i2a Integration Map data, for 2011 there was double the number of major courses reported as infusing i2a concepts (297+ in 2011 compared to 139+ in 2010) with an additional 40+ courses identified as in-progress for infusing i2a concepts. The number of reported CUE courses also increased dramatically, 44+ in 2011 compared to 27 in 2010. Caution needs to be used when interpreting these data because the collection process was different in 2010 and 2011. The i2a specialist for assessment believes the 2011 data is a more accurate list of undergraduate courses infusing i2a concepts.

Culminating Undergraduate Experience

Undergraduate students participated in pilots of culminating undergraduate experiences in their majors. Specific student comments include:

- Gaining practice in problem solving by thinking about the unmet needs of my chosen program was helpful.
- Tests are a good way to be sure a student is able to answer a question correctly but does not demonstrate comprehension or the ability to analyze and utilize the material, this class really helped me bring it all together.
- I used the concrete foundation in sociology that I have established throughout the years in a real life setting. This all came together after some critical thought was applied.

CUE Student Evaluation

For the 2010-2011 year, five faculty members administered the Culminating Experience Student Evaluation to a total of 60 students in their course.

Table 4 presents the mean student response to the questions on a scale of 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

	Mean
The culminating undergraduate experience helped me either connect what I learned to real-life situations or contribute to knowledge in the discipline.	4.32
The culminating undergraduate experience provided me an opportunity to apply skills and knowledge I have gained from my major courses.	4.512
The culminating undergraduate experience helped me to see how critical thinking can be used in everyday life.	4.238
The culminating undergraduate experience helped me to better understand other course materials and activities.	4.168
The culminating undergraduate experience helped me become more aware of the issues in my major or discipline.	4.248
The culminating undergraduate experience helped me address an authentic issue, topic or situation in my major of discipline	4.367
The culminating undergraduate experience clarified my choice of a major.	4.431
The culminating undergraduate experience improved my ability to analyze ideas and multiple points of view.	4.216
The culminating undergraduate experience enhanced my ability to communicate my ideas in a real world or disciplinary context.	4.42

FSSE/NSSE Comparison

For the first time in spring 2011 the university administered the Faculty Survey of Student Engagement (FSSE) to faculty who taught at least one undergraduate course during the fall 2010 semester. The results from the FSSE were compared with student response to similar items on the National Survey of Student Engagement (NSSE) that was administered to a random sample of freshmen and seniors during spring 2009.

Responses by faculty teaching in lower division courses (100-200 level courses) were compared with responses from freshmen and responses by faculty teaching in upper division courses (300-400 level courses) were compared with responses from seniors. Table 5 provides a summary of the faculty and student responses to community engagement and culminating experience items on the two instruments.

To support this key goal, in fall 2011, the academic units will report on their relevant i2a-related student learning outcomes and activities as part of their annual unit reports submitted in November each year. Additionally, the units will continue to work toward the campus-wide goal of having at least 50% of the programs in each unit having CUE-designated courses in place by spring 2013.

The CUE Subcommittee plans to place the CUE designation on the campus course inventory form (CIF), allowing units to formally mark which courses in their programs allow students to meet their CUE requirement. Finally, the Office of the Provost will issue an invitation to a group of faculty, staff and students to form the QEP 5th Year Impact Committee in order to provide leadership and guidance in the process of gathering data and reporting on our i2a accomplishments as part of our work toward a successful completion of UofL's Five Year Interim Report in March 2013.

Future Directions

As the i2a team and Task Group looks toward the 2011-2012 academic year, they are focused on reaching the five-year i2a milestone in 2012 and successful preparation for the Five Year Interim Report to be completed for SACS by March 2013.

Table 5-FSSE and NSSE Comparison-Community Engagement and Culminating Experience Items

	Faculty were asked "How important is it to you that undergraduates at your institution do the following?"	**Students** were asked "Which of the following have you done or do you plan to do before you graduated from your institution?"
Community service or volunteer work	LD 58%	FR 70%
	UD 58%	SR 75%
Culminating senior experience (capstone course, thesis, project, comprehensive exam, etc.)	LD 83%	FR 42%
	UD 8%	SR 63%

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