

Teaching Matters

News & Information from CTE

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Teacher-student connections tied to long-term learning

At the Teaching Summit plenary last August, Charlie Blaich and Kathy Wise shared some surprises from their groundbreaking work, the Wabash National Study of Liberal Arts Education. The Wabash study is a multi-institutional, longitudinal study designed to identify practices and conditions that promote a number of desired student outcomes of college—qualities such as effective reasoning and problem solving, curiosity and interest in deep intellectual work, openness to diversity, and moral reasoning.

Blaich, Wise and colleagues have tracked changes in these outcomes in over 17,000 students from 49 institutions. At the Summit, they discussed some of the lessons learned from the Wabash study so far (from the initial cohort of about 3000 students from 19 large and small institutions), and the implications for how we work as teachers.

Good pedagogy is important, Blaich said, but students need professors who make connections with them. They notice instructors



Blaich, Wise and Greenhoot at Summit. Photo Jana Tigchelaar

who experiment with teaching and pay attention to students. They learn from them.

A Gallup-Purdue Index Report released earlier this year further reinforced that idea. College graduates who felt that their professors connected with them, cared about them and made them excited about learning were far more likely to thrive in their lives (chronicle.com/article/A-Caring-Professor-May-Be-Key/146409/).

That held true whether colleges were large or small, public or private. The connectedness doubled the likelihood that graduates were engaged in their jobs and felt an overall sense of well being.

None of that is surprising, but it reminds us of the role that instructors play in the lives of college students. We matter.

—Andrea Greenhoot
& Doug Ward

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How can we create more opportunities to connect with our students at KU?

Andrea Greenhoot

CTE/Psychology

The plenary at this year's Teaching Summit produced a real buzz about the role of professor-student connection in supporting student learning and personal development.

Initially, the Wabash study findings that Charlie Blaich and Kathy Wise presented were quite sobering: students showed far less growth across four years of college than most of us would either hope or expect to see. There were moderate improvements in a few outcomes such as moral reasoning and critical thinking, but declines in many others, including academic motivation, attitudes about literacy, contributions to the sciences and the arts, political and social involvement, and openness to diversity and challenge. Most of these qualities showed precipitous drops from the beginning to the end of the first year of college, with little improvement across years 2, 3 and 4. Yet at each institution there were students who

showed more positive trajectories than the norms, so Blaich and Wise then revealed some of the conditions that differentiated between students who improved and those who did not. Among the most important was the degree to which students experienced "high quality interactions with faculty." Yet most students in the study reported experiencing these conditions only "occasionally" or "sometimes."

Many Summit participants asked: How can we create more opportunities to connect with our students at KU?

The answer becomes clearer when we break down what Blaich and Wise mean by "high quality interactions with faculty." As defined in their study, students experience these interactions when professors provide feedback, engage in non-classroom interactions that influence student aspirations and interest in ideas, and show that they are interested

in students and their understanding and reactions to material. In other words, professors can foster development by getting to know their students, and **their learning.**

Some long-standing teaching environments—such as seminar courses, studios and courses in which critique is a signature pedagogy—provide fertile ground for these practices. In these contexts, teachers can use dialogue, in-class activities, and assignments to reveal student understanding, then provide targeted feedback and/or adjust instruction. Many of the new teaching activities that KU faculty are developing create environments in which the teacher can more easily get to know students and their learning. First Year Seminars—small-enrollment courses organized around exciting academic content—are designed to provide students more opportunities for these types of interactions at the start of their KU experience.

In very large classes, more and more faculty are developing pre-class assignments (e.g., problem sets, reading quizzes, or discussion board or blog posts) that they can review before class to learn about student perceptions or identify skills or concepts that need further support in the next class

"Many of the new teaching activities that KU faculty are developing create environments in which the teacher can more easily get to know students and their learning."

period. Many are also reorganizing in-class time with student-centered active learning strategies like think-pair-share, group discussion or problem solving, team-based learning, and student response systems (e.g., clickers or polling software). All of these uncover far more valuable information about how students are processing material than nods, diligent note-taking, or a few responses to occasional questions. Indeed, many instructors who integrate clickers or problem solving into large classes discover that concepts that they had for years believed students “got” from the lecture were actually widely misunderstood. This immediate and meaningful feedback allows for a quick change in direction to address difficulties as the class period unfolds. Happily, sometimes the reverse is true: students reveal that they are already competent in

an area, and the instructor can quickly move on to complex or troublesome issues.

Importantly, to most effectively harness these strategies to foster meaningful connections with students, faculty need to find ways to make it clear to students what they have learned about them: start class with a summary or samples of particularly interesting student responses on the pre-class assignment, or explicitly address how their responses on a pre-class or in-class activity have informed what they are doing in the class.

In this issue of *Teaching Matters*, we’ll look at several ways that faculty are connecting with students. For more ideas, consider joining the C21 Course Redesign Consortium, a group of 80+ individuals from across campus who share a goal of student-centered course transformation. To join, contact Judy Eddy at jeddy@ku.edu.

New leaders named for CTE

In May Andrea Greenhoot, professor of psychology, was named the new director and Gault Teaching Scholar at the Center for Teaching Excellence. Greenhoot served as a CTE Faculty Fellow from 2009-13, and she was acting associate director in 2013-14. She has shared her work on teaching and learning at the national and international level, and she brings to CTE a deep understanding of teaching as a scholarly activity.

In August Doug Ward, associate professor of journalism and mass communications, was named CTE’s new associate director. One of Ward’s areas of expertise is teaching and technology, and he brings to CTE an understanding of the challenges and opportunities facing higher education. He blogs about recent news, research, trends and thoughts about education in Bloom’s Sixth (www.cteblog.dept.ku.edu).

News In Brief

Next spring, CTE will revamp its **Peer Triad** program. Five faculty members will lead triads; each will focus on one of these topics:

- Using teams to increase student responsibility for learning
- Blending active learning and learner outcomes in large classes
- Bridging theory and practice with service learning
- Reinforcing application and interpretation in research methods courses
- Scaffolding discussions in graduate courses

Triad participants will meet about five hours during the spring semester to collaborate on their teaching questions.

To participate in the program, attend the Kick-Off meeting on Dec. 15, 12–1 PM at CTE, or contact Judy Eddy at jeddy@ku.edu.

In September, CTE held its initial conference for the **Collaborative Humanities Redesign Project** (CHRP), funded by a \$215,000 grant from the Teagle Foundation. CTE is partnering with centers at Rockhurst, Park and Elon universities to build communities of faculty who will enhance engaged learning in humanities courses.

Meagan Patterson was named a CTE Faculty Fellow this fall. Patterson, an associate professor in psychology and research in education, joins Faculty Fellows Caroline Bennett, Chris Haufler, Mark Mort, Amy Rossomondo and Susan Williams.

Wabash Study affirms classroom philosophy

Jim Orr, Ecology & Evolutionary Biology; with Rebekah Taussig, CTE/English

At this year's Teaching Summit, Charlie Blaich and Kathy Wise shared refreshing results from the Wabash National Study: connecting with students improves their performance. Their research affirmed a philosophy I have been practicing in my classes for years.

In all of my courses, I make it a priority to let students know that I care about their performance in the class, and I am there to help them succeed. In my introductory-level classes, I demonstrate this on the first day of class with a presentation that includes a "Top Ten List" of my expectations (see right). Aside from the typical academic objectives, one item on the list is "Say hello to the instructor outside of class." I think it shows the students that I'm approachable, and that I want to know them as individuals.

There are many questions you can ask students to help them open up in out-of-class conversations: Where are they from? What are their goals? What careers are they thinking about?

"If students know that you care about how they are doing, how much they are learning, and how they are performing, they may try a little harder."

In my upper-level classes, I start each session with a small group discussion in the front of the room for the entire group to hear. When the students walk into the classroom, a random list of 20 students is projected on the screen. These students are invited to sit in the front rows of the room for a discussion with me. I ask them questions that ideally go a little bit beyond what was previously presented in class and apply what we learned. My students take this time seriously, and use it to really try to understand the material better. This question/answer session allows me to create more of a connection with these students than just lecturing.

I do not want students to have the impression that my goal as a teacher is to fail them. There is always a fine line between maintaining professionalism and student/teacher relationships, while still trying to indicate an interest in how they are doing. I strive to maintain that balance. The Wabash National Study af-

firmed what I have always believed and practiced in my teaching: if students know that you care about how they are doing, how much they are learning, and how they are performing, they may try a little harder.

Orr's "Top Ten Things that Make the Instructors Happy"

10. Students come to class.
9. Students pay attention in class.
8. Students are excited about biology.
7. Students take advantage of the instructors' office hours.
6. Students don't leave class early.
5. Launch Pad [website for course material] surpasses all video game entertainment on the KU campus.
4. Students say hello to the instructors outside of class.
3. Bill Self autographs Biology 150 notepads as students queue up for basketball game seats.
2. Students recopy their lecture notes on brown paper napkins at the Underground.
1. Students participate in PLUS program [voluntary weekly discussion/workshop activities that supplement lectures].

Real time complexity creates new opportunity

Amy Rossomondo, Spanish & Portuguese; with Ben Guyer, CTE/History

This fall, the Department of Spanish and Portuguese began offering its first hybrid version of Intermediate Spanish II (SPAN 216). Traditionally, our advanced Spanish courses have been small; the intimacy generated by this kind of learning environment has been one of the greatest strengths of these classes. But a new media-rich room, which allows us to use digital curricula during classtime, has caused us to change the way we are teaching Spanish II.

Because of scheduling complexities, we could not fit two sections of the class in the new room for the standard three contact hours per week. So we changed how the class meets. With the new format, we have both sections of the course (total 36 students) meet at the same time with two instructors. They meet two days a week, 50 minutes each day, and complete in-class work in groups.

The third class is a hybrid day, which allows us to recreate small classes virtually. The in-class groups are extended to the out-of-class activities, so students work in small learning communities. Each unit divides students into groups of six. Students stay in the same group throughout a unit. For each hybrid day, students complete investigation assignments and post their findings to a

group blog, as well as respond to each other's posts.

We also added a weekly reflection journal to ensure that students are reading comments from their group members on the weekly assignments described above. They are asked to reflect on these comments, the feedback that they are getting from their instructors on other assignments, and any other concerns or questions that they may have had the week before.

Instead of feeling alienated because they are working on projects online, students have consistently indicated that they feel close to their group members. In fact, students have expressed only one displeasure with the new course format: they don't want to dissolve their groups at the end of each unit.

The reflection journal has turned out to be an amazing tool. I feel like I know my students much better than I ever have. I have been able to make adjustments in the course, respond to valid concerns (like the timing of due dates), and explain the rationale for aspects of the course.

Not for the faint of heart, though! There is a lot of honesty,



but it works both ways. For example, one student complained that he thought the journal was a waste of time and asked a series of questions, the last of which was whether he would get a bad grade on the journal that week because he asked so many questions. I answered his questions and then explained that he would not be earning full credit for the assignment that week because he didn't respond to all the prompts (reflection about feedback, etc.). I added that a journal is an appropriate place to vent frustration and that he seemed to have availed himself of that function nicely.

Alternately, students regularly express appreciation and tell me which learning activities helped them each week. Truly invaluable! Reading journals takes me less than one hour a week, and the impact is worth 10 times that. Far from undermining the intimacy we had in SPAN 216, hybrid day has enhanced it.

Mixing chocolate and thermodynamics in an environmental studies course

Doug Ward

CTE/Journalism & Mass Communications

Chocolate and thermodynamics don't seem like a natural fit at first glance.

But Kathleen Dahl-Nuckolls has found a way not only to tie them together but to use them to help students understand the principles of energy transfer.

Dahl-Nuckolls, a multi-term lecturer at KU, has been experimenting with ways to improve student engagement in Environmental Studies 148 this fall. Instead of relying solely on lecture in her class of 100-plus students in 330 Strong Hall, she has been using an online tool called Sli.do to allow students to submit answers with their phones, tablets and laptops.

Dahl-Nuckolls moves around the room, asking how students arrived at their answers, listening, prompting, elaborating and illuminating. Her relaxed style keeps students engaged and makes it safe for them to participate.

She saw the payoff in that approach during what begs to be called "the chocolate lecture."

On a recent Tuesday, Dahl-Nuckolls handed out small bars of milk chocolate and asked students

to consider the energy transfers involved in creating the chocolate and, ultimately, in allowing them to consume the energy in the chocolate.

She had used that approach in previous semesters but had always explained the possibilities to students, who "just sort of glazed



over" as she showed them a PowerPoint slide with cocoa beans, sugar and milk. This semester, she set up an open-ended question with Sli.do and had students text in ideas about the steps involved.

Not only did students see the things that Dahl-Nuckolls wanted them to see—plants turning sunlight into energy; cattle eating the plants and making milk—but they provided answers that she hadn't anticipated. Several gave examples like workers harvesting sugar

cane, and chocolate makers roasting cocoa beans and extracting cocoa butter. A couple of students said "Prof. Nuckolls getting the candy from the store."

"One said something like, '... getting the milk out of the cow. Ewww!,'" Dahl-Nuckolls said. "I was surprised (and gratified) to see that the students were comfortable enough to joke around."

In her classes, Dahl-Nuckolls tries to find an appropriate line between "I'm in charge here" and "We're all in this together," she said. "I use a lot of examples from my own life and try to find examples that everyone can relate to—the best

ones are things that show that I'm 'just like them' in some way."

She also tries to "model an attitude of constant learning, show that I'm not afraid of not knowing something, and let students know that they have things that they can teach me."

Like some of the principles of thermodynamics involved in making chocolate.

Faculty members illustrate teaching innovations in CTE's Gallery of e-portfolios

Last summer, CTE completed work on a set of new e-portfolios published in the online Gallery (cte.ku.edu/portfolios). The ten new entries are:

Genevieve Baudoin, architecture: “Site in Architecture: Transforming a Lecture Course.”

Baudoin restructured a large, upper-level course by developing a series of mapping assignments to tie together readings, lectures and course objectives.

Hyesun Cho, curriculum and teaching: “Incorporating Active Learning in an Online Course to Increase Graduate Student Engagement.” Cho focused on designing online assignments that facilitated interactions among students, as well as between students and the instructor.

Evangelia Chryssikou, psychology: “From Neurons to the Brain: Redesigning a Neuroscience Course to Enhance Student Learning and Engagement.”

Chryssikou increased engagement by creating online quizzes and in-class mini-seminars.

Heather Getha-Taylor, public affairs and administration: “Helping Students Understand Abstract Ideas.” Getha-Taylor used an inductive approach to design and implement a team assignment in a graduate course.

Kim Glover, KU Libraries: “Constructing Learning in the

Online Environment.” Glover scaffolded assignments that required students to analyze ill-structured research problems and create an annotated bibliography to address them.

Bruce Johnson, architecture: “Measuring Group Work in a Fabrication Setting.” For a studio course, Johnson determined an effective way to assess students’ skills, both as individuals and as teams.

Mariya Omelicheva, Russian, East European, and Eurasian studies: “Portfolio Assessment: An Alternative to Traditional Performance Evaluation Methods in the Area Studies Programs.” CREES restructured their MA requirements and replaced the exam with a student portfolio, which was better aligned with program goals.

Misty Schieberle, English: “Encouraging Students’ Analytical Abilities in a Large Literature Survey.” Due to increased enrollment, Schieberle redesigned a survey course to maintain the rigor and engagement of a small class and to strengthen students’ analytical skills.

Hyunjin Seo, journalism and mass communications: “Social Media as a Vehicle for Connecting Theory and Practice.” Seo altered the design of an upper-level undergraduate course to help stu-

dents critically assess and make connections between theory and practice in mass communications.

Susan Twombly, educational leadership and policy studies: “Understanding Before Acting: Teaching Students to Assess Needs.” Twombly revised part of a graduate-level class so that students would develop beginning competencies in program evaluation and assessment.

Links to new e-portfolios:

Baudoin: cte.ku.edu/portfolios/audoin

Cho: cte.ku.edu/portfolios/cho

Chryssikou: cte.ku.edu/portfolios/chryssikou

Getha-Taylor: cte.ku.edu/portfolios/getha-taylor-abstract-ideas

Glover: cte.ku.edu/portfolios/glover

Johnson: cte.ku.edu/portfolios/bruce-johnson

Omelicheva: cte.ku.edu/portfolios/omelicheva

Schieberle: cte.ku.edu/portfolios/schieberle

Seo: cte.ku.edu/portfolios/seo

Twombly: cte.ku.edu/portfolios/twombly

END NOTE

Ten things that make a difference in student learning

As mentioned in this issue, Teaching Summit speakers Charlie Blaich and Kathy Wise outlined findings of the Wabash National Study. Here are practices Blaich and Wise recommend faculty members follow:

1. Provide clear explanations of course goals and requirements.
2. Develop organized classes and presentations.
3. Ensure that students work hard to prepare for their classes and are required to read and write a substantial amount of material.
4. Ask students to integrate ideas and information from different sources and to include diverse perspectives in their work.
5. Ensure that students have learned material before moving on to new material.
6. Provide timely feedback.
7. Challenge students to analyze and synthesize information and make judgments about ideas, experiences, and theories.
8. Ask students to examine the strengths and weaknesses of their ideas and to understand someone else's view by imagining how an issue looks from his or her perspective.
9. Have a genuine interest in teaching and in helping students grow in more than just academic areas.
10. Engage in high quality, non-classroom interactions that influence students' growth, values, career aspirations, and interest in ideas.



For a complete list of effective practices and conditions, see www.liberalarts.wabash.edu/study-research

Teaching Matters is published by CTE, and edited by Judy Eddy. We welcome your comments and suggestions.

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