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Cheelan Bo-Linn
Center for Teaching Excellence

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The following projects were among those awarded funding from the Provost’s Initiative on Teaching Advancement to support innovative instructional programs.

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Department of Kinesiology and Community Health

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Developing Undergraduate Student Leadership Skills in a Capstone Community-based Learning Class
Kim C. Graber, Wojtek Chodzko-Zajko, and Jamie O'Connor
Department of Kinesiology and Community Health

The purpose of this project was to implement Stage II of a three-stage project to increase the number of meaningful courses, leadership opportunities, and community-based learning experiences that are available to students in both the Department of Kinesiology and Community Health and the College of Applied Health Sciences. The primary objectives were to (a) encourage undergraduate students to become engaged in their community, (b) facilitate the development of leadership skills to enable students to serve as primary leaders/assistants in other community-based courses in the department, (c) provide students with “real world” experiences that will give them confidence to assume significant positions in the health-related fields upon graduation, (d) expose students to the interdisciplinarity of the college, (d) encourage team-based learning, and (e) support students in the development of a project portfolio that highlights their experiences in the community and encourages reflection about what they learned.

Data were regularly collected to assess the effectiveness of the class in relation to its overall success and potential for developing future course leaders. Overall, the class was perceived by students as extremely relevant and highly desirable. Based on observations, formal interviews, and document analysis, the results indicate that students registered for the course based on recommendations from advisors. Many also expressed a desire to take a hands-on, community-based class outside of their major. When asked what difficulties they might expect a professor of this type of class to face, participants suggested that student autonomy could lead to accountability issues (in the form of not keeping up with weekly assignments, readings, site contacts, etc.). Students also expressed that courses such as AHS 399 are most likely not required in many departments because administrators are reluctant to give that much responsibility to undergraduate students. Students overwhelmingly stated, however, that capstone courses such as AHS 399 should be required because they are hands-on, foster teamwork, help students cope with people’s strengths and weaknesses, and enable communication within a “real-world experience.” When asked if the capstone design seemed more or less effective as a learning tool, participants felt that being allowed to make mistakes in an authentic situation provided a rich experience, and is “the only way to learn.” One student stated that this type of course is a story; “This is something you’ll tell people.” Finally, the results indicate that the course effectively prepared students to assume roles as productive and active citizens in society by providing skills such as teamwork, project planning, and portfolio development that will be particularly relevant in their subsequent careers. They appeared to acquire the ability and confidence to successfully complete their projects, and several will continue as leaders.

How Students Learn Creativity: Evaluation of a New Course
Bruce Elliott-Litchfield
Engineering Administration
Ray Price, David Goldberg, and Holli Burgon
Department of Industrial and Enterprise Systems Engineering

Changes in creativity were studied among students enrolled in two new courses, Creativity, Innovation and Vision (CIV) and Advancing Creativity (AC). In the first class the central course question is “How do I enhance my personal creativity?” and in the advanced class the guiding question is “How do I help others advance their creativity?” In both cases, students who completed the courses scored higher than national norms on two different creativity assessments. Students also reported that as a result of the classes they felt more confident in their creative capabilities, competent in using and sharing techniques for creative thinking, able to deal with obstacles to creative thinking, able to foster a life style and environment to nurture creativity, and able to lead others in creative processes.

Results from early in the study suggested that students were enhancing their creativity in the CIV first course. However, there was both a need – in order to more fully realize meaningful change – and a desire on the part of
some students for a sequel course. So the AC course was developed, and students in the sequel help teach portions of the introductory course. Further instruction on creativity is essential to complement the traditional university instruction dominated by critical thinking, and the pair of courses evaluated in this study represents one effective model for doing so.

**Disability and Relevant Design**

Deana McDonagh  
*School of Art and Design*  
Lydia Khuri  
*University Housing*  
Susann Heft Sears  
*Disability Resources and Educational Services*

Disability + Relevant Design began as a pilot project with the main goal of raising awareness of how Product Design can positively impact daily experiences through people’s interactions with products within the material landscape. Graduate (n=6) and sophomore level (n=20) product design students were partnered with students with disabilities (n=23), who were studying diverse subjects outside design, to develop individually appropriate products for people with disabilities. This was not a traditional research relationship but one in which a meaningful relationship was developed (rather than researcher/subject, they developed designer/life-expert roles). The life-expert users became co-creators of knowledge. Utilising ethnographic and empathic research methods, the designers primarily developed products for their student with disabilities partner who was a volunteer participant and not enrolled in the class. The study included students with a variety of disabilities: Amputation, Cerebral Palsy, Dysreflexia, Muscular Atrophy, Muscular, Dystrophy and Retinitis Pigmentosa.

In order to facilitate the full participation of people with disabilities in the designing process, we need to focus initially on the authentic needs of the individual, gathering information through a variety of methods including observation and recordings. Evaluation of the changing cultures and processes unique to this group of people with disabilities provides insight for greater exchange of ideas and teamwork in co-creating solutions that can provide benefits to the entire population. These steps provide the foundation for increasing economic development and competitiveness by promoting innovation in creativity education and practice in both people with disabilities and able-bodied population by removing the barriers that exclude people with disabilities from the creative process. This is both radical and timely.

**Collecting East Asia**

Anne Burkus-Chasson  
*School of Art and Design*

I established the following goals for the course titled “Collecting East Asia”: 1). That students become familiar with collecting practices in East Asia, as well as historical trends in collecting East Asian art in the United States; 2). That students use visual representation as a means of thinking and learning; 3). That students practice ethnographic research into local collections of East Asian art through interviews and the production of a video. The first goal was accomplished through traditional group discussions of scholarly articles and books. The second goal was accomplished through assignments that combined the use of expository prose with visual representations of the essay’s thesis. These assignments prepared students to conceive of the video they produced as a “visual construction” of their ethnographic research, rather than as a documentary record of the things they viewed in a collection.

**Developing Online Content for Blended Learning in Severe Weather Courses**

Donna J. Charlevoix and Sara Strey  
*Department of Atmospheric Sciences*

The original proposal submitted was to develop online content to be integrated into an existing course. The primary objective of this project was to create learner centered visualizations and learning modules focused on the interdisciplinary intersections of severe weather, climate change and societal impacts: ISWeCS (Intersection of Severe Weather, Climate & Society). The online content was to be incorporated into a lecture-based general education course with the result that the course would be taught in a blended learning format. The funding of
the ISWeCS projects allowed the seed money to make the curriculum shift to a blended learning format in a large lecture class. This was the first large lecture blended format offered on the University of Illinois Urbana-Champaign campus. An initial offering of one section of this course with an enrollment of 100 students in spring 2008 was a success. A second large-enrollment blended learning offering of ATMS 120 took place in spring 2009 with 150 students. Both semesters data was collected to allow for us to conduct SoTL research. We are in the process of drafting the manuscripts for publications related to the outcomes of the research.

**Transparency in the Classroom: Enhancing Communication and Understanding to Improve Learning**

Walter Hurley  
*Department of Animal Sciences*  
Judith Sunderman  
*College of Education*

The project involved the refinement of specific instructional methods that challenge students to reflect on the deeper meaning and personal significance of their learning. The approach involved using guided reflections and discussions to enhance course activities. This study evolved into a two semester effort to gain a better understanding of the role of transparency in the classroom in student learning. The goal was to explore the use of shared perspectives and mutual understanding as tools to enrich learning experiences for students. Here, transparency in the classroom was defined as an extra emphasis on helping students understand the instructor’s rationale and theoretical basis for assignments and class activities in terms of student learning. Instructor reflections and active participation in assignments and activities provided the impetus for exploring issues of transparency.

**Communication Partners and Disability: Community Engagement for Undergraduate Curriculum in Speech and Hearing Science**

Julie Hengst  
*Department of Speech and Hearing Science*

*Communication Partners and Disability—Community Engagement for the Undergraduate Curriculum in Speech and Hearing Science* built on preliminary work in the Department of Speech and Hearing Science (SHS) toward developing a formal service-learning course for our undergraduate curriculum. PITA funding supported graduate students assistants who worked directly with Dr. Hengst to expand the pilot course curriculum, write/submit a course proposal, seek new community partners, and develop evaluation tools for the class, the field sites, and the program as a whole. The new course has been approved and will appear in the Spring 2010 timetable as: *SHS 375 Communication Partners and Health* (also cross-listed as AHS 375, KINS 375). We currently have 11 community partners and over the past year enrolled 40-70 undergraduate students per semester. Our goal is to increase the number of community partners in order to support a semester enrollment of 100-150 students.

**Development of Workshop Materials for Best Teaching Practices Associated with "Diversity in the Classroom"**

Brenda Farnell, Anthony Jerry, Janet Keller, and Monica Santos  
*Department of Anthropology*

In the absence of adequate resources on campus for assisting instructors in developing best teaching practices for diverse classrooms, the Department of Anthropology carried out background ethnographic research among its students and faculty to provide materials for workshops on teaching in diverse classrooms. With the collaboration of *Inner Voices Social Theater* group, real events and incidents were converted into performable scripts and re-enacted, recorded and compiled into a DVD suitable for such workshops. The DVD contains 8 vignettes, each one illustrative of problems that can arise in teaching environments enrolling students of diverse backgrounds and identities. The DVD is accompanied by a facilitator manual and bibliography of supporting articles and websites. These materials are being tested during Fall 2009 prior to the release of a final version. The final product is a DVD and facilitation manual available for circulation throughout campus as a resource for teaching in diverse classrooms. If the DVD is successful, it is possible it will circulate more broadly across campuses in the U.S.
Large-scale Implementation of Enrichment Program for Chemistry Courses
Yi Lu and Lauren Denofrio
Department of Chemistry

The investigators have expanded the reach and impact of Chemistry 199L, “The Chemistry and Biology of Everyday Life (CBEL)” by incorporating its course instructional modules into the mainstream general chemistry curricula Chemistry 202, 203, 204, and 205 for both Fall semester of 2007 and Spring semester of 2008, with ~ 280 students enrollment in each course. The goals have been to bridge the gap between students’ understanding of material in their science courses and their own interests, capture students’ interests in science early and sustain this interest through independent investigation, increase the retention rate of students in the Chemistry major, increase the number of students graduating with a degree in the sciences, build a strong chemistry community that links undergraduates to graduate student and faculty mentors, and increase the number of students partaking in undergraduate research. Preliminary assessment through online surveys indicates that there is significant impact to students who participated in the first stage of modules implementation.

Building on the 2007-2008 academic year’s success and momentum, we were further able to augment this enrichment program to select students in additional chemistry courses (CHEM 102, 104, 236 and 336). Our first action for this academic year was to give the entity/process of modules implementation a name, thus creating a bona fide new program, the Chemistry Enrichment Project (CEP). During this academic year, the CEP has a larger contingency and a longitudinal impact in contrast to last academic year. We began tracking students from the freshman to the sophomore year, and invited back 15 students to this program to participate in a second year of the project, as mentors for the first-year students. Thus we are now replicating the structure and design of the original course (Chemistry 199L) to have students longitudinally invested in the project throughout their entire undergraduate career (freshman to seniors). In this way, the Chemistry Enrichment Project (CEP) is truly emulating the Chemistry 199L idea that students are participating in a “pipeline” that begins in the freshman year and reaches towards professional and graduate school.

The Annual PITA Colloquium is sponsored by the Provost’s Teaching Advancement Board and the Center for Teaching Excellence