

KU TEACHING SUMMIT 2013

Innovations in Teaching and Learning

August 22, 2013

Sponsored by the Provost's Office, KU Medical Center, and the Center for Teaching Excellence

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- 8:00–8:25** **Registration** Northwest Budig entrance
Continental breakfast served in CTE, room 135, until 8:20 a.m.
- 8:30–8:40** **Welcome** Budig 130
Dan Bernstein, CTE Director, & Doug Girod, Executive Vice Chancellor
- 8:40–8:50** **Teaching Recognition**
Bernadette Gray-Little, Chancellor
- 8:50–9:35** **Opening Plenary**
Simon Peacock, University of British Columbia
“Transforming Undergraduate Education Using an Evidence-Based Approach: Successes and Lessons Learned from UBC’s Carl Wieman Science Education Initiative”
- 9:35–9:50** **Door Prizes**
- 9:50–10:05** **Break** — Refreshments are available on the 4th floor of Wescoe

10:05–10:45 **BREAKOUT SESSIONS I**

- A. Interactive OneNote® Guidebook** Wescoe 4012
James Fishback, Pathology & Laboratory Medicine; Bob Klein, Anatomy & Cellular Biology
We will present an overview of the OneNote program and its capabilities, followed by a demonstration of how textbooks have been structured in the OneNote program. Second, we will discuss how OneNote is a better alternative to the e-textbooks and tools that are available from various textbook providers. Finally, we will discuss ways in which OneNote encourages the development of critical thinking skills and the establishment of neural networks.
Please note: This session will be offered only one time.
- B. Pecha Kucha as an Online Presentation Tool: How to Increase Quality and Interest of Online Presentations** Wescoe 4002
Lauren Foster & Becky Nicholson, Occupational Therapy Education
Presenters will discuss how to incorporate the Pecha Kucha format into online teaching to improve the quality and focus of student presentations. Pecha Kucha is a fast-paced, highly visual presentation format (20 slides, 20 seconds each slide). The presenters, who are faculty in the Occupational Therapy Education Department, have paired Pecha Kucha with Adobe Connect to increase quality of online student presentations. Examples from their courses will be provided.
- C. Integrating the KU Common Book into the Classroom: Multi-Disciplinary Approaches** Wescoe 4062
Mary Jo Reiff, English; Sarah Crawford-Parker & Christina Kerns, First Year Experiences
The KU Common Book program aims to create a shared intellectual context for first-year students, to stimulate discussion and interaction, and to cultivate the skills of critical thinking, reading, and engagement with ideas that students will employ throughout their academic lives and beyond. This session will focus on ways that faculty can support these goals and broaden learning experiences of first-year students by integrating the book into courses across the disciplines. The focus, then, will be on innovative approaches to teaching Timothy Egan’s *The Worst Hard Time*, with an emphasis on how the book, with its varied themes and topics, can be adapted across multiple disciplines and courses.

- D. Measuring Undergraduate Learner Outcomes in Research-Related Courses and Experiences: Implications for KU Core Goal #6** Wescoe 4044
Nancy Brady & Holly Storkel, Speech-Language-Hearing
In this session, we will share two examples of undergraduate research courses/experiences that have been approved for KU Core Goal 6: SPLH 660, a research methods course, and SPLH 497/498, a mentored research experience for REP or Departmental Honors Certification. We will focus on our current method for evaluating learner outcomes, current outcome data, and our reflection on what we will do differently in 2013-14, particularly as related to documenting learner outcomes for KU Core Goal 6.
- E. Using a Team Based Learning Approach with Undergraduate Students** Wescoe 4035
Chito Belchez & David Martin, Nursing
Faculty often voice concerns about the lack of students' enthusiasm toward course content. Students also express that when content is provided in a classical lecture format using Power Point slides, this dampens their engagement in the learning process. This is the classical set up for a passive learning environment. What both sides are expressing is the desire to abandon this passive approach to learning in favor of an active learning environment. Using a team-based learning approach in a concept based course can provide the student and the instructor with the format for this to occur in the classroom. This presentation will describe faculty experiences with using these principles in two separate required undergraduate nursing courses.
- F. What's the Big Idea? Course Design to Promote Inquiry, Intellectual Curiosity, and Critical Thinking** Wescoe 4045
Rob Bayliss, Spanish & Portuguese; Chuck Epp, School of Public Affairs & Administration; Nathan Wood, History
In this session faculty from the pilot First Year Seminar program will share how they designed courses aimed at developing the intellectual curiosity, critical thinking, and communication skills of first year students. Discussion will focus on how to use the "big ideas" in an academic field to promote inquiry and foundational skills in novice students.
- G. Rethinking "Getting It": Identifying and Teaching Discipline-Specific Threshold Concepts to Promote Powerful Learning** Wescoe 4076
Reva Friedman, Curriculum & Teaching; Dan Hirmas, Geography
Threshold concepts are credited with irrevocably altering how learners perceive or experience key ideas and content within a discipline. The consequence of failing to acquire threshold concepts is to be conceptually "stuck" and unable to progress. These conceptual bottlenecks are often referred to as troublesome knowledge. In this session, we'll discuss threshold/bottleneck concepts and discover strategies for identifying and teaching these concepts, both from our own experiences and the literature. Session participants will engage in an activity where they will create a list of potential threshold concepts in their field, and the group will work to discuss strategies for teaching those concepts.
- H. Challenging Freshmen with Learning Projects** Wescoe 4023
Doug Ward, Journalism
This session will focus on the use of individual and group projects in a hybrid course aimed at freshmen. It will explore such topics as student-generated learning goals, classroom design, use of online tools to help students learn, and the challenges of turning over class time to students as they develop their projects.
- I. Developing Clinical Reasoning Skills in First-Semester Medical Students** Wescoe 4041
Michael Parmely, Microbiology, Molecular Genetics & Immunology
Critical thinking applied to the analysis of complex clinical data is an important skill that we strive to develop even in the first year of medical school. This session will utilize a simple clinical case to illustrate how active learning approaches, including concept mapping, can develop clinical reasoning, a better understanding of the basic mechanisms of disease, and improved diagnostic skills. Participants in the session will develop learning objectives, pose diagnostic hypotheses, and develop their own map of the pathogenesis of a prototype disease.

- J. Getting Students to Read Using Digital Technologies** Wescoe 4007
Angela Lumpkin & Rebecca Achen, Health, Sport & Exercise Sciences
 This session will be divided into two parts: Lino and group blogs. Lino is an online sticky note service used to facilitate class discussions about assigned readings through anonymous, real-time postings by students. Using group blogs through Blackboard encourages students to read by posting questions that require them to apply concepts, explain their understanding, clarify important takeaways from assigned readings, and assess their understanding. Grouping responses for emphasis visually and during class, providing feedback on responses, and asking students to expand on their responses are among the many options for facilitating class discussions using these technologies.
- K. Course Redesign, Scaffolding Assignments, and Information Literacy Skills for Large Introductory Classes** Wescoe 4034
Nikhat Ghouse, KU Libraries; Akiko Takeyama, Anthropology/WGSS
 The presenters will share how they implemented library research into ANTH 108/308: Introduction to Cultural Anthropology, which is a large survey course. In addition to an in-class lecture, we designed and scaffolded the assignments and group activities toward completing two final projects. These tasks and assignments include homework and in-class activities, research proposal, searching for scholarly resources, annotated bibliography, and citing correctly. We will also discuss our plans for further scaffolding and assessment of student learning for this upcoming fall semester.
- L. Developing a Course for Core Goal #5: Practice Social Responsibility and Demonstrate Ethical Behavior** Wescoe 4025
Jomella Watson-Thompson, Applied Behavioral Sciences; Andi Witczak, Center for Civic & Social Responsibility
 The presenters will discuss how to frame ethics and social responsibility from a disciplinary perspective; e.g., discussing ethical behavior within the context of social responsibility, and not necessarily orienting to a theory of ethics. Participants in this session will be invited to think about the ethical considerations that could be lifted up in the courses that they are already teaching or planning to teach. In addition, we'll discuss potential assignments or strategies for documenting student learning. Bring course ideas and be ready to work in small teams. Each team will offer suggestions as to how the course could meet the learning outcomes for KU Core Goal #5.
- M. Best Practices in Undergraduate Research Mentoring: Comparing Models Across the Disciplines** Wescoe 4067
Robert Fiorentino, Linguistics; Jennifer Gleason, Ecology & Evolutionary Biology; Tanya Hartman, Visual Art
 This session will explore the best practices of undergraduate research mentoring from the perspective of faculty in diverse fields, including Linguistics, Biology, and Visual Art. The panelists will give a brief overview of their experiences mentoring undergraduate scholarship, with a focus on the most successful practices in transitioning students from consumers to creators of knowledge, challenging undergraduate students to meet their potential, and managing the time demands of mentoring. The emphasis of the session will be to explore how these best practices could be used across different disciplines.

10:55–11:35 BREAKOUT SESSIONS II

These sessions, first offered during Breakout I, will repeat at this time:

- B. Pecha Kucha as an Online Presentation Tool Wescoe 4002
- C. Integrating the KU Common Book into the Classroom Wescoe 4062
- D. Measuring Undergrad. Learner Outcomes in Research-Related Courses/Experiences Wescoe 4044
- E. Using a Team-Based Learning Approach with Undergraduate Students Wescoe 4035
- F. What's the Big Idea? Course Design to Promote Inquiry/Curiosity/Critical Thinking Wescoe 4045
- G. Rethinking "Getting It": Threshold Concepts to Promote Powerful Learning Wescoe 4076

These sessions are new during Breakout II:

- N. Innovations in Teaching and Learning in STEM Disciplines** Wescoe 4012
Simon Peacock, Univ. of British Columbia; Anna Hiatt, Ecology & Evolutionary Biology
Teaching and learning in the STEM disciplines is undergoing rapid transformation, with increased use of evidence-based, student-centered teaching strategies and technologies. The leaders of this session will facilitate a conversation about how to best apply these innovations for improved learning in the wide range of students who take STEM classes at KU.
Please note: This session will be offered only one time.
- O. Assessing Core Goals #5: Practice Social Responsibility and Ethical Behavior** Wescoe 4025
Glenn Adams, Psychology
What does social responsibility look like? How does one know when one's students have learned it? In this session, I will invite participants to reflect on these questions after a brief presentation of a case study that I draw from collaborative research I conducted in Spring 2013 with colleagues in the Departments of History and Psychology.
Please note: This session will be offered only one time.
- P. Concept-Based Learning: An Emerging National Trend** Wescoe 4040
Lorraine Buchanan & Kathy Fletcher, Nursing
Concept-based learning allows students to use concepts to organize ideas, principles, or information as they learn. Additionally, conceptual learning involves connecting facts in a meaningful way so they will be recalled more easily. These connections facilitate the retrieval and application of information as students experience similar relevant situations in the future. Designing a course using a conceptual methodology is a difficult task for most faculty, because they have trouble letting go of all the specific facts of their content. This presentation highlights the process that these faculty members used to transition from a traditional nursing lecture course to one where learners are encouraged to engage. Steps for developing the conceptual format as well as actions that supported the process will be emphasized, plus lessons learned from developing a conceptually based course.
Please note: This session will be offered only one time.
- Q. Infusing Research Skills and Content in a Freshman Course** Wescoe 4033
Dennis Karney, Business; John Stratton, KU Libraries
In Fall 2012, the presenters co-taught a First Year Seminar course entitled Business 177: Commerce Today. Our primary goal was to achieve the objectives of the FYS initiative, namely the development of research skills and critical thinking, by moving students beyond Google searches and Wikipedia reading to intelligently research and discuss selected current issues affecting the world of international business. To achieve this we needed to collaboratively teach in a manner which infused the development of information literacy skills into the fabric of the course. Our presentation will provide details about our pedagogical approach, methods and topics used to instruct students to meet course expectations, and what our assessments revealed in terms of those expectations. We will also highlight potential changes we plan to make in Fall 2013, as well as discuss the benefits of immersing a librarian in a course, not just a class.
- R. Problem-Based Learning in a Technology Environment** Wescoe 4071
David Pendergrass, Molecular Biology
Participants will review the educational design of BIOL 600, Introduction to Biochemistry. The review will cover the paradigm of using problem-based learning outcomes by allowing students to watch previously recorded lectures of the content material and then convening during class time to solve the problems presented. The content will furthermore be conducted in a realtime live and online setting that demonstrates a unique version for distance learning. A demonstration of the actual recording of the course will be included.
- S. Interdisciplinary Interprofessional Online Learning: Populations Based Healthcare for Occupational Therapists and Nurses** Wescoe 4008
Vicki Hicks & Wendy Hillenbrand, Nursing
In this session, participants will discuss the impact that electronic communication, particularly online communication, has on learning in an interdisciplinary, interprofessional setting.

T. Flipped Classes: Using Class Time to Teach Introductory Research Skills Wescoe 4001
Mark Mort, Ecology & Evolutionary Biology; Mike Vitevitch, Psychology
In a "flipped class" content is delivered on-line, freeing up class time for hands-on learning activities that promote deep and active learning. This session will highlight some ways that this class time can be used to develop foundational research skills in introductory-level class.

U. State of the KU Core Wescoe 4043
Ann Cudd, Undergraduate Studies; Chuck Marsh, Journalism; Kelli Thomas, Curriculum & Teaching
Launching in the Fall 2013 semester, the KU Core comprises six goals that shape a student-centered, learning-outcome based, university-wide core curriculum of approximately 36 hours for all incoming undergraduate students. The six KU Core goals address critical thinking and quantitative literacy, communication, breadth of knowledge, culture and diversity, social responsibility and ethics, and integration and creativity. In 2012-13, the University Core Curriculum Committee approved 1,309 course-learning outcome matches for the KU Core curriculum. Core-related aspirations for 2013-14 include the review and approval of additional courses and educational experiences and the creation of a review and recertification process for courses and educational experiences already approved.

11:45-12:25 BREAKOUT SESSIONS III

These sessions are new during Breakout III:

V. Active Learning in Basic Sciences: The Micro-dissection Team Concept Wescoe 4012
James Fishback, Pathology & Lab Medicine; Bob Klein, Anatomy & Cellular Biology
The School of Medicine has been utilizing a microscope simulator (virtual microscopy) system since 2005. Originally, students simply followed faculty leaders as they illustrated key features of specimen slides. To make the process more active, students are now assigned to "micro-dissection" teams, which mimics our team approach to gross anatomy. In this session, we'll describe how student teams function, how team projects help students meet course goals, and how students have responded to this approach. We'll also discuss how session participants might use the team concept with simulations in other undergraduate lab courses.

W. Documenting Critical Thinking Skills for the KU Core: A Report from the Pilot First Year Seminar Assessment Wescoe 4062
Sarah Crawford-Parker, First Year Experiences; Andrea Greenhoot, CTE/Psychology
With the launch of the KU Core, faculty and departments are starting to consider how to document student achievement of Core learning outcomes. In this session, faculty from the First Year Seminar program will share their approach to teaching and documenting students' Critical Thinking (Goal 1 Learning Outcome 1) in FYS courses. Participants will be invited to consider the value and sustainability of our approach, as well as what the data can tell us about FYS course design.

These sessions will repeat during this time:

Q. Infusing Research Skills and Content in a Freshman Course Wescoe 4033
R. Problem-Based Learning in a Technology Environment Wescoe 4071
S. Interdisciplinary Interprofessional Online Learning Wescoe 4008
T. Flipped Classes: Using Class Time to Teach Introductory Research Skills Wescoe 4001
U. State of the KU Core Wescoe 4043

In addition, the following sessions, first offered in Breakout I, will repeat at this time:

H. Challenging Freshman with Learning Projects Wescoe 4023
I. Developing Clinical Reasoning Skills in First-Semester Medical Students Wescoe 4041
J. Getting Students to Read Using Digital Technologies Wescoe 4007
K. Course Redesign, Scaffolding & Information Literacy Skills for Large Intro Courses Wescoe 4034
L. Developing a Course for Core Goal #5 Wescoe 4025
M. Best Practices in Undergraduate Research Mentoring Wescoe 4067

12:30–1:00 LUNCH

4th floor Wescoe hallway

Pick up a box lunch from tables at the west end of the 4th floor, then join an informal discussion:

The Teaching Post-Doc Program — <i>Dan Bernstein & Simon Peacock</i>	Wescoe 4040
Mentoring Graduate Students — <i>Thomas Heilke & Roberta Pokphanh</i>	Wescoe 4041
The First-Year Experience: Transforming KU’s Undergraduate Academic Culture from the Ground Up — <i>Rob Bayliss, Sarah Crawford-Parker, Jeremy Shellhorn</i>	Wescoe 4043
Creating Sharable/Reusable Course Resources — <i>Kim Glover & Julie Loats</i>	Wescoe 4044
Teaching Triads — <i>Jeff Hall & Dena Register</i>	Wescoe 4045

Special thanks to the following offices for participating in the Info Fair during Summit breaks:

Center for Civic & Social Responsibility, KU Libraries, Ombuds Office, Privacy Office, Spencer Museum of Art, Writing Center

BREAKOUTS SUMMARY

<u>Room</u>	<u>Breakout I: 10:05–10:45</u>	<u>Breakout II: 10:55–11:35</u>	<u>Breakout III: 11:45–12:25</u>
4001		T. Flipped Classes	T. Flipped Classes
4002	B. Pecha Kucha	B. Pecha Kucha	
4007	J. Getting Students to Read		J. Getting Students to Read
4008		S. Population Based Healthcare	S. Population Based Healthcare
4012	A. OneNote Guidebook	N. Innovations in STEM	V. Micro-dissection Team Concept
4023	H. Learning Projects		H. Learning Projects
4025	L. Developing for Goal #5	O. Assessing Goal #5	L. Developing for Goal #5
4033		Q. Infusing Research	Q. Infusing Research
4034	K. For Large Intro Courses		K. For Large Intro Courses
4035	E. Team Based Learning	E. Team Based Learning	
4040		P. Concept Based Learning	
4041	I. Clinical Reasoning		I. Clinical Reasoning
4043		U. State of the KU Core	U. State of the KU Core
4044	D. Measuring Outcomes	D. Measuring Outcomes	
4045	F. What’s the Big Idea?	F. What’s the Big Idea?	
4062	C. Integrating Common Book	C. Integrating Common Book	W. First Year Seminar Report
4067	M. Undergrad Research Mentoring		M. Undergrad Research Mentoring
4071		R. PBL in Tech Environment	R. PBL in Tech Environment
4076	G. Getting It	G. Getting It	