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TEACHING AND LEARNING

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Conference Proceedings

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## Preface to Conference Proceedings

This past January approximately 200 conference participants attended the Lilly Conference on College and University Teaching in Austin, Texas. These individuals represented 118 different institutions, from 27 states. The conference program offered 3 plenary speakers, 72 concurrent sessions, 6 round-table discussions, and 13 poster presentations.

I am grateful to all of the individuals who presented their work at the Lilly Conference on College and University Teaching, Austin 2015. Conference evaluations, supported by anecdotal comments, clearly noted the quality of the session presentations, both in content and delivery.

Of the many things that are needed to make a conference a success, conference presentations are by far the most important. This is certainly a group effort and I appreciate the willingness of the presenters to help make this important event possible.

Respectively Recorded,



Todd Zakrajsek, Conference Director



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## Plenary Presenters

### Christy Price

Dalton State College

Christy Price is a professor of psychology and the founding director of the Center for Academic Excellence at Dalton State College. She is a nationally recognized authority on innovative teaching techniques to engage modern learners and as a recipient of an institutional foundation grant award, she has studied teaching techniques that influence student motivation. Her most recent research focuses on engaging Millennial learners and preventing incivility in the classroom. Christy has been honored with numerous awards, which are, in part, a result of her use of innovative strategies in assisting students to achieve learning outcomes. Christy's dynamic and interactive style make her a favorite as a professor and presenter. She regularly presents as a keynote speaker and has led faculty development workshops and retreats at over seventy institutions across the United States and abroad.

**Presentation:** *Why Don't My Students Think I'm Groovy? The New "R"s for Engaging Millennial Learners*

### Norm Vaughan

Mount Royal University

Norm Vaughan is a Professor in the Faculty of Teaching and Learning at Mount Royal University in Calgary, Alberta. Norm has co-authored the books *Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry* (2013) and *Blended Learning in Higher Education* (2008) and has published a series of articles on blended learning and faculty development. He is also the Co-founder of the Blended Online Design Network (BOLD), a member of the Community of Inquiry Research Group, the Associate Editor of the *International Journal of Mobile and Blended Learning* and he is on the editorial boards of several journals.

**Presentation:** *Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry*

### Todd Zakrajsek

International Teaching Learning Cooperative

Todd Zakrajsek is an Associate Professor in the Department of Family Medicine and Executive Director of the Academy of Educators at the University of North Carolina, Chapel Hill. Todd served as a tenured associate professor of psychology at Southern Oregon University before directing three teaching centers over the past 15 years. Todd currently serves in leadership roles for several educational efforts, including board membership at Lenovo Computer and Microsoft. He has published and presented widely on the topic of effective teaching and on student learning.

**Presentation:** *Who We Are, What We Do, and How We Do It*

**Presentation:** *The New Science of Learning: How Research is Changing the Way We Teach*



# Transition Points: Hidden Obstacles to Student Success

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## Abstract

As they progress through their courses of study, students often encounter transition points that can be challenging. Some of these periods of uncertainty, such as examinations, are obvious to the instructor. Other more subtle transition points, such as gradual changes in class delivery from didactic to student-centered formats, may create significant student stress that often goes unnoticed and yet which may impede expected progress. Providing a safe learning environment, offering additional opportunities for calibration against peers, taking time to acknowledge hidden stress and effort, and enhancing mentoring activities can assist students who are quietly struggling to handle periods of uncertainty.

## Introduction

The first three years of the veterinary medical curriculum are an intense experience of didactic classes and laboratories, often involving 21 or more semester credit hours. By nature, veterinary medical students prefer to study independently, spend little time in high-level knowledge processing with their peers, and value strong direction from their instructors (Thurman et al, 2009). The fourth year is spent in the veterinary medical teaching hospital, working in small groups with faculty members, house officers, technicians, clients, and patients. The abrupt transition from the relatively passive environment of the large classroom in which students are reluctant to answer questions, to the examination room and hospital wards where opinions and recommendations are sought constantly, can be very stressful for the learner (August, 2014). Recognition of this stressful period in the professional curriculum prompted the presenter to investigate and address more subtle transition points that might be affecting student progress negatively.

## Critical Transitions in the Undergraduate Experience

Based on his observations of students at Harvard in the 1960's, William Perry identified a sequence of stages of intellectual development during the undergraduate years (Perry, 1999). Depending on their individual abilities, his students passed successfully through, or became trapped by, critical transition points in the nine-stage process. At the beginning of their college years, undergraduate students tended to view their world from a dualistic approach; for example, they considered most issues as good or bad, or right or wrong. This early behavioral characteristic was reinforced by considering the instructor to be the ultimate purveyor of knowledge and the subject matter.

As his students progressed further during the early stages of their academic development, Perry noticed that some of them started to have difficulties when confronted with instructors who did not have all of the answers or when they were expected to solve problems independently. By the mid-point in their development, students were no longer thinking in a dualistic way; rather, they would consider the merits of each issue in context. This mid-point appears to be one of the important transitions in student development. The later phases of academic maturity are characterized by an increasing commitment by the students to individual decision-making in an increasingly uncertain environment (Perry, 1999).



In his study, Perry observed that some students struggled with their passage through the nine phases, and when confronted with a difficult transition, they took one of three approaches: they hesitated to take the next step, became detached and alienated, or retreated back to a dualistic viewpoint. Importantly, and not surprisingly, the most difficult transition for many students and their instructors was the point at which the learner must shift from an educational environment that is fact-based to one in which knowledge must be applied to unique situations and contexts.

Perry reminded the reader that instructors typically praise or criticize students for the responses that they give in class or for their academic performance in general. Under-recognized is the courage that students must have to make the successful transition to the next phase of their development, and simple recognition of this hidden effort may be an important motivational factor.

### **Applying Perry's Model to Today's Veterinary Medical Curriculum**

At first glance, it would seem unlikely that observations made on Ivy League undergraduate students in the 1960's could be extrapolated to today's veterinary medical students. However, instructors will quickly recognize the confusion and frustrations expressed by some students in their early clinical courses as they confront ambiguous case studies during the largely fact-based (dualistic) basic science curriculum. As noted previously, the trepidation felt by most third-year students as they start their clinical rotations in the teaching hospital, an uncertain environment in which they must assume increasing responsibility for independent decision-making, is particularly noticeable. It is very likely that many other, more subtle transition points occur in the student experience; for example, when students hear conflicting viewpoints from faculty members, or when distinctly different teaching styles are used by instructors in team-taught courses.

### **Strategies to Assist Students Navigate Challenging Transition Points**

Based on Perry's recommendations and the author's experience, several strategies and practices may be effective in supporting the efforts of students who may be struggling to navigate obvious or subtle transition points in their academic development.

Creating a classroom environment in which students are willing to express their opinions, discuss controversial issues, and make mistakes without significant retribution, can create the safety necessary to take the next step during a period of uncertainty. Providing opportunities for peer calibration at challenging times offers opportunities for the students to compare their progress with their colleagues, either boosting confidence or prompting additional study to keep up. Instructors who think out loud consistently when asked questions help their students understand how they arrived at their answer, based on their extensive personal and professional experiences. In the author's experience, students greatly value this under-utilized practice which facilitates their understanding of the rationale of the instructor's response and provides a template for their own thought processes. Assuming an additional role of mentor proactively around the time of perceived stressful transitions can provide the emotional support needed for students to address the challenges. Svinicki's model of mentoring for faculty development (Svinicki, 1994) can be modified for this purpose. In this model, the mentor considers three variables when providing advice to her/his protégé. First, the mentor considers which issues need to be addressed; in this case, personal growth and instruction. Second, the mentor assesses the career stage of the person for whom she/he is giving advice – this is not based simply on the year of study of the student but also on the perceived stage of intellectual development of the protégé. Lastly, the mentor determines which roles she/he will assume (which hats she/he will wear) when providing advice. Svinicki suggests several roles that mentors might assume, including broker, environmental engineer, visionary, and role model among others. Svinicki's model is a three-dimensional cube, with the ideal advice and mentoring being defined as a point in space inside the cube, based on a confluence of the three variables described above.



## Creating a Safe Learning Environment using Polling Technology

The author teaches a 16-contact-hour elective course on feline internal medicine to 80 students in the last month of the third-year curriculum. Originally a traditional didactic course, it was converted several years ago to a case-based flipped format. Polling technology, using smartphones and tablets, was introduced more recently to promote student engagement and confidence in decision-making at a very stressful transition point in the curriculum.

When participating in audience-response activities, the students valued anonymity very highly. Any exercise that disrupted this trust quickly inhibited their willing expression of opinions and comments. The use of polling technology allowed students to complete their thought processes when analyzing case data – permitting them to submit, and commit to, case management recommendations without distraction. Some students commented specifically on the detrimental effect of hand-raising in their previous classes. Once a quick responder raises her/his hand in class to answer a question from the instructor, many students are triggered subconsciously by this visual cue to stop thinking about the topic, thereby losing a very important learning opportunity to complete a thought process through to its end point.

Students were motivated by opportunities for peer calibration, a confidential and anonymous comparison of their level of understanding of important concepts and facts with their colleagues in the class. Peer pressure may be more motivating than cajoling by the instructor for some students who are struggling to maintain interest or effort in their classes. Although answering questions correctly clearly provides encouragement and builds confidence, students commented specifically on the benefit of answering incorrectly in a safe environment. They appreciated an opportunity to choose an answer, make a decision, and be wrong. Hearing the correct answer after an incorrect response was submitted was an important motivator for self-improvement, and counter-intuitively improved understanding of concepts. In the words of one student “when no grades are associated, I can think more clearly and learn from my mistakes”.

## Recommendations

Even the most integrated curriculum contains widely varying learning experiences for students from increasing diverse academic and social backgrounds and who have different styles of learning and studying. Student stress is most obviously linked to the rigorous examination system that is necessary for documenting competency. However, instructors may underestimate the stress associated with more subtle transitions in the educational continuum, as their students progress from a dualistic, fact-based environment to one of increasing ambiguity and independent decision-making. Candid conversations between academic administrators and student representatives may be useful to identify these under-recognized stress points more accurately.

Providing safe, but demanding, learning experiences in which students can complete thought processes, commit to decisions, compare themselves with their peers, and reflect on mistakes without penalty, all may be helpful in facilitating more confident passage through difficult transitions. Recognition of the emotional and intellectual effort that many students must expend to traverse these personal challenges successfully may significantly increase their self-confidence and motivation. The careful pedagogical application of polling technology at well-defined points in the curriculum may be particularly effective in developing skills that help students cope with an increasingly demanding and uncertain learning environment.



## References

- Thurman, J., Volet, S.E., & Bolton, J.R. (2009). Collaborative, case-based learning: How do students actually learn from each other? *Journal of Veterinary Medical Education*, 36(3):297.
- August, J.R. (2014). From classroom to exam room: Facilitating the transition with polling technology. *Proceedings Annual Forum of the American College of Veterinary Internal Medicine*, 1-3.
- Perry, W.G. (1999). *Forms of ethical and intellectual development in the college years. A scheme*. San Francisco, CA: Jossey Bass.
- Svinicki, M.D. (1994). Beyond teaching: Other areas of development for current and future faculty. *National Issues in Higher Education (Kansas State University)*, 43:12.





# Faculty Perceptions on Scholarship of Teaching and Learning: A Faculty Development Initiative

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### **Abstract**

This article is a synopsis of one university's experiment on a faculty cohort ( $n = 12$ ) that participated in an inaugural program of the Scholarship of Teaching and Learning (SoTL) program at a southwest regional university. Interviews were used to determine the perceived impact on teaching and research as a result of participation in this program. Investigators determined that the participants perceived a positive impact on their teaching methods with a transition toward evidence-based instruction. They also reported an expanded research agenda.

### **Literature Review**

In the spirit of Boyer's *Scholarship Reconsidered* (1990), one university's faculty development team set out to spread the word about the scholarship of teaching and learning (SoTL) to colleagues. The systematic research and reflection on teaching and student learning was woven into the university's new strategic plan, and the faculty-to-faculty developers recognized the opportunity to develop a cross-disciplinary initiative to promote this research among colleagues.

SoTL compels teachers to shift from thinking of teaching solely as student-teacher interaction to an "object of investigation" (Bass, 1999). Hodges (2013) casts SoTL as a mindset of "questioning old assumptions about what teaching entails and how our students learn, gathering and examining evidence of the effects of our approaches, and reflecting on and sharing insights gained" (p. 72). This transformational agenda cuts across disciplinary silos, but not everyone has the social science methodologies needed to attain expertise applying



SoTL (Hubball & Clark, 2010). Faculty members in schools of education are versed in bridging required outcomes assessment to a legitimate research program, but faculty in other disciplines are not aware of the opportunity to subject their pedagogy to the rigor of scientific research principles. Conclusions regarding the success of a given instructional practice are often grounded in anecdote and instructors' prior experience as a student. While epistemological viewpoints and nuances of sound pedagogical practices may be uneven across disciplines, Huber (2006) argues for interdisciplinary interactions amongst faculty as these interactions foster cross disciplinary discovery of those very nuances of pedagogical practices. The study explores how one university's faculty development team created, and the inaugural cohort members evaluated, the pilot installation of a SoTL program.

The Carnegie Foundation for the Advancement of Teaching's initiative, CASTL Carnegie Academy for the Scholarship of Teaching and Learning (CASTL), sought to promote the concept of taking teaching seriously and "continues to nourish academic practice" (Bender, 2005). The SoTL message has spread throughout the academy, and faculty SoTL training programs have taken different forms on campuses across the United States. For example, Southeast Missouri State University uses a SoTL Fellows model, where an annual cohort of 10 meets monthly to craft SoTL research projects (Waterman et al., 2010). In a study of three of the Southeast cohorts, 66% of the SoTL projects showed enhanced student learning (100 courses and 4,500 students affected). In addition, 15 projects were presented at conferences, and seven were published in peer-reviewed journals. The University of Wisconsin System assessed its 11-year SoTL program to find that 96% of participants (n = 130) reported a positive impact from its program (Voelker & Martin, 2013). Sixty-two percent of participants published SoTL-related articles, essays and book chapters. At Iowa State University, researchers interviewed 18 SoTL champions about their experiences with SoTL research (Marcketti, Gidlewski, & Leptien, 2014). Three themes of faculty perceptions emerged from the qualitative study: synergistic efforts (the overlapping of teaching, research, and service efforts), personal and professional benefits, and nuanced understanding (related to how a university perceives SoTL projects). Like these universities, the university in this study began a SoTL program for its faculty.

The purpose of this paper is to document faculty perceptions of a SoTL program that was created to enhance the participant's ability and interest to complete and sustain an ongoing SoTL agenda at a regional university in the southwest United States. Two research questions were posed: R1. How do SoTL program participants perceive the impact of the experience on their teaching? and R2. How do SoTL program participants perceive the impact of the experience on their research agenda?

### Methodology

The faculty development team, called Faculty Fellows, created a program and solicited faculty applications to participate in the university's first SoTL cohort. Priority consideration was given to those applicants without prior experience with educational research. A cohort of 12 was selected with faculty members from a diverse set of disciplines, including the natural sciences and the humanities. Most were assistant professors with doctoral degrees, and had varying years of service at the university. Demographics are omitted so individual identification is not possible. Because a keystone of a SoTL effort is communicating findings (Bishop-Clark & Dietz-Uhler, 2012), a central goal for the semester-long initiative was that every participant submit an abstract or manuscript to present at a conference or for publication, respectively. This goal was incentivized because participants did not receive their stipend until they responded to a Request For Proposal to present at a conference or submitted a manuscript to a journal. Over the course of five Saturdays, the faculty development team at a mid-size regional Master's granting university in the southwest U.S. led workshops and lectures. Topics included: an introduction to SoTL projects and the SoTL research process including reflection; research question construction; study design; institutional review board (human subjects) process; data collection and analysis; and publication and presentation avenues. At the time of publication, eight members of the cohort had earned their stipends by submitting an article about their SoTL project to a journal, or had submitted to present the project at an academic conference.



After receiving IRB approval of Exempt status (University IRB approval #2014-012314-14001), the faculty development team utilized a qualitative design based on two research questions that guided the study. Because participants' perceptions were the focus of the study, interviews served as the primary data source. The interviews were conducted at least three months after completion of the program but prior to formal group presentations of each participant's SoTL project. All 12 participants were interviewed. The interview questions were structured to give researchers a glimpse into participants' perceptions regarding the SoTL experience. The interviews were conducted in person, over the phone, and virtually by an independent interviewer. Completed interviews were transcribed and delivered to investigators for analysis. The interview questions were: 1) How has your participation in the SoTL cohort program impacted your ability to complete a SoTL project? 2) How has the SoTL experience impacted your teaching? 3) How has the SoTL experience impacted your research agenda? 4) What tools or strategies did you find helpful when participating in SoTL? Tell us why you found them helpful. 5) What changes in the SoTL process might have made it more effective and applicable for your teaching and research efforts? and 6) Anything else you want to say?

Investigators used open coding as they independently reviewed all transcripts in their entirety for keywords and themes. Keywords were collapsed into categories and further collapsed into patterns or themes (Gay, Mills, & Airasian, 2012). Investigators (n = 6) compared coding and themes via peer debriefing (Creswell, 1998). From peer debriefing and discussions, overall themes emerged through debate and consensus. Narrative samples from transcripts provided participants a voice concerning their SoTL experience.

## Results

Transformation and transition were two overarching themes for both research questions. The major theme for faculty member perceptions on a SoTL experience's impact on teaching (R1) was a transition to evidence-based teaching. Participants were testing assumptions about particular teaching methods. One participant phrased it this way: "I think you get comfortable doing things a certain way and you know whether or not that's the most effective way in that particular context; you may or may not be true *sic* [correct]. You've got to keep asking yourself those questions and find ways to efficiently and effectively get those questions answered." Another said he "found that a lot of the things we were doing in the classroom don't always increase student engagement, that students have a different way of being connected ... than we were expecting." A third said he was thinking of new ways of approaching the classroom, and the kind of effects that may have on student learning and outcomes.

While some participants were in a transition to evidence-based teaching, others experienced transformation. "I've kind of gone from just being someone in front of the room throwing information out, to trying to get the students more involved and trying to make it more of an engaging environment for them," said one participant, who has already applied SoTL findings to her classroom. She added, "...the assessment portion of my SoTL research has been helpful in terms of how I can add value in my classes right now." Another participant said she is making sure that scholarship is involved when she implements something new into her course, saying her teaching has "more of a purpose."

Two sub-themes included reflection on their own teaching and beliefs about student learning, and exposure to teaching ideas from colleagues. The reflections included "reconsidering" and "rethinking" classroom approaches. "It's certainly made me think more about the way that students learn in a modern setting," said one participant. Another participant said the program did not change the way she taught, but she did add a teaching component to her research agenda.

In addition to transforming the participants' perceptions about teaching, the investigators noted a change in participants' perceptions about research as well as a broadened research agenda (R2). The keyword data taken from the transcriptions suggests a transition of foci from solely traditional discipline specific research to an expanded research agenda which now includes SoTL research. Evidence of a change in participants' perceptions were statements such as "I've been able to add more of the teaching component to my research



agenda in addition to my other posted research” and “...this is good because it provided another area to focus on.” When describing how this experience has impacted their research agenda, a third participant remarked that SoTL is a “secondary area of research that I can kind of focus in” and further stated she would definitely incorporate SoTL into her research objectives. Another said, “I would have never gotten into SoTL — it’s a line of research that would be missing in my kind of [research] tool bag.”

For the novice researchers, the SoTL program provided guidance and assistance to motivate them to not only complete this research project but also increased their self-efficacy about unfamiliar research methods. During the post program interview, one participant stated, “The support of the Faculty Fellows and all the resources provided [to] us really helped me to see a project all the way through.” Another participant displayed some trepidation because she did not have any prior experience with human or classroom research. Yet another participant interjected that she did not feel confident in her research abilities prior to starting the program. Since completing the program, this same participant stated, “I feel more confident in my [research] abilities and skills.” Another participant started the program lacking confidence with qualitative research methods. However, upon completing the program, his perspective changed. He stated, “[SoTL] helped me get my mind around the idea that [qualitative research] is OK and that’s real too.” One of the greatest successes of this program is that after completing this program, one of the participants decided to enroll in a doctoral program because she felt more confident in her research skills.

The investigators also noted benefits to those participants who were experienced researchers. One participant noted, “Being able to do research on what I’m passionate about, which is teaching, was kind of eye opening.” A participant from the natural sciences stated, “Learning how to take something that we’re doing in the research lab and how to bring it into the classroom is an important change in the way I do research.” In addressing the program, this participant further elaborated, “It’s helped me to fuse together an educational component with the actual research I’m doing.” A male participant stated that his SoTL experience “opened up some doors on some other research areas to go into” further stating, “It will lead to several more conference papers and proceedings or journal articles.”

## Discussion

The research findings are consistent with Hodges (2013): “Through the SoTL perspective, faculty realize that course design is an intellectual endeavor, that students are complex individuals from whom they can learn, and that teaching is an ongoing transformational journey to be shared.” (p. 72) Participants began to recognize and started to practice evidence-based teaching with plans for broader dissemination of findings. Participants also realized the value of SoTL research and have expanded their research agenda to include projects that involve the SoTL and its impact on students.

A limitation for this study is the small number of participants from a single institution, which weakens generalizations to larger populations. Another limitation of the study is the potential bias introduced into the study by investigators who are also mentors for the program. Suggested areas for further research include collecting longitudinal data to track how the participants incorporate SoTL into their research agenda and how their teaching evolves as a result of their research.

Huber and Hutchings (2006) stated about SoTL, “doing it enables one to use it” (p. 28) and one institution’s foray into a SoTL cohort experience helped 12 faculty members start their SoTL journey. As a result of this investigation and the perceived success by the participants, the university has decided to continue the program with revisions to capitalize on promoting a campus culture of evidence-based teaching and research.



## References

- Bass, R. (1999). The scholarship of teaching: What's the problem?. *Inventio: Creative Thinking About Learning And Teaching, 1(1)*. Retrieved from <http://www2.okcu.edu/cetl/randybass.pdf>
- Bender, E. T. (2005). CASTLs in the air. *Change, 37(5)*, 40-49.
- Bishop-Clark, C., & Dietz-Uhler, B. (2012). *Engaging in the scholarship of teaching and learning: A guide to the process, and how to develop a project from start to finish*. Sterling, Virginia: Stylus.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. New York: Carnegie Foundation for the Advancement of Teaching.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Gay, L.R., Mills, G.E., Airasian, P. (2012). *Educational research: Competencies for analysis and applications (10th ed.)*. Upper Saddle River, NJ: Pearson.
- Hodges, L. C. (2013). Postcards from the edge of SoTL: A view from faculty development. *Teaching and Learning Inquiry: The ISSoTL Journal 1(1)*, 71-79. Indiana University Press. Retrieved November 8, 2014, from Project MUSE database.
- Hubball, H., & Clark, A. (2010). Diverse methodological approaches and considerations for SoTL in higher education. *The Canadian Journal for the Scholarship of Teaching and Learning, 1(1)*, 1-11.
- Huber, M.T. (2006). Disciplines, pedagogy, and inquiry-based learning about teaching. *New Directions for Teaching and Learning, 107*, 69-77.
- Huber, M.T., & Hutchings, P. (2006). Building the teaching commons. *Change: The Magazine of Higher Learning, 38(3)*, 24-31.
- Marcketti, S., Gidlewski, S., & Leptien, J. (2014, November). *SoTL champions: Leveraging their lessons learned*. Presentation at the 39th Annual POD Conference, Dallas, TX.
- Voelker, D., & Martin, R. (2013). Wisconsin teaching fellows & scholars program assessment project: Final report. *University of Wisconsin System, Office of Professional & Instructional Development*. Retrieved from <http://tinyurl.com/jvrgkd8>
- Waterman, M., Weber, J., Pracht, C., Conway, K., Kunz, D., Evans, B., ... & Starrett, D. (2010). Preparing scholars of teaching and learning using a model of collaborative peer consulting and action research. Faculty Perceptions on Scholarship of Teaching and Learning, a Faculty Development Initiative



# Contain Yourself! Supporting Faculty's Initiation into the Scholarship of Teaching and Learning

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## Abstract

In a short (18 hours total) faculty development seminar series, a community college CTL director and an emerging technologies librarian introduce faculty to SOTL. The step-by-step writing and researching activities they offered resulted in participants meeting learning outcomes, self-reporting their satisfaction, and in some cases presenting their SOTL work at professional conferences. Murray, Steckley, and MacLeod's application of "containment theory" provides a useful framework for understanding the success of the seminar series as well as the complexity of faculty and faculty developers' efforts to respond to institutional competing demands for increased scholarly productivity and improved student learning.

## Introduction

As is now commonplace knowledge among most faculty developers, "the production of SOTL solidifies and rewards teaching as a reflective act, and the consumption of SoTL promotes and encourages innovation and collaboration" (Cruz, 2013, 1). We also seem to agree that the benefit of the scholarship of teaching and learning (SOTL) lies in its capacity to address two phenomenon particular to the current climate in higher education: 1) the ever-increasing pressure on faculty not just to publish but also to improve the effectiveness of their instruction and 2) the burgeoning number and impact of centers of teaching and learning (CTLs) able to support faculty's success while simultaneously advocating the innovative pedagogies and assessment techniques requisite to improved student learning. Further, initiating faculty into SOTL is perhaps most critical at community colleges where teaching by far requires the majority of faculty time and attention and students are typically are the least prepared and thus most in need of effective, innovative teaching and learning techniques.

## Literature Review

Consequently, when I as a community college's CTL director was charged with increasing faculty's SOTL activity, I initiated my communicative inquiry with this question: Where do faculty have the most difficulty in writing for SOTL publication? A review of the literature revealed several possible answers. For instance, Mary Wright and her colleagues note that even faculty already familiar with disciplinary may well struggle with transferring those skills to teaching and learning scholarship (2011, 51). Other examinations of the challenges faculty face in writing for SOTL publication blame the difficulty on the imbalance in academic reward structures which historically privilege research more than teaching, traditional research more than SOTL. (Walker et al, 2008, 183). Still others point to the "pedagogical solitude" (Tinberg, 2007, 28) that defines most faculty's classroom experience and thus undermines their willingness to participate in the public sharing of inquiries and findings that SOTL requires. And finally, as I myself discovered, academic publishing of any sort may be a novel and daunting task for community college instructors hired specifically for their professional experience outside academia rather than their academic expertise (e.g. full-time faculty in nursing or business).



In response to these challenges, a recent trend has been to offer extensive SOTL development programs that require two and even three-year commitments from faculty (Thomas & Goswami 2013; Walker et al 2008). Here on our campus, however, offering faculty large stipends to offset the time involved in a two to three-year commitment to a SOTL project is simply not possible. My revised question for investigation, then, became this: without promise of course release or stipends of any kind and within the confines of one academic semester (during which time their schedules are over-flowing with teaching and service commitments), what workshop series can I offer “my” community college faculty that will best initiate them to SOTL and motivate them to attend all seminar series sessions and continue their SOTL involvement after the sessions’ end?

### Methodology

At the forefront of my considerations when I constructed a method to introduce SOTL to this particular group of community college faculty and motivate them to sustain their SOTL productivity was Furco and Moely’s review of the scholarship exploring faculty’s resistance to new initiatives. Among other conditions they describe, these two aptly note that “faculty members must have opportunities to gain expertise with the innovation and to explore their questions, without making inordinate demands on their time” (2012, 129). Accordingly, I created a workshop series comprised of six three hour sessions spread throughout the course of the semester. I offered the session during one of the very few at least somewhat unscheduled times for many full-time faculty, Fridays 10Am – 1PM. Faculty were enticed to participate by these guarantees: 1) enough guided, hands-on work time during the sessions that little if any “homework” would be necessary outside of the three hour Friday meetings, 2) a lunch more appetizing than the usual boxed dry sandwiches our CTL typically supplied during its noon seminars, and 3) a “take-away” for those who attended all six sessions and completed all in-class assignments, namely a well-constructed and well-researched abstract that could be submitted as a conference proposal or in a query letter to an editor.

All sessions were held in the CTL computer lab. The loose structure for each session began with approximately sixty minutes of presentation and/or group discussion followed by a twenty to thirty minute lunch and then at least an hour of hands-on time during which my collaborator and I were both available to offer feedback and/or further instruction as requested. Faculty who so desired were welcome to continue working in the lab after the structured session time. In addition, they could post their drafted research questions, abstracts, or other queries on our Blackboard Discussion Board and receive targeted feedback from me or other participants.

#### Session topics were as follows:

1. Reflecting on my teaching,
2. Identifying my teaching philosophy and creating a research questions,
3. Solidifying my research question and identifying the key terms in my area of inquiry,
4. Getting situated in the discussions of teaching and learning most relevant to my inquiry,
5. Finding a venue for my findings,
6. Writing and submitting a SOTL abstract.

During the initial reflection-writing exercise, participants spent at least thirty minutes answering guided questions about specified events in and aspects of their teaching. As a result, they were able to use their own experiences as the basis for their subsequent SOTL research questions. The protracted group discussions of those research questions in the second and sometimes third session—in addition to my comments in Blackboard discussion forums to their drafts of those questions—generated further collegial and collaborative ideas for SOTL inquiry as well as effective revisions of individuals’ original questions.

Absolutely crucial to the success of the seminar was my collaboration with the college’s emerging technologies librarian, Jean Amaral, in sessions three and four. Jean’s expertise and enthusiasm in demonstrating and teaching us all how to search the library’s databases enabled faculty to adhere to another crucial aspect of the



seminar series, namely my directive that faculty limit their research sources to **ONLY** two or three articles specifically related to their research question. Such restriction in the amount of time allotted for situating themselves in current SOTL research obliged faculty to forego what I know from experience to be a common pitfall for academic writers'—particularly novices: spending far too much time locating and reading articles and far too little time actually writing. Repeatedly, I urged participants to focus on creating a SOTL product rather than on becoming generally familiar with the enterprise itself or with a plethora of examples of others' SOTL work.

In addition to these strategies, I continually presented myself throughout the seminar series as a working teacher and writer, as an experienced-but-still-learning SOTL scholar. At opportune moments I offered some reflections on my own teaching—even my teaching within our sessions, on my tried-and-true techniques for procrastinating and for expediting the writing and research process, on deciding when and where to submit my work. I presented at length one very specific example of the evolution of my early SOTL work: my first (and former) Department Chair's evaluation of my teaching sparked for me a perplexing SOTL question which informed my published theoretical exploration of the contradictions inherent in the stated goals of critical pedagogy and the typical criteria on teacher evaluation forms that a plethora of college and university students nationwide complete at semester's end. Many years later, that exploration culminated in my constructing an alternative teacher evaluation form, running a formal study comparing individual teachers' scores on my form and on the one used by the departments and in the several courses that participated in the study, and finally publishing the statistically significant results of that study in a peer-reviewed and discipline-specific journal.

In the final two sessions of the STOL seminar series, I first offered participants another of my own techniques for organizing research sources and expediting the drafting process. Known to them simply as “the Prezi,” my visual map demonstrated how to center place the inquiry's implied argument at the center and then integrate one's research sources into the evidence supporting/countering/surrounding that argument; in essence, the demonstration offered participants a strategy for creating a visual outline. Because of the detail and structure recommended in the “outline” I proposed, it could readily support participants' progression from “mapping” to writing their abstract in the last session. Even more importantly perhaps, that same map could restore a scholar's thought process if and when her teaching schedule interrupts her writing process: thus, in its specific prompts regarding an unfinished article's content and structural detail, the visual outline encourages the writer's return to and persistence with her SOTL project.

One final essential element of my method: lunch. While this activity did not necessarily or reliably instigate involved discussion of SOTL best practices, it did consistently engender congenial conversation, connection between colleagues who otherwise might never cross paths, and even collaboration on a few occasions. The benefits of creating this sense of community cannot be overstated.

## Results

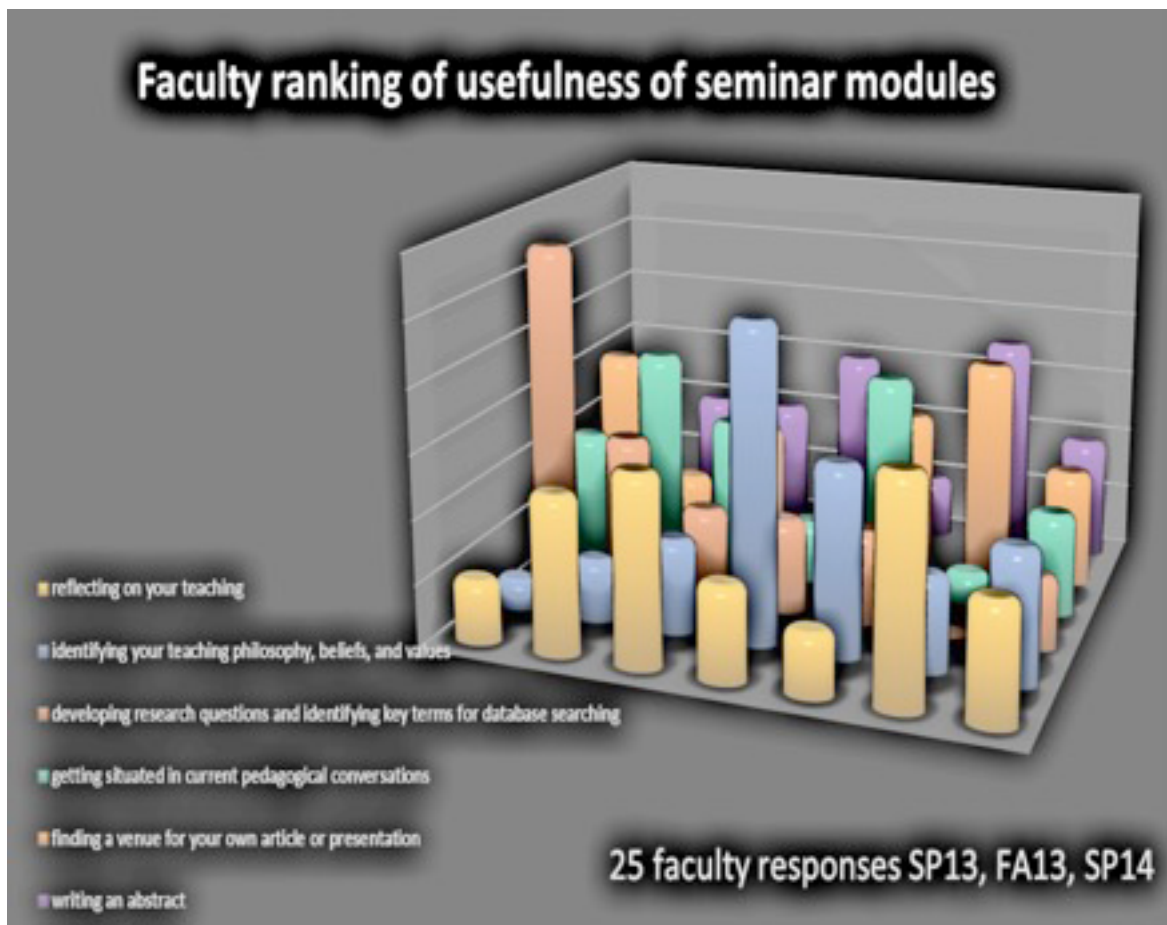
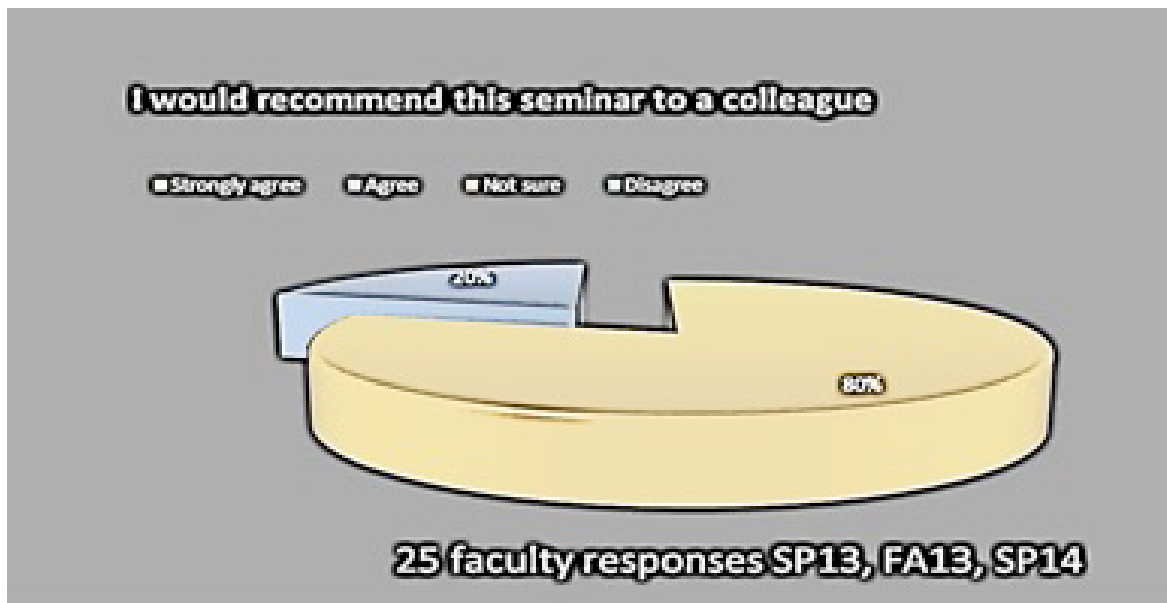
I considered three primary indicators of the outcome(s) and impact of the three SOTL seminar series workshops I offered over the course of three semesters, Spring 2013 - Spring 2014:

1. participants' satisfaction—as indicated on surveys distributed via Survey Monkey
2. participants' self-reported acquisitions of the series' learning outcomes
3. participants' subsequent SOTL-related conference presentations or article publications

A total of fifteen faculty members registered in Spring 2013, twelve completed; thirteen registered in Fall 2013, nine completed; seven registered in Fall 2014, six completed. Of the twenty-seven completers, twenty-five responded to the survey distributed via Survey Monkey to participants at the end of the final session of their respective seminar series. Salient details of their aggregated responses follow.







### SP13, FA13, and SP 14 Faculty Responses to Seminar Series Learning Outcomes

| Answer Options  | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree        | Response Count |
|---|----------------|-------|----------------------------|----------|--------------------------|----------------|
| I know how to identify an appropriate SoTL journal for my own articles about pedagogy.  | 15             | 9     | 0                          | 0        | 0                        | 25             |
| I can locate at least one SoTL journal in my discipline.  | 18             | 6     | 0                          | 1        | 0                        | 25             |
| I know how to earn scholarly recognition for my innovations in teaching.  | 12             | 10    | 1                          | 0        | 0                        | 25             |
| I feel more equipped to write a pedagogical article than I did at the beginning of this seminar series.                                 | 21             | 3     | 1                          | 0        | 0                        | 25             |
| I am more able to identify my individual teaching philosophy than I was at the beginning of this seminar.                               | 12             | 13    | 0                          | 0        | 0                        | 25             |
| I know more about how to situate my teaching practices within current pedagogical research than I did at the beginning of this seminar. | 15             | 9     | 1                          | 0        | 0                        | 25             |
| Other (please specify below)  |                |       |                            |          |                          | 9              |
|   |                |       |                            |          | <i>answered question</i> | 25             |
|   |                |       |                            |          | <i>skipped question</i>  | 0              |

### SP13, FA13, and SP 14 Faculty Responses to "Other" in Learning Outcomes

|   |   |
|---|---|
| <b>A very helpful workshop. I would like to participate in this again.</b>  | <b>I hope to fill in the remaining gaps as I prepare some SOTL publications.</b>  |
| What was especially effective for my work was the individualized program of study over the course of the workshops.   | I enjoyed the exercise we did during the second (or was it the first) meeting that displayed our teaching philosophy  |
| I am comfortable to begin the process and submit an abstract for consideration.   | Based on everything I learned, the SoTL workshop should be mandatory for all non-tenured faculty.   |
| This course effectively introduced publishing opportunities for pedagogical research. I particularly valued the discussion board and more "publicly" thinking out loud. | I wasn't able to attend as many sessions as I would have liked due to scheduling conflicts. Therefore my participation and learning in the seminar wasn't full as I would have liked. |
| I found the Prezi about integrating to be extremely helpful.  |   |

In addition to these indications of faculty's satisfaction with the seminar series and of their perceived ability to meet the series' learning outcomes, I can offer evidence of a longer-term impact of the SOTL series. Based on their responses to the college's formal documentation of Faculty Activity Reports of scholarly work in 2013, a total of ten participants who completed one of the three SOTL seminar series presented their SOTL at conferences in 2013. Another three participants proposed the SOTL project they'd begun in the workshop series when they applied for CTL Pedagogical Challenge grants; two of those participants won awards.



## Conclusion

Participants cite the “informal process-oriented atmosphere,” the “individual attention provided in the group setting,” and the “discussion of the others colleagues [sic] projects, their processes and results” as primary reasons for their satisfaction and productivity in the workshops. However, I’ve been persuaded to interpret the results as much more multi-dimensional and comprehensive. Though I knew nothing about containment theory until after I’d completed all of the first and most of the second iteration of the workshop series, I’m nonetheless drawn to its explanatory power in accounting for the complexity of the challenges as well as the varied though specific indicators of the success of this SOTL seminar series. Borrowing from Gillian Ruch’s model for supporting reflective practice in contemporary social work practitioners, British researchers Rowena Murray, Laura Steckley and Ian MacLeod use the concept of “containment theory” to explain how the leadership offered to faculty writing for publication is crucial to faculty’s success. (October 2012, 765). Because of the pressure and anxiety faculty face in trying to manage the often contradictory demands for their increased performativity in competing arenas, MacLeod et al emphasize that time alone does not guarantee faculty’s productivity in contexts dedicated to writing for publication. Instead, they team employs the term “strategic engagement” to describe their “model for [faculty’s] producing regular writing for publication while continuing to meet other professional demands” (September 2012, 641).

In their formal study of the “containing processes” of their writing retreat and the relationship—if any—between those processes and the leader’s role at the retreat, the team’s findings suggest that the leader’s ability to address three dimensions of containment were operative: emotional containment--primarily of writers’ anxiety; organizational containment--primarily of writers’ tendency to lose focus; and epistemological containment--primarily of participants’ inexperience with writing specific kinds of articles or with writing for publication more generally (October 2012, 769-773). “Using containment theory,” Macleod et al contend, “allowed us to reveal the function that makes the retreat work: containing writing-related anxiety, helping writers to negotiate multiple tasks, positioning writing as the primary task and preventing anti-task behavior” (September 2012, 653).

I conclude, then, that the opportunity it afforded faculty to **contain themselves** accounts for faculty’s satisfaction with the SOTL workshop series discussed herein. In addition, I advocate further study of Murray, Steckley, and MacLeod’s concept of containment theory, for it illuminates the task-complexity not just of faculty’s writing for publication but also of faculty developers’ efforts to initiate faculty in the methods and materials of SOTL. I whole-heartedly recommend further study and application of containment theory as an explanation of and prescription for effective professional development in the scholarship of teaching and learning.



## References

- Cruz, Laura. (2013). Peas in a POD: Faculty development and the scholarship of teaching and learning. *MountainRise: The International Journal of the Scholarship of Teaching and Learning*, 8(1), 1-5.
- MacLeod, Iain, Steckley, Laura, & Murray, Rowena. (2012). Time is not enough: Promoting strategic engagement with writing for publication. *Studies in Higher Education*, 37 (6), 641-654. Retrieved from <http://www.tandfonline.com>.
- Murray, Rowena, Steckley, Laura, & MacLeod, Iain. (2012). Research leadership in writing for publication: a theoretical framework. *British Educational Research Journal*. 38(5), 765-781.
- Thomas, Jacqueline, and Jaya S. Goswami. (2013). An investment in new tenure-track Faculty: A two-year development program. *Journal Of Faculty Development*, 27 (1), 50-55. Education Source. Web. 11 Mar. 2013.
- Walker, J. D., Paul Baepler, and Brad Cohen. (2008). The scholarship of teaching and learning paradox: results without rewards. *College Teaching*, 56 (3), 183-189. Education Source. Web. 11 Mar. 2013.
- Wright, Mary, Finelli, Cynthia, Meizlish, Deborah, & Bergom, Inger. (2011). Facilitating the scholarship of teaching and learning at a research university. *Change: The Magazine of Higher Learning*, 43(2), 50-56. Web. 11 March 2013.



# Transformative Approaches to Higher Education

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## Abstract

This paper explores what it means to implement a transformative approach to higher education consistent with a holistic philosophy, particularly when working with educators teaching in an “unholistic” professional setting. The exploration is through a case study of the MA program in Holistic and Integrative Education at California State University, San Bernardino, based primarily on a reflective paper that students submitted in the final quarter of their program. Specifically, the study explores the students’ perceptions of the process of transformation and nourishing their inner life during the two-year period they were enrolled in the program.

## Introduction

This paper will explore the experience of students that were enrolled in the MA program in Holistic and Integrative Education at California State University, San Bernardino (CSUSB), a program that has worked with twelve cohorts over a period of more than 15 years, recognized by its students and the professional community as an exemplar program in transformative education (e.g., Duerr, 2003). As part of our program students take six program courses over a two-year period as a cohort. To introduce this paper, I will quote one student’s account of her professional setting,

Imagine my shock . . . to find that most of the theories of educational leaders were de-emphasized in favor of political agendas . . . and teaching to the test in order to get school dollars. Proven curriculum and pedagogies were discarded in favor of drilling, pre-scripted curriculum, and anthology readings from the class text. . . . *I was a holistic teacher in an unholistic environment* [emphasis added].

Unfortunately, this description describes the type of professional setting in which most of our educators work. This paper will focus on our students’ journey and their transformation from near hopelessness to confidence in their ability to create a holistic learning environment in an “unholistic” professional setting.

The pedagogy of the program has been deeply influenced by my colleagues and input from our students; therefore, I will use the pronoun “we” in this section, since it seems more appropriate than using “I.” A principle that we believe is essential is the need for the teacher to be open to, and cooperate with, what is needed. As stated by Doll (1993), “... ends emerge from within process itself; they are not external to it. This means that prior to the process’ development the ends can be delineated only in general, even ‘fuzzy,’ terms” (p. 31). For things to work we had to be open to the needs of our students. We saw the primary method associated with this principle to be “not doing,” approximately meaning that we were careful not to let our habitual patterns of teaching prevent us from seeing what was needed. This meant a disciplined strategy of planning learning opportunities that we considered consistent with our vision, yet allowing ourselves to be open to what was needed and perhaps not considered in our initial planning.

In addition, we have tried to implement a constructive post-modern pedagogy, particularly as implied by Doll (1993) and Oliver (1989), as well as allowing ourselves to be influenced by our work in identifying the implications of a spiritual perspective in education and studying transformative approaches to learning (e.g., London et al., 2004; O’Sullivan, 2002). We believe that post-modernist science reveals the inadequacy of modernism to explain a significant portion of our experience, and that our interpretation of a spiritual perspective clarifies what a post-modern pedagogy might mean in our context. This implies that although colleagues, teachers, books, curriculum materials, methods of teaching and so on can all provide the teacher with valuable ideas, tools and support, ultimately each teacher must strive to understand his or her unique contribution, and develop a trust and confidence in his or her sense of what is essential in his or her teaching.



Finally, we invite theory to emerge from experiences, relationships and questions. Doll (1993) states, “These [post-modern] relations will exemplify less the knowing teacher informing unknown students, and more a group of individuals interacting together in the mutual exploration of relevant issues” (pp. 3-4).

The research process being used in this study is a process for solving significant problems in a way consistent with a spiritual perspective (London, 2002). A significant problem is defined as a problem that requires a change in our level of understanding. Approximately, the significant problem for this study can be stated as, “How can we facilitate a transformation in our students’ visions of education?”

## Methodology

Briefly, in addition to our collaborative research for over 15 years that included major summative evaluations and collaborative planning typically on a weekly basis, this research drew primarily from material submitted by our students as part of their graduate work, including over 160 pages of final documentation papers. The material was initially reviewed four times, each time refining categories and patterns, until I felt comfortable with the clarity of the patterns. After identifying the patterns, specific examples from students’ comments were selected to clarify the patterns. It needs to be noted that this is not a traditional qualitative study in that I was studying a program in which I was integrally involved for over 15 years and certainly had opinions concerning our approach. In addition, the program, in my opinion at least, has already been established as transformative based on consistent data from our students, studies and comments by other researchers, and my own observations. Therefore, the focus of this study was not whether the program was transformative, but what was the nature of the transformation, what contributed to the transformation, and what effect the transformation had on practice.

## Results

Next, I will discuss three interdependent components of our program that are consistent with the above framework and were integrated into all six program courses: (1) students developing a transformative vision of education, (2) exploring how to nourish their inner life and the inner life of their students, and (3) developing a supportive learning environment. The major focus of our program is helping each student develop a transformative vision of education and clarifying how to implement that vision in their professional context. We expected their vision of education to be transformed, in the sense of “a transformation in your overall view of teaching, resulting in a significant change in the way you view teaching.” I will mention that 92 to 100% of our students in the last four cohorts have identified the program as transformative in this sense in their summative evaluation. In exploring one’s vision of education we identified three key questions to address, (1) What is my vision of education? This question is primarily a matter of connecting with one’s purpose in life particularly in the context of one’s profession. (2) What practices and methods are consistent with my vision? Clarity for this allows one to have a variety of tools to use to teach in a way consistent with one’s vision. (3) What is needed in my situation? Receptivity to what is needed allows you to “see” what is needed to reconcile your vision and methods with your actual classroom situation. This process requires the teacher to maintain a strong connection to their vision of education in the midst of the limiting nature of their actual classroom situation.

The students described the transformation of their vision of education in a variety of ways, summarized in four (interdependent) patterns in their descriptions. The first pattern was an increased feeling of empowerment and confidence in their teaching,

I’ve learned to be more confident in my understanding and abilities. This has transformed my attitude towards the educational process. I used to think that perhaps some of these tenured teachers in the school system were educational experts with their “drill & kill”, “practice ‘til it’s perfect”, and other mechanical methods. . . . I’ve learned that my understanding and methods are just as good.

The second pattern involved a shift from an emphasis on the “end product” to an understanding that transformation is an ongoing process that will continue beyond the temporal end of the program. The nature of this shift is caught in the following quote, “my vision has changed dramatically since I started this program. Although I started off as a holistic teacher years ago, I quickly fell into the trap of teaching to the test and producing test scores. This program has brought me back to the [holistic] frame of mind.”



The third pattern involved a movement from lack of clarity to a clear vision of education and how to implement that vision in their professional setting. One student wrote, “My vision of education was made clear during the program and I find myself constantly finding random things that I can incorporate into my lessons that maybe other educators would never consider.” This clarity concerning their vision of education allowed them to determine how to integrate their vision in an “unholistic” institution.

The fourth pattern involved movement from feeling isolated in their professional context to understanding the “bigger picture.” The example I will quote relates to earlier remarks concerning our emphasis on a post-modern paradigm,

Today’s schooling is so crippling to students and teachers alike. It is based on standardized testing and superficial curriculum. I felt guilty whenever I strayed from the modernist lesson plans. . . . This program did not relieve me of my guilt, but helped me to be aware of the feeling and to control my responses. If I am guilty of giving my students experiences that are meaningful, I do not retreat back to the terrible ways of the current education system; I continue to teach the whole child and nothing less.

Students noted that a focus on developing the students’ ability to be present as a educator, including an emphasis on observation, facilitated transformation of their vision of education. We emphasized observation in the sense of “seeing” our actions in the present moment and then reflecting on the implications of those observations (London, 2007).

### **Nourishing the inner life**

A second major component of the program is a two-year curriculum focusing on the students’ ability to nourish their inner life and the inner-life of their students. One student describes her lack of nourishing her inner life on entering the program,

Previously, . . . I thought that the more I did, the better I would feel. I was spiraling downward. I was giving more than I was receiving, a very unhealthy way to live. . . . I was struggling to be there for my students physically, emotionally, and spiritually, but things were not working out.

Later she writes about her experimentation,

to nourish myself, I had to find a practice that I was comfortable with . . . . At first I tried going on mini-nature walks with my dog, but the routine became another item on my agenda and lost its power . . . . Then I tried driving in my car to and from work without listening to music and that worked . . . but eventually it lost its luster. Lastly, I have discovered a practice that had not occurred to me before. Whenever I felt stressed . . . I did something kind for someone else. . . . I actually felt nourished because my path was crossing with someone else’s and we were connected . . . . These small acts of kindness became an ongoing practice.

Many students in describing both their development of a transformative vision and a process to nourish their inner life, mention feeling they were granted permission by the program both to experiment with their pedagogy and to nourish their inner lives.

In developing their own process for nourishing their inner life, I have identified three patterns: (1) Each student develops an unique process that works for them, many times including activities that were not introduced in class. (2) Most students report a qualitative difference in their process of nourishing their inner life, including, for many, a change from a view that time spent nourishing your inner life “interferes” with their need to spend time planning, to a view that such time is essential and, in fact, improves the quality of their teaching. (3) Students realize that nourishing their inner life is a continuing process, needing regular adjustment, and requiring discipline.

A third major component of the program is creating a supportive learning community. One student captures the positive effect of this focus,

The strength I received through this community of [holistic educators] is something I could not have achieved on my own. This cohort provided a place where my voice could be heard and where I could hear others’ voices as well.



Many of our activities addressed this focus on community, one approach was consistently identified by students as significant, our quarterly retreats at the James Reserve in a lodge in a wilderness area. One student captures the significance of the retreats,

I still remember the feeling I had at the end of the first weekend driving home from the Reserve . . . It was a feeling of power, of contentment, relaxation, a bonding with my friends and with nature.

The Mesa activity was usually part of our first quarter retreat and, briefly, required students and faculty to bring artifacts that reflected who we were to place on a created “mesa” (i.e., a specially prepared table). This seemingly simple activity, combined with our initial establishment of community, elicited much deeper responses than we expected. One student tries to capture the significance of her feelings at the end of the Mesa activity, “It was at this moment that I truly saw each person and they saw me. It was more than a physical presence that permeated the circle, but a spiritual essence that guided us through an emotional experience that would forever bond us together.”

### Discussion

What in this case study might have implications for other settings and disciplines?

First, when we identify transformation as a goal, what might this look like? Generalizing the results from our students we identified four typical patterns: an increased feeling of empowerment and confidence; a shift from an emphasis on the “end product” to an understanding that transformation is an ongoing process; a movement from lack of clarity to a clear vision and how to implement that vision; and movement from feeling isolated in their professional context to understanding the “bigger picture.”

Second, it seems appropriate to emphasize the importance of what we labeled as a constructive postmodern pedagogy, specifically the principle that recognizes the mystery of Universe and the need to be receptive to what is needed and emerges in the moment as essential as careful planning. The journey with each cohort, as well as each student, was different and unique, with many unexpected twists and turns for which we could not possibly plan, that resulted in transformative outcomes that were not in the “lesson plans.”

Finally, I will attempt to identify a few specific approaches in terms that can be applied in other disciplines and contexts that might facilitate the process of transformation: (1) We implement a cohort model that emphasizes building a supportive learning community, especially over a substantial period of time such as one or two years. In our program the quarterly retreats in a wilderness setting and the activities that involved art were particularly effective. (2) We emphasize a focus on developing the students’ ability to be present in their profession, including an emphasis on observation. (3) A major component of our program is a focus on the students’ ability to nourish their inner life. For us, this focus included students experimenting with a variety of strategies and resulted in the following understandings: Each student needs to develop a unique process that works for them, many times including activities that were not introduced in class; students reporting a qualitative difference in their process of nourishing their inner life, including a recognition that time nourishing their inner life, in fact, improves the quality of their professional work; and students realizing that nourishing their inner life is a continuing process, needing regular adjustment, and requiring discipline. (4) We integrate an emphasis on process and integrating alternative modalities in activities, assignments and processing. This emphasis on process had many positive affects, including the fact that many students felt they had permission to experiment in their settings and to nourish their inner lives. (5) We require students to experiment in their professional context and reflect on the experiments. (6) The faculty instructors consistently engage in in-depth collaborative planning and continuous input into our process from students.





## References

- London, R. (2007, October). No Time assignments: A spiritual perspective in teacher education. Paper presented at the Holistic Education Conference, University of Toronto.
- London, R. (2002, April). Educational research: A spiritual perspective. Paper presented at annual meeting of the American Educational Research Association, Chicago.
- London, R., Arguelles, L., Brown, R., Crowell, S., Donnelley, J., and Johnson, A. (2004). What does it mean to teach in a way consistent with a spiritual perspective? *Encounter: Education for meaning and social justice* 17 (2), 28 - 37.
- Doll, Wm. (1993). *A post-modern perspective on curriculum*. New York: Teachers College Press.
- Duerr, M., Zajonc, A. & Dana, D. (2003). Survey of transformative and spiritual dimensions of higher education. *Journal of transformative education* 1 (3), 177-211.
- Oliver, D. (1989). *Education, modernity, and fractured meaning: Toward a process theory of teaching and learning*. Albany, New York: SUNY Press.
- O'Sullivan, E., Morrell, A., and O'Connor, M. (Eds.). (2002). *Expanding the boundaries of transformative learning*. New York: Palgrave.



# Backward Design in STEM Courses: The Role of the Question

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### **Abstract**

Three instructors implemented the Backward Design approach with a particular focus on the use of Essential Questions. Did this improve student performance, confidence, and engagement? Project results were analyzed individually and collectively. Results varied. There was no significant difference in performance for any project. Confidence was impacted in some revised units. The Essential Questions appear to have the greatest impact on engagement.

### **Introduction**

An interdisciplinary group of university faculty (statistics, geology, developmental English) and a middle school earth science teacher were part of a Faculty Learning Community (FLC) that studied Backward Design (Wiggins & McTighe, 2005, 2011) and the associated use of Essential Questions (McTighe & Wiggins, 2013). We then implemented Backward Design and Essential Questions in each of our courses. One of our FLC members studied the impact that this implementation had on the instructors and their teaching. The broad question we asked was, “Did implementation of Backward Design and Essential Questions improve student performance, confidence, and engagement?” Our anecdotal reports and feelings of accomplishment were difficult to gauge by traditional achievement measures, but when engagement and motivation were taken into account, we found that creating and developing essential questions had a positive impact.

### **Backward Design**

Backward Design has been formalized, introduced, and explained by Wiggins & McTighe. Their book, *Understanding by Design* (2005), is essential to the theoretical background of this study. Wiggins and McTighe (1999, 2005) postulate that instructors should consider big ideas when developing curriculum. These “big ideas” are the enduring understandings or fundamental concepts that a student should carry with them from the class.

They suggest identifying these fundamental concepts first and then converting them to “Essential Questions.” These Essential Questions are used to grab student interest and ground the unit. Course design then moves backward to develop meaningful assessments and, lastly, lesson plans (hence the name Backward Design). Specific skills, content knowledge, standards, and/or outcomes are incorporated into this process.



## Literature Review

In summarizing the idea of the Essential Questions framework, McTighe and Seif (2003) write that “Teaching for meaning and understanding are two sides of the same coin. They both occur when students explain and interpret ideas, put facts into a larger context, inquire into ‘essential questions,’ and apply their learning in authentic situations.” In their review of other studies in cognitive psychology, student achievement, authentic pedagogy, mathematics, and technology, they find that educators who support meaning and understanding-based approaches have shown significant improvements for student learning. Backward Design privileges meaning and understanding over “coverage,” concepts that we worked to emulate in our own teaching. Due to the esoteric nature of curriculum development, finding ways to document and quantify results has proven difficult, though our results thus far encourage us to continue exploring this pedagogical method.

Researchers have developed various approaches to studying Backward Design, including inquiry-oriented teaching (McNeill, Lizotte, Harris, Scott, Krajcik, & Marx, 2003; Samaras, 2011); depth-targeting (Childre, Sands & Pope, 2009); best-practices for students with disabilities (Childre, et al, 2009; Orr & Hammig, 2009); portfolio assessment (Britton and Johannes, 2003); assessment-centered teaching (DiRanna, Osmundson, Topps, Barakos, Gearhart, Cerwin, Carnahan, et al, 2008); teacher preparation (Loughran, 2002; Darling-Hammond, L., Bransford, J., LePage, P., Hammerness, K. & Duffy, H., 2005; Derry, Schunn & Gernsbacher, 2005); reflective practice (Ghaye, 2010; Butt, 2002; Savage, Savage & Armstrong, 2006; Fox, Kidd, Painter & Ritchie, 2007); lesson planning (Cerbin & Kopp, 2006; Fink, 2003; Kunzman, 2003); collaboration amongst teachers (Klentschy, 2006); self-regulated learning and differentiated instruction (Ertmer & Newby, 1996; McTighe & Brown, 2005; Bovill & Bulley, 2011); outcomes-oriented teaching (Balasubramanian, Wilson, & Cios, 2005). Unfortunately, there has been little investigation into the implementation of the method at the collegiate level.

When Fogleman, McNeill, & Krajcik (2011) looked at reforms in middle school science teaching, they found that reforms imposed upon teachers were only effective when teachers had considerable experience with the reforms. However, across all of the teachers, they found that inquiry-oriented middle school instruction resulted in significant student learning, with a great variety in effect size. They also found that students who worked on their own experiments showed greater gains than students who learned from teacher demonstrations. These researchers provided empirical evidence for what anecdotal evidence has long suggested: student engagement is a “key factor in determining the successful implementation of the inquiry-oriented curriculum” (Fogleman, et al, 2011).

Faculty working in the field of special education in science have found that the general education science curriculum becomes more accessible to special education students (all areas of special needs and gifted) when using a framework based on backward design and implementing individualization, scaffolding, experience, and cooperation. For these teachers and researchers (Spaulding & Flannagan, 2012), the Backward Design model is an essential framework for assuring that all students receive a general education in science.

## Methodology

Our research objective was to determine if using Essential Questions to frame a unit would increase student performance, confidence, and engagement in the subject. Three of the instructors implemented varied elements of Backward Design in targeted classes. The fourth instructor specifically studied the impact the implementation had on instructors and their teaching. Questions became part of the explorations we undertook with students. The instructors implemented the Essential Questions (EQ) to varying degrees, see Table 1. Table 2 summarizes the methodology for each of the three projects and Table 3 briefly states the results.



**Table 1.** Focus of the Question for Each Project

| Earth Science<br>(middle school)   | Geology<br>(100-level)   | Statistics<br>(300-level)   |
|--|--|---|
| <ul style="list-style-type: none"> <li>• Frame a unit</li> <li>• Engagement at start of unit</li> <li>• Repeated iterations of question and feedback</li> <li>• Assess depth of student understanding</li> <li>• Use questions to develop a growth mindset and personal relevance</li> </ul> | <ul style="list-style-type: none"> <li>• Frame a unit</li> <li>• Engagement at start of unit</li> <li>• Repeated iterations of question and feedback</li> <li>• Assess depth of student understanding</li> </ul> | <ul style="list-style-type: none"> <li>• Frame a unit</li> <li>• Engagement at start of unit</li> <li>• Repeated iterations of question and feedback</li> </ul> |

**Table 2.** Methods for Each Project

| Earth Science<br>(middle school)  | Geology<br>(100-level)  | Statistics<br>(300-level)   |
|---|---|---|
| <ul style="list-style-type: none"> <li>• 8th grade students</li> <li>• Backward Design already partially present in units</li> <li>• Strong emphasis on EQ and constructivist approach to answers</li> <li>• EQ as focus of summative assessment</li> <li>• Measured student performance, confidence, and engagement</li> </ul> | <ul style="list-style-type: none"> <li>• Freshman/sophomore general education students</li> <li>• Fall 2013, traditional design</li> <li>• Spring 2014 used Backward Design to scaffold learning and prepare students for assessment</li> <li>• Specific Labs redesigned</li> <li>• Pre and Post surveys and standard assessment tools evaluated performance, confidence, and engagement</li> </ul> | <ul style="list-style-type: none"> <li>• Junior/senior engineering students</li> <li>• Fall 2013, traditional design</li> <li>• Spring 2014, 2 units revised using EQ</li> <li>• Evaluated performance using exams, projects, homework</li> <li>• Evaluated confidence and engagement using survey</li> </ul> |

**Table 3.** Results for each Project

| Earth Science<br>(middle school)  | Geology<br>(100-level)  | Statistics<br>(300-level)  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• 92.3 % believed the EQ helped them learn</li> <li>• 69.2% believed the EQ motivated them to study harder</li> <li>• 92.3% encouraged the use of EQ to be continued</li> <li>• Students reported high levels of engagement for units throughout the year</li> </ul> | <ul style="list-style-type: none"> <li>• Student excitement was greater (<math>p = 0.0644</math>) using EQ</li> <li>• Correlation between student 'perceived usefulness' and excitement (<math>r=0.061</math>)</li> <li>• Student perceived mastery of material (<math>p = 0.1105</math>) warrants further research</li> <li>• Two of four assessments (Labs) show a significant improvement (<math>p</math>-values of 0.06 and 0.002)</li> <li>• Student ability to identify and explain EQ in environmental geology was very limited</li> <li>• Student ability to demonstrate skills and knowledge underpinning EQ's was improved (average grade 68% vs. 76%)</li> </ul> | <ul style="list-style-type: none"> <li>• Unit 1: Estimation <ul style="list-style-type: none"> <li>- No significant difference in performance, confidence or engagement</li> <li>- Higher performance correlated slightly with less confidence (<math>r = -0.31</math>); no correlation with engagement</li> </ul> </li> <li>• Unit 2: Error <ul style="list-style-type: none"> <li>- No significant difference in performance</li> <li>- Significantly lower engagement (<math>p = 0.02</math>)</li> <li>- Significantly higher confidence (<math>p = 0.04</math>) on 1 of 3 measures</li> <li>- Higher performance correlated slightly with higher confidence (<math>r = 0.38</math>); no correlation with engagement</li> </ul> </li> </ul> |



## Conclusions

### Earth Science (middle school)

The instructor most experienced with Backward Design is the 8th-grade science teacher. Data strongly indicate that the use of Essential Questions and, to a lesser degree, enduring understandings have a powerful effect on student motivation and engagement. Forced and open response questions indicate increased student engagement and motivation. Students report feeling a deeper level of understanding than in classes without Essential Questions.

The work done in this project also triggered ongoing improvements and innovations. Due to the increased emphasis on Essential Questions, assessment in this classroom began to take a significant new direction as the Essential Questions themselves became the assessment focus. Tests became increasingly irrelevant as the research study went on. Innovations took shape in the form of student scaffolding and support in building strong, evidence based student answers to the Essential Questions. Anecdotally, these innovations seemed to create increased focus. Essential Questions became the target for students' learning, giving more clarity and confidence to students in the classroom.

### Geology (100-level)

The Geology instructor made the most changes to her units. The results showed sufficient evidence to conclude that the excitement level in the Backward Design course was greater ( $p = 0.0644$ ) based on student responses to 'how interested/excited were you about the material covered' on a Likert scale. A correlation also exists ( $r = 0.61$ ) between the student perceived everyday 'usefulness' of the material and student excitement, as well as a correlation ( $r = 0.46$ ) between excitement and perception that the material provides valuable insights as a global citizen.

An independent two sample t-test of the confidence that students had in their mastery of the material at the end of the semester provided a p-value of 0.1105 which, while not statistically significant, does provide some evidence of greater student confidence.

Two revised student assessment items showed a significant improvement, with p-values of 0.06 and 0.002. Other targeted labs showed increases in average grades that were not, however, statistically significant. Students showed improved skills and content knowledge with more consistency on a short-answer exam question. The average grade on this question increased from 68% ((std. dev. 35%) to 76% (std. dev. 29%).

While the questions helped instructor organization by framing units, student survey responses show limited ability to identify Essential Questions.

### Statistics (300-level)

The least impressive results came from the Engineering Statistics instructor. There was no appreciable improvement in performance, confidence, or engagement between the two semesters except the spring had significantly lower engagement ( $p = 0.02$ ) but significantly higher self-confidence ( $p = 0.04$ ). There were probably several reasons for this lack of evidence. First, she was least knowledgeable about the approach. Second, she did not use the Essential Questions for the same level of impact. (See Table 1.)

This instructor reported a definite heightened engagement when the Essential Questions were used to introduce the units. Unfortunately, there was a lengthy gap between the introduction of this unit and the measurement of engagement with the Essential Questions. So the data did not support this observation. But given the observation of increased engagement, one interesting thing to note is that performance did not correlate with engagement. So this could imply that the questions can be used to grab interest for both high-performing and struggling students. More investigation needs to be done.

### Combined Insight

From the above summaries it appears the more experience an instructor has with the Essential Questions, the more impact the questions have on the student. The impact of the prolonged use of the Essential Questions not only appears to be a function of the instructor's experience, but also may depend on the student's exposure to the approach. As our tables show, the more an instructor engaged with the Backward Design methods (according to Table 1), the more he or she garnered positive results (according to Table 2).



**Engagement:** All the instructors experienced increased or high level engagement based on anecdotal, observational, and interview data. Although a few measures showed significant differences, statistical evidence was very limited, ranging from no significant difference to p-values as low as 0.0644. There appears to be weak evidence that the Essential Questions can draw students into the subject. Further work in this area is warranted.

**Confidence:** We found that when students understood the question and its purpose, confidence was greater. The more opportunities students had to grapple with a question, the more confidence was gained also. So it seems the more the students are presented with a question in an overt and sustained manner, the more the students are able to persist with questions, and the greater the impact on confidence. For example, the earth science class used the Essential Questions to the greatest degree, and these students consistently rated themselves highly when asked whether Essential Questions impacted their learning. The geology students indicated some sense of growing confidence in their self-evaluations. The statistics classroom, which had the least use of the Essential Questions, found confidence levels to be more inconsistent. While one measure showed more confidence ( $p = 0.04$ ), the other measures were not significantly improved.

**Performance:** Measurement of performance yielded varied results. For one of us, performance improved on some of the revised units; for another, performance did not change; and for another, performance actually declined in one of the revised units. There were many confounding factors beyond our control that likely impacted these results. Extreme weather during the spring of 2014 caused class cancellations and poor attendance. Some attempted revisions were more successful than others. Performance could have been influenced by a number of factors unrelated to the Essential Questions.

These results encourage continued exploration of the role of the question in any classroom. Because Essential Questions are linked to deep conceptual knowledge, the level of inquiry is further enhanced when students aren't simply busy with activities but are actively working toward uncovering enduring understandings within the content.

## References

- Balasubramanian, N., Wilson, B., & Cios, K. (2005). Innovative Methods of Teaching Science and Engineering in Secondary Schools. *Systemics, Cybernetics, and Informatics*, 4 (6), 41-46.
- Bovill, C. & Bulley, C. J. (2011). A model of active student participation in curriculum design: exploring desirability and possibility. In C. Rust, *Improving Student Learning (ISL) 18: Global Theories and Local Practices: Institutional, Disciplinary and Cultural Variations*. Oxford, UK: Oxford Brookes University.
- Britton, K. L., & Johannes, J. L. (2003). Portfolios and a Backward Approach to Assessment. *Mathematics Teaching in the Middle School*, 9 (2), 70-76.
- Butt, G. (2002). *Reflective Teaching of Geography 11-18*. London, UK: Continuum.
- Cerbin, W., & Kopp, B. (2006). Lesson Study as a Model for Building Pedagogical Knowledge and Improving Teaching. *International Journal of Teaching and Learning in Higher Education*, 18 (3), 250-257.
- Childre, A., Sands, J. R., & Pope, S. T. (2009). Backward Design: Targeting Depth of Understanding for All Learners. *Teaching Exceptional Children*, 41 (5), 6-14.
- Darling-Hammond, L., & Bransford, J., LePage, P. Hammerness, K. & Duffy, H. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.
- Derry, S. J., Schunn, C. D., & Gernsbacher, M. A. (2005). *Interdisciplinary Collaboration: An Emerging Cognitive Science*. Mahwah, NJ: Erlbaum.
- DiRanna, K., Osmundson, E., Topps, J., Barakos, L., Gearhart, M., Cerwin, K., Carnahan, D., & Strang, C. (2008). *Assessment-Centered Teaching: A Reflective Practice*. Thousand Oaks, CA: Corwin.
- Ertmer, P. A., & Newby, T. J. (1996). The expert learner: Strategic, self-regulated and reflective. *Instructional Science*, 24, 1-24.



- Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco, CA: Wiley & Sons.
- Fogleman, J., McNeill, K. L., & Krajcik, J. (2011). Examining the Effect of Teachers' Adaptation of a Middle School Science Inquiry-Oriented Curriculum Unit on Student Learning. *Journal of Research in Science Teaching*, 48 (2), 149-169.
- Fox, R., Kidd, J., Painter, D., & Ritchie, G. (2007, Spr). The Growth of Reflective Practice: Teachers' Portfolios as Windows and Mirrors. *The Teacher Educators' Journal*, 13-25.
- Ghaye, T. (2010). *Teaching and Learning through Reflective Practice*. New York, NY: Taylor & Francis.
- Klentschy, M. P. (2006). Connecting Science and Literacy Through Students Science Notebooks. *California Journal of Science Education*, 6 (2), 51-79.
- Kunzman, R. (2003). From Teacher to Student, the Value of Teacher Education for Experienced Teachers. *Journal of Teacher Education*, 54 (3), 241-253.
- Loughran, J. J. (2002). Effective Reflective Practice: In Search of Meaning in Learning about Teaching. *Journal of Teacher Education*, 53.
- McNeill, K.L., Lizotte, D.J., Harris, C.J., Scott, L.A., Krajcik, J. & Marx, R. (Mar, 2003). *Using backward design to create standards-based middle-school inquiry-oriented chemistry curriculum and assessment materials*. National Association for Research in Science Teaching, Philadelphia, PA.
- McTighe, J. & Brown, J. L. (2005). Differentiated Instruction and Educational Standards: Is Detente Possible? *Theory into Practice*, 44 (3), 234-244.
- McTighe, J., & Seif, E. (2003). Teaching for Meaning and Understanding: A Summary of Underlying Theory and Research. *Pennsylvania Educational Leadership*, 24 (1).
- McTighe, J. & Wiggins, (2013). *Essential Questions: Opening Doors to Student Understanding*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Orr, A. S., & Hammig, S. B. (2009). Inclusive Postsecondary Strategies for Students with Learning Disabilities: A Review of Literature. *Learning Disability Quarterly*, 32, 181-196.
- Samaras, A. P. (2011). *Self-study Teacher Research: Improving your Practice through Collaborative Inquiry*. Thousand Oaks, CA: Sage.
- Savage, T.V., Savage, M.K. & Armstrong, D.G. (2006). *Teaching in the Secondary School*. Upper Saddle River, NJ: Pearson.
- Spaulding, L. S., & Flannagan, J. S. (2012). Dis2ect: A Framework for Effective Inclusive Science Instruction. *Teaching Exceptional Children*, 44 (6), 6-14.
- Wiggins, & McTighe (1999). *Understanding by Design Handbook*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Wiggins, & McTighe (2005). *Understanding by Design*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Wiggins, & McTighe (2011). *The Understanding by Design Guide to Creating High-Quality Units*. Alexandria, VA: Association for Supervision & Curriculum Development.



# Stereotype Threat

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## Abstract

Black males, as a group, have the lowest rate of bachelor's degree attainment in the US (Harper, 2012). I suggest that a possible contributing factor is "stereotype threat," a term first used by Steele and Aronson in the mid-1990's to describe "...a situation in which a member of a group fears that her or his performance will validate an existing negative performance stereotype, causing a decrease in performance" (Rydell, Shiffrin, Boucher, Van Loo, & Rydell, 2010, p. 14042). Fortunately, there has been some promising research on the efficacy of several brief and simple interventions to mitigate its negative effects.

## Introduction

Black men have the lowest rates of persistence and completion of any group in US higher education. Even before college, the educational outcomes for Black males are not good. According to the Schott Foundation for Public Education (2010), only 47 percent of Black males graduated from high school with others in their entering class. Harper (2012) reported that fewer than a third of Black men earned bachelor's degrees within six years. I suggest that a possible contributing factor is "stereotype threat," a term first used by Claude and Aronson in the mid-1990's to describe "...a situation in which a member of a group fears that her or his performance will validate an existing negative performance stereotype, causing a decrease in performance" (Rydell, Shiffrin, Boucher, Van Loo, & Rydell, 2010, p. 14042).

## Literature Review

Stereotype threat (ST) was first "discovered" in research by Steele and Aronson in 1995 through studies in which they gave Black and white college students a difficult verbal test in one of two conditions, one in which students were told that the test was about intellectual ability. Since there is a stereotype that Black students have lower intellectual ability than white students, the Black students worried that their performance would confirm that stereotype. The stress of this worry negatively affected their performance so that they scored well below what was expected by their ability. Since that time, the phenomenon has been found in many settings with different groups of people in domains in which there is high identification with the specific group and for which there is a negative stereotype (e.g., women in math and science).

The long-term harm of ST for non-majority students is that a "...negative recursive cycle can occur, where psychological threat and poor performance feed off one another, leading to ever-worsening performance" (Cohen, Garcia, Apfel, & Master, 2006, p. 1309). However, research has demonstrated how changing the circumstances of a situation, sometimes through a seemingly minor intervention, can have dramatic effects on the academic performance of students in the stereotyped group. The following interventions have been successful in reducing the effects of ST.

### Values Affirmation

When students in stereotyped groups were asked to choose from a list of values ones that are most important to them and then to write about why they are important, they attained significantly higher grades than students in a control group over the next two years, resulting in a significant reduction (40%) of the gap between Black and white students (Cohen, Garcia, Purdie-Vaughn, Apfel, & Brzustoski, 2009).

### Growth Mindset

Another simple intervention involves informing students of Dweck's two theories of intelligence: "incremental" and "entity." The former sees intelligence as malleable - the brain grows with new learning - while the latter sees intelligence as fixed (Moore & Shaughnessy, 2012). She also refers to the former perspective as a





“growth mindset.” In a study by Aronson, Fried, and Good (2001) with Stanford undergraduate students, Black students who were taught the incremental theory improved academically and seemed to become more convinced of the expandability of intelligence over time. One way to cement the learning about the brain is to have students reflect on that learning. For instance, they could write an essay or make a video that would be read/seen by the next class of first-year students. As they produce a persuasive argument, they are themselves internalizing the message more deeply (Tough, 2014).

### Pejorative to Nonpejorative Attribution

To break the cycle of poor performance and anxiety that leads to more poor performance, Wilson and Linville (1985) thought that it would help if students could shift the attribution for poor performance from pejorative (the student's lack of intelligence) to nonpejorative (the context). They convinced entering college students that early difficulties were attributable not to stable internal causes (fixed intelligence) but to temporary external causes (the transition from high school to college); students improved their grades in the second year and were more likely to stay in college than nonintervention subjects. Similar studies have shown equally promising results (Walter & Cohen, 2007).

Integral to the cycle of “poor performance > anxiety > more poor performance” is the lack of a sense of belonging that characterizes the first-year experience of many non-majority students. In a 2007 study, Walton and Cohen introduce the term for the insecurity that students feel about themselves as scholars:

We suggest that, in academic and professional settings, members of socially stigmatized groups are more uncertain of the quality of their social bonds and thus more sensitive to issues of social belonging. We call this state *belonging uncertainty*, and suggest that it contributes to racial disparities in achievement (p. 82).

In their study, students were presented with data from upperclass students from all ethnic groups who reported that, as first-year students, they also had worried about whether they would be accepted and that the worry decreased over time.

## Methodology

A theme that could encompass all three of the phenomena underlying the challenges addressed by these three intervention strategies is the concept of hope. If students believe that, given the values that they have internalized in their lives so far, they can, by their own application of skill and hard work, succeed in college, they are more likely to do so.

One strategy that non-majority students use (sometimes unconsciously) to decrease ST is to base their self-esteem on domains in which they can be successful and dis-identify from domains in which they have failed or expect to fail. This happens when a person changes her or his self-concept so that the particular domain, for instance, academic performance, is no longer the basis of self-esteem (Aronson, Fried, & Good, 2001). In the case of Black males, since the stereotype is that they will not be good in academics, many of them might be dis-identified with academic performance and, instead, associate their self-esteem with domains in which they perceive that they will be more successful, like work, athletics, family or friend networks. This seems like highly adaptive behavior and, except if he wants to succeed in college, highly functional for survival and life satisfaction. So, looking back at the values exercise, if the Black male student lists, for instance, competitive, loyal, and reliable as his top values and then writes an essay in which he describes his reasoning, those values are affirmed in this new, academic setting. And maybe he begins the process of adding academics as a domain in which his self-concept could survive and even flourish.

In both my first-year seminar and my senior/graduate sociology course, students give a Life Report. They share with the class a brief story of their life in which they tell about the circumstances of their birth, their parents and siblings, where they lived and went to school, and about the positive and negative milestones in their lives. Students discover that some of their classmates have very different backgrounds than they do and, in the process, everyone's experiences are affirmed and respected. The students show great empathy toward one another and realize that, in spite of their backgrounds, they are all now together in this class with the same goal of getting a college education, therefore increasing, especially for first-year students, their self-identification as a person who can do academic work.



In a first-year course, students could interview senior students within a year of graduation, who were matched with them by various demographic characteristics, about their experience as first-year students. Over time, this collection of data from these successful students could be used in interventions with new students who might arrive at college having experienced ST in their education and life and might feel significant *belonging uncertainty*. This assurance that students like them have gone on to be successful will add to a sense of belonging and to hope. In the Black students in the Walton and Cohen study (2007), the normalizing of doubts about social belonging and presenting them as temporary, was associated with the students' sense of belonging not being so dependent on the quality of their day, more engagement in achievement behaviors (like studying), and improvements in their GPAs.

In an article on hope theory, Gragreen (2012) refers to work at Chaffey College, where Laura Hope, dean of instructional support, is working with faculty to help them create learning environments that inspire students and give them hope. She refers to "low-hope" syllabi that are "...packed with challenging assignments but with no advice or offers to help." Instructors can be encouraged to examine their syllabi for "high-hope," like challenging assignments with support, for instance, a major research paper for which the student first turns in a proposal, then an outline, and then the paper, with feedback from the instructor at each step.

Instructors can also work on giving feedback to students that is high in hope. In a talk on the fixed mindset vs the growth mindset, Carol Dweck (2014) refers to difference between "not" and "not yet." Feedback that indicates to students that they can achieve the learning outcome with more effort (knowledge, experience, focus) is more productive than the kind of feedback that says "you're not good enough." I try to be the kind of instructor who gives students second tries, frequent specific feedback, and consistent support, practices that I find to be especially effective for first-generation and non-majority students.

### Conclusion

Stereotype threat refers to the phenomenon that the fear of confirming a negative stereotype results in lower-than-expected performance for members of the stereotyped group. A Black male college student athlete might perform under his ability level on a college entrance exam, but his performance on the football field would not be effected by ST. The location of the low-performance problem in the specific situation is encouraging because the cause is not in the person but in the social circumstances. "Stereotype threat research underscores how changing those circumstances can have positive effects on performance" (Aronson, et al., 1999, p. 29). In this paper, I have described three of the interventions that have shown promise in creating a learning environment in which the negative effects of ST seem to be mitigated and some specific strategies that I have found to be effective in my classrooms. More action research involving students and instructors will reveal other potentially powerful interventions that could result in higher academic achievement in college for Black males and other non-majority students.



## References

- Aronson, J., Friend, C.B., & Good, C. (2001). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology*, 38, 113-125.
- Aronson, J., Lustina, M. J., Good, C., & Keough, K. and Steele, C. M., & Brown, J. (1999). When white men can't do math: Necessary and sufficient factors in stereotype threat. *Journal of Experimental Social Psychology*, 35, 29-46.
- Cohen, G.L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science*, 313,1307-1310.
- Cohen, G.L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Brzustoski, P. (2009). Recursive processes in self-affirmation: Intervening to close minority achievement gap. *Science*, 324, 400-403.
- Dweck, C. (November, 2014). The power of believing that you can improve. TEDXNorrkoping. [https://www.ted.com/talks/carol\\_dweck\\_the\\_power\\_of\\_believing\\_that\\_you\\_can\\_improve](https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve)
- Harper, S. R. (2012). Black male student success in higher education: A report from the National Black Male College Achievement Study, University of Pennsylvania Center for the Study of Race and Equity in Education., Philadelphia. Retrieved from [www.work.bepress.com/sharper/43](http://www.work.bepress.com/sharper/43). In Harper, S. R., & Kuykendall, J. A. (2012). Institutional efforts to improve Black male student achievement: A standards-based approach. *Change*, 44(2), 23-29.
- Harper, S. R., & Kuykendall, J. A. (2012). Institutional efforts to improve Black male student achievement: A standards-based approach. *Change*, 44(2), 23-29.
- Grasgreen, A. (July 6, 2012). Researchers apply hope theory to boost college student success. *Inside Higher Ed*. From <http://www.insidehighered.com/news/2012/07/06/researchers-apply-hope-theory-boost-college-student-success>
- Moore, T-L. M. B., & Shaughnessy, M. F. (2012). Carol Dweck's views on achievement and intelligence: Implications for education. *Research Journal in Organizational Psychology & Educational Studies*, 1(3), 174-184.
- Rydell, R.J., Shiffrin, R. M., Boucher, K.L., Van Loo, K. V. & Rydell, M. T. (2010). Proceedings of the National Academy of Sciences of the United States of America. 107, 14042-14047.
- Schott Foundation for Public Education. (2010). *Yes we can: The Schott 50 state report on public education and Black males*. Author, Cambridge, MA. In Harper, S. R., & Kuykendall, J. A. (2012). Institutional efforts to improve Black male student achievement: A standards-based approach. *Change*, 44(2), 23-29.
- Steele, C.M., & Aronson, J. (1995). Stereotype threat and intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Storms, M. D., & McCaul, K. D. (1976). Attributions processes and emotional exacerbation of dysfunctional behavior. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 1, pp. 143-164. Hillsdale, JM. Erlbaum. In Wilson, T. D., & Linville, P. W. (1985). Improving the performance of college freshmen with attributional techniques. *Journal of Personality and Social Psychology*, 49, 287-293.
- Tough, P. (2014). Who gets to graduate? The New York Times. <http://nyti.ms/1gjJOoU> A version of this article appears in print on May 18, 2014, on page MM26 of the Sunday Magazine with the headline: 'Am I Supposed to be Here? Am I Good Enough?'
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82-96.
- Wilson, T. D., & Linville, P. W. (1985). Improving the performance of college freshmen with attributional techniques. *Journal of Personality and Social Psychology*, 49, 287-293.



# Motivation Through Collaboration in the Online Teaching and Learning Classroom

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## Abstract

Limited research has been conducted regarding the alignment or misalignment of student and faculty perceptions of traits that motivate students to complete an online learning degree. While studies have focused on attrition rates of online students, little research has compared student and faculty perceptions of internal characteristics that drive a student towards online degree completion. This paper presents a study that investigated characteristics that motivate students to complete undergraduate online learning degrees. The results of this study have led to insights regarding best teaching and learning practices that cultivate self-efficacy in students to promote success in the online classroom environment.

*Keywords:* Online learning, intrinsic motivation, self-efficacy, faculty perceptions, student perceptions

## Literature Review

Various reasons lead to enrolled online course students not continuing a course through completion. Jenkins (2012) notes that while enrollment in online learning degree programs is rising, attrition rates are also rising. Understanding student and faculty perceptions regarding undergraduate student motivation could help universities cultivate best teaching and learning practices that nurture teacher-student collaboration in order to ensure academic success in the online classroom.

### Research Regarding Student Motivation in the Online Classroom

Teacher and student collaboration and community is an integral factor in student motivation to complete an online course. Brown (2011) suggested that minimal collaboration and community in the online environment affected a student's ability to complete an online course. Dobbs, Waid, and del Carmen (2009) found lack of community among students, teaching style, and limited synchronous interaction with the professor contributed to negative student perceptions regarding online course completion. A strong collaborative student-teacher bond must be formed to ensure student success in the online learning environment (Shea & Bidjerano, 2012). Pollard, Blevins, Connor, and McGovern (2013) discovered in their quantitative study that a strong connection was found between teacher presence, social presence, and student motivation to learn.

Gregori, Torras, and Guasch's (2012) research explored how technology impacts social constructs within the online learning environment. The exchange of information through the use of technology in the online classroom alters the dynamics and exchange of information between faculty and students. Thus, a student's motivation to learn also changes in the context of what motivates students in the independent, self-directed online learning setting (Peiris & Gallupe, 2012).

### Theories and Frameworks

Garrison (2011) developed the conceptual framework for e-learning out of the collaborative constructivist ideas of teaching and learning and Dewey's research regarding blended individual and social perspectives to develop new knowledge. Opportunities should be given to for students to exercise social and cognitive constructs as related to the social, cognitive, and teaching presences of the Community of Inquiry Framework (Leong, 2011). This will produce strong feelings of positive self-efficacy, perceptions, and attitudes about the course. Retention in online programs occurs through student satisfaction regarding student and teacher community building constructs.

Smith (2011) noted that students don't physically see each other in the online environment, therefore they must be able to quickly gauge trust and comradery with each other for active learning to occur through



student led communication. Mistrust develops when students feel he or she can't rely on other students or the teacher for support and learning in a collaborative environment. Inevitably, this turns into lack of motivation to learn or complete the tasks with the online course structure (Smith, 2011). Yoon and Rolland (2012) note that a student's ability to trust others in the sharing of ideas, contextual connections, and comfort level of openness is influenced by the ability to maximize learning potential. Learning capacity of the student is determined by the student's self-confidence and innate ability to connect with peers in the online setting.

### Methodology

Three research questions were explored in this mixed methods study:

1. What are the perceptions of students regarding motivational characteristics and traits students possess that allow them to complete an online degree program?
2. What are the perceptions of faculty regarding motivational characteristics and traits students possess that allow them to complete an online degree program?
3. What is the difference between the Intrinsic Motivation Inventory (IMI) scale rankings of students who have graduated from an online college degree program and faculty who instruct students in an online college degree program?

The following hypotheses were addressed for Research Question 3:

$H_0$  = There will be no statistically significant different between the IMI scale rankings of students who have graduated from an online degree program and the IMI scale rankings of faculty who instruct students in an online degree program.

$H_1$  = There will be a statistically significant different between the IMI scale rankings of students who have graduated from an online degree program and the IMI scale rankings of faculty who instruct students in an online degree program.

Sixty-eight out of four hundred seven alumni from undergraduate online degree programs in one national online university responded by completing the IMI survey and open-ended questions. One hundred three of the three hundred ninety-eight faculty members who had taught online degree programs from one national online university responded by also completing the IMI survey and open-ended questions. Of the thirty-six faculty who elected to be interviewed, fifteen were selected using a random number generator, and nine faculty members responded to the request. Demographic selection of participants in the study was within the constraints of students and faculty from the university. The open ended questions were approved by a panel of experts. Informed consent was obtained and the IRB approved this embedded mixed methods study.

A mixed methods study was utilized by administering the Intrinsic Motivator Instrument (IMI) and asking open-ended questions of both faculty and students who have completed or taught in an online learning degree program (Ryan & Deci, 2008). The IMI contains questions exploring personality traits that internally motivate and drive someone to succeed at a goal or task. The quantitative results were analyzed by a professional statistician using SPSS (American Statistical Association, 2011).

An additional five open-ended questions were embedded in the Survey Monkey link to elicit student and faculty perceptions regarding motivating factors that drive students to degree completion. The open-ended questions for students were:

1. Once you started your online degree program, what were some of the external factors that motivated you to continue your degree to completion?
2. Once you started your online degree program, what were some of the internal factors that motivated you to continue your degree to completion?
3. How much weight did the internal factors play in your ability to complete your degree versus the external factors that you listed above?
4. What are three characteristics or traits you would use to describe yourself in completing a task or goal?



5. Was there any point during your online degree program where you felt like you wanted to quit? What drove you to continue on and finish?

Those same questions were asked of the faculty regarding what they believe motivates students to complete online learning degrees. This qualitative portion of the study allowed for further data collection through in depth interviews with nine faculty members of online programs. Eight sub questions were asked of the interviewees that developed from the open-ended questions asked in the survey link. The qualitative results were analyzed using hand coding techniques and QSR\*NVivo software to look for emerging themes.

## Findings

The following results were found in direct regards to student motivation, community, and collaboration in the online classroom.

### Qualitative Findings

Research Question 1 was addressed by the results from the qualitative data regarding student perceptions. Several key themes emerged from the five open-ended questions regarding student motivation in the undergraduate online classroom including: *self-satisfaction, self-confidence, intrinsic motivation, determination, and self-determination to finish goals until completion.*

Research Question 2 was addressed by the results from the faculty responses to the open-ended questions asked of the faculty in the study. Key themes that emerged from the faculty perceived questions regarding student motivation included: *self actualization, desire to learn and achieve personal goals, student internal drive to succeed, time management, intrinsic motivation to complete task, and faculty support to help students complete task.*

Nine faculty were interviewed using a qualitative phenomenological approach as a means of investigating further the perceptions of faculty regarding why some students are successful in completing an online learning degree. The nine faculty interviews of the eight sub-questions regarding what faculty perceived motivated students to complete online learning degrees revealed several themes found through hand coding techniques: *location of study, age/skill level, supports, intrinsic motivation, self-efficacy, internal drive, life experiences, asynchronous/synchronous learning, hardships, determination, self-improvement, beginning of the course, faculty initiative to offer supports, and student initiative to take supports in the online environment.* Seven of the nine faculty (77%) agreed that faculty must be an active presence in the student's online experience. Faculty initiative to offer supports to students, provide accommodations when needed, and provide opportunities to communicate support, honest, and constructive criticism were vital to the student's success in the online course. One hundred percent agreed that the teacher must convey verbal, emotional, and physical support in order to aid in student completion of the course. While faculty agreed that these supports were crucial to student success, they also believed that the student initiative to act on those supports must be there as well.

### Quantitative Findings and Conclusions

Research Question 3 was analyzed using several different statistical tests through SPSS including the Mann-Whitney U, Non-Directional Independent Samples Median Test, Levene's Test for Equality of Variances, and the t-test. Faculty and student perceptions were not aligned in regards to the amount of value and usefulness students perceive completing an online degree is beneficial to them in the Mann-Whitney U test. If value and usefulness components are tied to intrinsic motivation, then faculty and student alignment of perceptions in this area would be necessary in order for the faculty to provide and plan activities that students find stimulating and beneficial to ensure student success in the online learning environment.

The Non-Directional Independent Samples Median Test rejected the null hypothesis for 8 of the 27 questions. This misalignment of student and faculty perceptions regarding the amount of effort students put into their work and the value and importance they place on work ethic leads to consideration of what the ramifications are in respect to student completion rates.

The Levene's test rejected the null hypothesis for 5 of the 27 questions. However, the assumption of unequal values didn't impact the final t-test results. This difference in faculty and student perceptions regarding self-competency could impact completion rates in online degree programs. If faculty do not understand when



students are feeling self-satisfaction and autonomy in an online course, the teacher-student relationship could be affected. It would be beneficial for faculty to know a student's perceptions of intended learning and self-autonomy levels in order to produce successful outcomes of instruction and learning throughout the online course (Akyol, Garrison, & Ozden, 2009).

The t-test revealed a statistical significance for 11 questions where the  $p$  value was less than the alpha of .05. This misalignment of faculty and student perceptions regarding internal student feelings and online learning activities important because faculty need to know how student internalize feelings towards their own capabilities so they can help foster intrinsic motivation in students to help them reach their fullest potential and succeed in the online learning environment.

### Discussion

The results from this study provide implications for future practices in the areas of building community and collaboration in the online teaching and learning environment.

Providing opportunities and resources for students and faculty to nurture their intrinsic motivation to collaborate and build community could help students and faculty move towards the same common purpose of helping students stay intrinsically motivated throughout the duration of an online course. Faculty data conveyed the importance of student-student community building in the online classroom. Faculty also expressed the need for the student-teacher relationship to be strong in the online classroom to ensure student success. The student-teacher bond had to be strong in order to ensure student success. Merging these two schools of thought could nurture student intrinsic drive in a course through student-student synchronous communication and student-teacher asynchronous communication. Strategies could include: more opportunities for student led discussions and community in the online classroom, and more faculty interaction with students through various modes of technological communication during the facilitation of the online course. Student self-efficacy could be strengthened through relationship building and shared responsibility by the student and faculty for optimal teaching and learning in the online environment. As Faculty #2 stated during an interview, "The teacher-student relationship is extremely important, even if it is just the student knowing that the teacher wants the student to succeed."

Student data conveyed that the set up, structure and curriculum of the online course increased their self-efficacy to learn. These suggestions align with student perceptions regarding what a degree is used for: self-actualization, increase self-efficacy, and positive self-discipline and self-reliance issues. Although faculty and student perceptions did not align in some subscales of the IMI instrument, both faculty and students agreed that internal motivation and drive to succeed was a vital component necessary to ensure student degree completion. Further research could include how collaboration and community provide opportunities for development of self-actualization in students of an online degree program.



## References

- Akol, Z., Garrison, D. R., & Ozden, M.Y. (2009). Online and blended communities of inquiry: Exploring the developmental and perceptual differences. *International Review of Research in Open and Distance Learning*, 10(6), 65-83.
- American Statistical Association. (2011). *Survey research methods section*. Retrieved from <http://www.amstat.org/sections/SRMS/index.html>
- Brown, R. (2011, July 18). Community-college students perform worse online than face to face. *The Chronicle of Higher Education*. Retrieved from [http://chronicle.com/article/Community-College-Students/128281/?sid=pm&utm\\_source=](http://chronicle.com/article/Community-College-Students/128281/?sid=pm&utm_source=)
- Dobbs, R., Waid, C.A., & del Carmen, A. (2009). Students' perceptions of online courses: the effect of online course experience. *Quarterly Review of Distance Education*, 10(1), 9-26
- Gardner, H. (2011). Five minds for the future: An overview. *Journal of Educational Sciences and Psychology*, LXIII(1), 1-11.
- Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice*. London, UK: Routledge Taylor and Francis Group.
- Gregori, E., Torras, E., & Guasch, T. (2012). Cognitive attainment in online learning environments: Matching cognitive and technological presence. *Interactive Learning Environments*, 20(5), 467-483. doi:10.1080/10494820.2010.531026
- Jenkins (2012, March 13). Online classes and college completion. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/article-content/131133/>
- Leong, P. (2011). Role of social presence and cognitive absorption in online learning environments. *Distance Education*, 32(1), 5-28. doi:10.1080 /01587919.2011.565495
- Peiris, K. D. A., & Gallupe, R. B. (2012). A conceptual framework for evolving, recommender online learning systems. *Decision Sciences Journal of Innovative Education*, 10(3), 389-412. doi:10.1111 /j.1540-4609.2012.00347
- Pollard, H., Blevins, R., Connor, M., & McGovern, L. (2013). An examination of the relationship between teaching presence, social presence, learner motivation, and self-reported learning among online MBA students. *Journal of American Academy of Business, Cambridge*, 18(2), 23-30.
- Ryan, R. M., & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology*, 49(3), 186-193. doi:10.1037/a0012753
- Shea, P., & Bidjerano, T. (2012). Learning presence as a moderator in the community of inquiry model. *Computers & Education*, 59(2), 316-326. doi:10.1016 /j.compedu.2012.01.011
- Smith, R. O. (2011). Trust in online collaborative groups: A constructivist psychodynamic view. *Adult Learning*, 22(2), 19-23.
- Yoon, C., & Rolland, E. (2012). Knowledge-sharing in virtual communities: Familiarity, anonymity and self-determination theory. *Behaviour & Information Technology*, 31(11), 1133-1143. doi:10.1080/0144929X.2012.702355





## Abstracts

*In alphabetical order by first presenter*

### **Curriculum Development and Service Learning to Bring Theory into Practice**

Margarett Alexandre - *CUNY, York College*

This course was developed to provide nursing students the opportunity to travel and provide much needed healthcare services to an underserved population. Students and faculty had the opportunity to work with local partners, in an orphanage, medical clinic, senior home and community school. We had the opportunity to immerse in the community that we were serving. This experience was truly transformational for both faculty and students alike. We had the opportunity to really see theory into practice.

### **Service Learning Improving Student Experiences in a Nursing Assessment Course**

Bernadette Amicucci - *CUNY, York College*

This presentation will discuss the process and outcomes of adding service learning to a traditional nursing assessment course as a means to expand students' exposure to the growing aging population in the community setting. Students engaged in planned activities to provide needed service for the community agency through an organized set of community-based learning activities. Students directly provided service and addressed identified needs in this setting to meet specific regulatory agency requirements for the elderly. Opportunities for reflection were provided. This course revision was implemented in response to national trends, community needs and student learning needs.

### **Transition Points: Hidden Obstacles to Students Success**

John August - *Texas A&M University*

As students progress through their courses of study, they often encounter transition points that can be challenging. Some of these periods of uncertainty, such as examinations, are obvious to the instructor. Other, more subtle transition points, such as gradual changes in class delivery from didactic to student-centered formats, may create significant student stress that often goes unnoticed and yet which may impede expected progress. Providing a safe learning environment, offering additional opportunities for calibration against peers, taking time to acknowledge hidden stress and effort, and enhancing mentoring activities can assist students who are quietly struggling to handle periods of uncertainty.

### **Using Social Media to Foster Student Engagement and Enhance Learning**

Ashley Bender and Gretchen Busl - *Texas Woman's University*

College students often enter the classroom well-versed in social media platforms. Educators can harness this knowledge to enhance student success. Social media assignments increase engagement and collaboration among students; they also lend themselves to more sophisticated self-reflection that encourages students to develop their synthetic critical thinking skills and to engage more thoughtfully in the variety of discourses in which they participate. In this interactive session, the presenters guide participants through the process of creating social media assignments that align with course learning objectives and assessments that gauge student success in meeting those objectives while mastering course content.



## Using Multimedia in the Online Classroom to Enhance Teaching Methods

Rizza Bermio-Gonzalez - *Ashford University*

Teaching in an online classroom presents unique challenges; particular challenges include trying to keep students engaged in their learning and trying to communicate instructional material and course requirements to students. As a result, it is necessary that instructors find innovative and effective ways in which to communicate. Multimedia uses and combines different types of media such as text, audio, video, and/or animation. Using multimedia in an online classroom can help effectively communicate course material to students and keep them engaged. This presentation will discuss research that has been conducted on using multimedia in the online classroom, and will discuss two multimedia platforms – Prezi and Voki.

## Cognitive Coaching<sup>SM</sup> Supporting Professional Development and Student Achievement

Scott Blackshire and Michelle De Bellis - *The University of Texas at Austin and Thinking Collaborative*

This workshop introduces Cognitive Coaching<sup>SM</sup> and nine research-supported outcomes. Participants experience a Cognitive Coaching<sup>SM</sup> conversation followed by group facilitation that addresses conference sub-themes: Student Learning and Creating Communities of Learners, Innovative Pedagogical Approaches, and Multiculturalism/Diversity/Inclusion. Cognitive Coaching<sup>SM</sup> (resource-developing) mediates thinking and enhances the professional support functions of collaborating, consulting, and evaluating across disciplines and campus strata. Cognitive Coaching<sup>SM</sup> underscores one's identity as a mediator of thinking and for classroom leaders, enhances student engagement through the development of self-directedness. Cognitive Coaching<sup>SM</sup> allows for the (re)discovery of internal and external professional resources and self-directed solutions for now and for the future.

## Active Online Teaching Strategies: Sharing Best Practices

Belinda Boon - *Kent State University*

Many instructors enter the online teaching environment with little or no training or guidance about how to teach effectively. Techniques that work well in the face-to-face environment can fall flat in the online classroom, and often excellent teachers find themselves struggling to connect with their online students. This session will present practical tips and techniques for engaging online students developing a true learning community. Participants will also have the opportunity to share best practices and active online teaching strategies with colleagues.

## Backward Design in STEM Courses: The Role of the Question

Nancy Sundheim<sup>1</sup>, Kirstin Ruth Bratt<sup>1</sup>, Kate Pound<sup>1</sup>, and Michael Rogers<sup>2</sup>- <sup>1</sup>*Saint Cloud State University*, <sup>2</sup>*Rice Middle School*

Four professors and teachers participated in a Faculty Learning Community with the intent of applying Backward Design principles (Wiggins and McTighe, 2005) to our courses. As a cross-disciplinary community we implemented Backward Design in three STEM courses, studying our own results using quantitative measures, reflective journals, observation, and focus group interviews. The aim of our Research was to: explore teacher self-efficacy under the Backward Design paradigm, discern the role of confounding variables in assessment of our implementation, and evaluate the impact of Backward Design on student achievement.



## **Cultivating Intercultural Knowledge and Competence on Campus**

Tom Bremer, Anita Davis, and Iris Mosah - *Rhodes College*

This workshop will introduce participants to strategies for cultivating intercultural knowledge and competence on college and university campuses. It is based on the experience of several interrelated institutional efforts to address issues of diversity in the classroom. Participants will learn pedagogical and assessment strategies that can be used to accomplish institutional goals focused on cultivating intercultural knowledge and competence for both faculty and students. Materials will be made available to participants for use on their campuses; participants will identify a specific action step that they will take based on the workshop and develop a timeline for implementing the action.

## **Creating an Online Learning Institute and Using Data Visualization to Improve It**

Andreas Brockhaus and Sara Frizelle - *University of Washington, Bothell*

Important trends for higher education, as highlighted by the 2014 NMC Horizon Report, include learning analytics, online and hybrid learning, and data-driven learning and assessment. In response to these trends and to institutional need, we created an Online Learning Institute (OLI) for faculty interested in teaching online. We also gathered data from the LMS and external surveys and used data visualization software to analyze the data and make improvements in the Institute. In this session, we will discuss how we used backward design and Quality Matters to create the OLI and how we used data visualization to assess and improve it.

## **Academic Service Learning - You Can Do It Too!**

Sandra Burns - *Ferris State University*

The Ferris State University Dental Hygiene Program received a Michigan Campus Compact Venture “Pay It Forward” Grant. This grant was used during a Community Dentistry course to create an Academic Service-Learning project. Academic Service-Learning is a teaching method that combines community service with academic instruction as it focuses on critical reflective thinking and civic responsibility. The Pay It Forward Grant is a unique funding method that allows students to assess the need of the community group then fund that need with the grant. The purpose of this initiative was to develop a new generation of philanthropist through a course-based service-learning environment that engages students in hands on philanthropy, grant making and service while providing community non-profits with much needed assistance. The Dental Hygiene Academic Service-Learning project allowed students to address a local need for oral care in our community. This project demonstrated how faculty can engage students in the practice and knowledge of philanthropy and service-learning with in their courses.

## **Radical Epistemologies: Improving Student Learning by Changing Definitions of Learning**

Stephen Carroll - *Santa Clara University*

When we went to college, learning mostly meant acquisition of knowledge and skills. And graduation rates were low. Over the past couple of decades, numerous revolutions have reshaped pedagogical practices. Yet the ways we define learning and knowing have not changed—and graduation rates remain low. In this interactive workshop, we’ll investigate our own definitions of learning and how those definitions shape the ways we measure and assess learning. We’ll also explore new epistemologies of learning based on recent advances in brain-imaging and cognitive science and consider how they might reshape our pedagogical practices and enhance students’ ability to succeed.



## Effectiveness of Pedagogical Interventions to Raise Awareness of Privilege

Kim Case - *University of Houston, Clear Lake*

White privilege refers to unearned benefits afforded to Whites within a system of institutional racial oppression (McIntosh, 1988). As more instructors include privilege as a topic within diversity courses, evidence of effective pedagogical strategies is needed. After completing the pre-test online, participants studied a list of white privileges or viewed a video about privilege in two experimental conditions. Participants then completed a post-test survey assessing awareness of privilege, white guilt, and awareness of racism. When compared to the control group, participants exhibited significant increases in privilege awareness in the video group and increases in white guilt for both intervention groups.

## Moving the Chains: Honoring the “Student” in Our Student-Athletes

Summer Cherland - *GateWay Community College*

In April 2014, the Northwestern University Football team became the center of conversation –among national media outlets, at the office water cooler—and it wasn’t even football season. Love it or hate it, the fact remains that athletics are integral to our collegiate culture. Student athletes play a complicated role on our campuses, and the Northwestern Football Team’s attempt to formally unionize demonstrates how difficult it is to categorize them. This session will discuss the unique history of athletics within academia. It will challenge some widely-held stereotypes about college student athletes, and in doing so, it will provide opportunities for instructors to relate to athletes who attend their classes.

## Voyage of Providing Successful Online Teamwork in a Virtual Era

Chiuchu Chuang - *University of North Carolina, Pembroke*

In this session, the presenter shares her voyage of providing optimal online collaboration experiences to enhance teacher candidates’ professional knowledge, skills, and disposition. Having implemented and collected data of collaborative team projects (CTPs) in online teacher education courses in a four-year university since 2010, the investigator provides students with clear CTP’s academic and social dual goals, offers ongoing feedback and evaluation, compares students’ learning results, gathers students’ feedback via surveys and modifies her teaching approaches accordingly. The results of the study suggest that the instructor’s continuous guidance and support positively impact students’ learning outcomes and perceptions toward online teamwork.

## Removing One Brick from the Wall Through Open Educational Resources

Joseph Coppola - *Palo Alto College*

The cost of textbooks has risen as more nontraditional students enroll in higher education. In order to improve access to education, we must consider reducing the cost of instructional materials for students. The journey of twenty faculty coming together to address the rising costs of textbooks for our students through the use of Open Educational Resources (OERs) will be shared. Participants will review examples of OERs from various disciplines. Participants will also identify several sources of OERs, evaluate the quality of OERs using a rubric created by faculty, and integrate OERs using a course alignment worksheet.



## Creating a Community of Engaged Learners Through Interdisciplinary Learning Communities

Joseph Coppola, Yolanda Reyna, and Daniel Rodriguez - *Palo Alto College*

Palo Alto College expanded the number of learning communities from two to fourteen from Fall 2012 to Fall 2013. Learning communities are considered a high impact educational practice due to national evidence that students achieve greater retention, course success, and graduation rates. Learning communities at Palo Alto College involve students co-enrolled in two linked courses with integrated course work through combined syllabi, integrative assignments, greater utilization of academic and student support services, and contextualized learning activities. Participants will receive a crash course to begin their learning community journey.

## Turn Your Lilly Conference Presentation Into a SoTL Publication

Milt Cox - *Miami University*

You have now prepared and delivered (or soon will deliver) a Lilly Conference presentation. In this session a journal editor will discuss four steps to publishing the scholarship of teaching and learning (SoTL) and ways that your presentation may be transformed into a published SoTL article. Also, if you have not yet prepared and made a SoTL presentation, you are welcome to join us and learn about getting started in SoTL.

## Beyond the Classroom: Experiential Learning at the Museum

Alba DeLeon and Nichole McLeod - *Palo Alto College*

While it is common practice for professors of art history to take students on field trips, Palo Alto College, of Alamo Colleges, has moved beyond the classroom and established a partnership with the San Antonio Museum of Art to offer Art History Survey as a hybrid/blended course. This course holds lecture classes at the museum where students directly experience the artworks.

This session introduces participants to the Museum's encyclopedic collection and a variety of learning strategies designed to emphasize course content and the Museum's role in the community. Participants are invited to complete a Problem-Based learning activity in this session.

## Discovering Our Purpose in Life: Describing a 60 minute Learning Activity

Cynthia DeMartino and Angela Naginey - *California Lutheran University*

Having a sense of purpose in life has extraordinary benefits, including longevity (Hill & Turiano, 2014). Unfortunately there is little academic discussion of how to guide college students in the process of discovering their life's purpose, and those studies that do, focus on long term approaches (Koshy & Mariano, 2011). This session will take participants through a brief learning activity we developed using religion and positive psychology literature. We will then discuss our preliminary findings on its effectiveness. The activity's materials will be distributed to all participants; free to use with attribution.

## Cliffs and Caves: Graduate Students' Perceptions of Teaching

Devon Donohue-Bergeler<sup>1</sup>, Molly Hatcher<sup>1</sup>, and Joanna Gilmore<sup>2</sup> - <sup>1</sup>*The University of Texas at Austin*,  
<sup>2</sup>*Charleston County School District*

This session examines graduate student instructors' (GSIs') perceptions related to teaching within the context of their graduate studies and future careers. We collected data from approximately 40 doctorate-seeking GSIs who participated in a semester-long interdisciplinary pedagogy seminar from 2012-2013. We asked participants



to visually depict their graduate school experience through a graduate student trajectory illustration (Austin, 2002). To qualitatively analyze the data, we will use a grounded theory approach. We will present and discuss results from the study along with implications and recommendations for graduate student development.

### **Shaping Students' Reading Skills in a Digital Age**

Scott Ellis - *Southern Connecticut State University*

In this session, we will address the myths and facts of students' reading skills, and we will discuss strategies we can use to help students engage more carefully with our course readings and ideas. To do so, we will discuss contemporary debates, current research, and historical analogues about students' reading skills and technological developments. Using this information, we will explore key pedagogical strategies we can incorporate in our classes to utilize students' reading habits to foster learning and to shape these habits to better fit our assumptions and expectations.

### **STEM Career Promotion and Leadership Strategies**

Victoria Fawcett-Adams - *Shenandoah University*

If you are in a leadership position concerned with science, technology, engineering and math (STEM) education, asking the right question is imperative in order to solve the ever concerning, important issue of creating interest in science-based professions and sustaining a skilled workforce. This paper will present findings from an empirical study that explored adults' science career choice and explored the environmental influences that motivated, influenced and shaped these choices. The answers to the research questions suggested strategies which can help STEM leaders tailor solutions to the problem within their organization.

### **Transparent Teaching and Other "High Impact" Practices**

Brooke Flinders, Matthew Dameron, Katherine Kava, and Bethany Flannigan - *Miami University*

Four undergraduate nursing students (from two regional campuses) will discuss a SoTL study that was initiated in response to their own identified frustrations with course design. We will present the background to our identified problem, our collaboratively designed course structure, results from a two semester study, lessons learned, and we will discuss how this innovative teaching strategy is tied to "high impact" educational practices and sets the stage for our three-tiered undergraduate internship program.

### **Beware of the Dark Side in the Classroom**

Kelly Flores - *City University of Seattle*

Students come from diverse backgrounds and social environments that have shaped their values, behaviors, and norms. While these environments can nurture strengths in character and leadership abilities, they can also cultivate dark side tendencies, including compulsiveness, narcissism, paranoia, co-dependence, and passive-aggressiveness. In this session, we will discuss how these dark side tendencies manifest themselves in the classroom, what the roots of these behaviors might be, and proven practices for proactively and reactively addressing these behaviors.



## **Determining Teaching Style: Is it Pedagogy or Philosophy?**

Cindi Fries - *Northeastern State University*

Teaching styles are often presented as a pedagogical tool rather than an expression of one's educational philosophy. A faculty member's educational philosophy is a silent force upon one's preference for either a Learner Centered or Teacher Centered teaching style, which in turn determine one's comfort zone for implementing pedagogical teaching strategies. This session will help identify the participant's preference of either learner centered teaching style, or of teacher centered style, and provide an insight into educational philosophy. Identification of a faculty's educational philosophy and teaching style preference can be a positive determinant on one's path of professional development.

## **Increasing Student Engagement and Learning with a Research Poster Project**

Kathleen Gabriel - *California State University, Chico*

As professors, we strive to engage our students, and provide them with educationally purposeful activities that students find beneficial, relevant, and helpful for their future careers. For years, a traditional term paper has been used to accomplish these goals. In this session, an alternative will be presented: the Research Poster Project. This assignment can challenge and engage students in researching, writing, and presenting their project. Presenter will share the results of a study on the Research Poster Project (along with its directions and grading rubric). "Take-away skill": designing a research poster project for increasing student satisfaction, learning, and engagement.

## **Helping Students Apply an Intersectional Lens**

Jessica Garcia - *Michigan State University*

Intersectionality involves an analysis of society and life chances across multiple dimensions--especially race, class, gender, and sexuality--simultaneously. Participants in this session will gain a greater understanding of the intersectional perspective and discuss the benefits and challenges of conveying this concept in the classroom. Two specific pedagogical strategies will be reviewed with abbreviated demonstrations of both, giving participants the opportunity to apply these practices. At the end of the program, participants will receive a list of additional resources on the topics of intersectionality and standpoint theory.

## **Implementing a Scholarship of Teaching and Learning Faculty Development Initiative**

Javier Garza, Jim Gentry, Shaffer Kelley, Sarah Maben, and Donald McGahan - *Tarleton State University*

Presenters will briefly describe a course redesign initiative started three years ago to encourage other faculty to undertake course/curricular reform. Presenters subsequently recognized a need for a faculty development initiative to encourage faculty engagement in the scholarship of teaching and learning (SoTL). An introductory, semester-long mini-course on SoTL was organized in Spring 2014, during which participants conducted SoTL projects. In this session, presenters will share results of value added for mini-course participants, representative project results, and will engage session participants in activities providing insight and direction on implementation of such an initiative.



## **Culminating Undergraduate Experience: Engaging in the Students Transition to Professional Status**

Michelle Gebhardt - *Kettering University*

The Culminating Undergraduate Experience (CUE), also known as the senior thesis, is a requirement for all students at this primarily undergraduate co-op university. The thesis project is generally performed for the student's co-op employer (Co-op Thesis); however, with employer permission the student is eligible to perform another option provided by the University. The focus of the project may be development of a product or system, creation of a comprehensive business plan, etc. Conference participants will learn about this program which helps students prepare students for their transition to professional status. It gives students a competitive edge when entering the workforce with the experience of managing a real world project.

## **Activating Communication Theory for Teachers**

Virginia Gregg - *Minnesota State University, Moorhead*

Gain insight in modifying your own and your students' behavior by understanding some basic communication theories. Put yourself in the learner's position and experience your own comprehension of and reaction to common communication circumstances. Be prepared for a lot of interaction, even more laughter, and wide-eye-opening situations in which you will find yourself. This will help you adjust your own teaching style and understand the positions from which your students may be communicating. Not recommended for the feint of heart.

## **Enticing Ed-drenaline: A Start**

Virginia Gregg - *Minnesota State University, Moorhead*

Students work hard, long, ambitiously and continually for a sport, hobby, event; it consumes them as they aim to excel. Yet becoming educated -- which would result in overwhelming opportunity, boundless rewards -- seems to elude many as a worthy goal. Students need ample guideline, motivation, and are often willing to settle for mediocre results just to get through the education process. What can be done to stimulate the adrenaline for education? We will look at identifying an ed-drenaline for students based on research purporting what propels athletes, entrepreneurs, and others who are goal-driven.

## **Using Reverse Engineering to Design on Online Master's Degree in Athletic Training: Implications for Online Education in the Allied Health Professions**

Jordan Hamson-Utley - *University of St. Augustine*

Reverse-engineering is one way to redesign courses and entire curriculums in the allied health professions. This talk will expose the attendee to reverse-engineering and related learning theories, and offer a platform for discussion about effective practices in online education across the allied healthcare professions. Various research will be showcased and tools that enable delivery of applied content will be demonstrated. After this session, conference attendees will be able to begin the reverse-engineering process to move allied healthcare curriculum from F2F to Online and employ various apps and techniques to foster and assess online learning.





## **Key Aspects of an Annual Faculty Institute: A Focus on Teaching/Learning and Writing/Publishing**

Tom Hanks - Baylor University

In this session, I will outline the goals and objectives of the annual Summer Faculty Institute at Baylor University, focusing on the twin areas of teaching-learning and writing-publishing. I will also provide several documents, including the “syllabus” for last summer’s SFI and some of the printed guidance that we use as we discuss class planning, constructing succinct but user-friendly syllabuses, and submitting a book proposal. This session will deliver resource rich references to key areas of teaching and learning, and for writing and publishing.

## **Podcast Lectures and the Impact on Student Test Scores**

Shannon Hankhouse - *Tarleton State University*

This session will cover the subject of podcasts and their use in higher education. Discussion topics will include: what podcasts are, how they can be used, and their impact on student exam scores. Participants should be able to understand how to record and post podcasts in their own courses, as well as the potential impact the use of podcasts has on student performance.

## **Teaching in Three Dimensions: Blackboard, Quality Matters, and Marzano’s Taxonomy**

Karen Hattaway, Sandra McCurdy, and Barbara Brown - *San Jacinto College*

Session participants acquire background knowledge of Blackboard, Marzano’s Taxonomy, and Quality Matters as a basis for an active learning experience in which they apply this potentially new information in a simulated course that will appeal to all teaching disciplines. Session presenters demonstrate the use of Marzano’s Taxonomy as they present foundational information and then illustrate how the Quality Matters emphasis on alignment of content, engagement, and objectives unifies learner experiences. Working in groups, participants then organize components of a hypothetical course to reflect Marzano’s hierarchy of learning, including an alternate “flipped classroom” component.

## **Contain Yourselves!: Supporting Faculty’s Initiation to SOTL**

Jane Hindman - *CUNY, Queensborough Community College*

This session will outline the presenter’s efforts to initiate a Scholarship of Teaching and Learning culture on a community college campus where faculty are facing increasing pressure to publish. The presenter initiated a SOTL professional development seminar series which merges two critical faculty support services: the Center for Excellence in Teaching and Learning and the library’s Emerging Technologies resources. The session illustrates the specific step-by-step writing and researching resources it provides; over its 3 semesters life-span, the series has been well-received by faculty who have subsequently produced several SOTL presentations and even some journal articles.

## **Information Literacy: The ESL Student’s Guide to Independent Learning**

David Hood and Rory Senerchia - *Johnson & Wales University*

This interactive workshop will engage attendees in the importance of integrating information literacy into the ESL curriculum. Presenters will not only focus on the need for incorporating information literacy skills into the ESL curriculum but also ways in which to do so.



## Youth Leadership Development: The Shelton Leadership Challenge

Kimberly Ingold - *North Carolina A&T State University*

An ethnographic case study documented the experiences and perspectives of high school age participants in the Shelton Challenge, a summer camp designed to inspire values-based, transformative leadership. Critical thinking, values based decision-making, and reflection were program goals. Findings demonstrated that participants took away from the Shelton Challenge the kinds of situated understandings salient to them. Implications for youth development knowledge base include challenging the thought process, experiential engagement, and leadership responsibility. Implications for using ethnographical methods may be pertinent by building a rapport, allowing youth verbalization through conversation, and a relaxed atmosphere with limited distractions to collect authentic data.

## Formative Assessment: Technology-Enhanced Approaches

Vivian Johnson and Trish Harvey - *Hamline University*

Technology integration often focuses on teaching a specific tool rather than how it can facilitate the use of a research-based teaching strategy. This session introduces technology-enhanced formative assessment and provides practice using technology tools to increase its use by teachers and students. Formative assessment is a research-based effective teaching strategy, documented to increase student achievement and the development of metacognitive skills - an important 21st century learning skill. This session will increase participants understanding of formative assessment and provide practice using technology tools that support its use. Online tools that do not require an account will be emphasized.

## College Success and Career Readiness: Engagement in Teaching and Learning

Erika Jones<sup>1</sup>, Rachel Juarez-Torres<sup>2</sup>, and Yvonne Ortiz-Prince<sup>2</sup> - <sup>1</sup>*Huston-Tillotson University*, <sup>2</sup>*AVID Center*

Stakeholders of higher education are vocal about their needs for an educated workforce (The Conference Board, Inc., 2006). Through incorporating a sound academic support system, it is possible to utilize a coaching model to connect both academics and student services. At the core of this support system are writing, inquiry, collaboration, organization, and reading (WICOR), which reflect the “soft skills” that employers have emphasized as being essential for successful employment. Participants will gain strategies that bolster these skills at postsecondary institutions to strengthen college success and career readiness, both inside and outside the classroom.

## Social Media in Higher Education: Attitudes of Traditional and Non-Traditional Student Learners

Nathalie Jones - *Tarleton State University*

The use of technology has becoming a natural part of daily living. Therefore, as student learners pursue higher education there is a need to utilize this platform within the learning experience. Identifying and capturing the attitudes and perspectives of students on the use of social media in college courses is necessary. Partially, because it assist educators with knowledge surrounding the use of appropriate tools and platforms that will enhance learning. The data in this presentation will suggest an opportunity to provide scholarship and learning for educator and student learners simultaneously.



## **Service Learning Assessments: What Works and What Doesn't**

Daphene Koch - *Purdue University*

Service learning projects are a wonderful part of a curriculum, but sometimes difficult to assess. How do you know who did what on a project? How do you capture the individual experiences? This faculty member has reviewed several years of projects and revealed some data that can be used by others. This session expose attendees to case study type examples with open discussion. Each person will review assessment data to understand what works and what doesn't in relation to service learning assessment.

## **Mentoring Advanced Career Faculty: Improving Creativity, Productivity, and Effectiveness**

Randy Kohlenberg - *University of North Carolina, Greensboro*

Faculty members in a variety of academic fields have been affected by years of enduring continual changes in standards, policy modifications, lack of rewards for service and excellence, etc. For many advanced career educators, staying continually focused upon excellence in achievement, accepting new tasks enthusiastically and creatively, and remaining energized and influential in the classroom can at times be overwhelming. Interaction with advanced career faculty through peer mentoring to encourage effective teaching, promote creative research, and establish engagement in professional service through a casual, non-invasive mentoring process can not only effectively utilize the wisdom and expertise of advanced career faculty, but also insure that they are engaged and inspired.

## **Police and the Press: An Experiential-Learning Course & iPad App**

Adam Kuban, Corey Ohlenkamp, and Alison McCool- *Ball State University*

Created by student journalists and criminal-justice majors, this multimedia publication is free as an App via Apple and Droid markets and is the capstone assignment for a 16-week experiential-learning course that teaches undergraduates what local police do and how to interact with them. The session begins with rationale for the interdisciplinary course design, identifying student learning outcomes and evaluative measures. The presenters then reveal contents of the App, allowing participants time to experiment with it via iPads. Two undergrads who completed the course will overview Storify and Adobe Digital Publishing Suite, technology utilized for content creation and App publication.

## **Role of Technology in Improving Student Knowledge: Evidence from Sciences and Social Sciences**

Subbu Kumarappan and Umila Pal Chaudhuri - *Ohio State University ATI and Kent State University, Stark*

The educational framework Technological, Pedagogical, And Content Knowledge (TPACK) claims that classroom knowledge creation depends on three major domains: the content shared by the instructor, the pedagogical techniques adopted in the classroom, and the technology media used to deliver the content. This session offers evidence by testing student scores in classes that used technology and contrast it with classes that did not use the same technology. The results of our analysis come from (i) a microeconomics class taught in Ohio State University (ATI campus) and (ii) a chemistry class taught in Kent State University (Stark campus). The following section describes the nature of technology used, methods and data used, and preliminary results.



## The Many Facets of Mentoring

Deborah Kuster<sup>1</sup>, Jeffry Young<sup>1</sup>, and Christina Bain<sup>2</sup> - <sup>1</sup>*University of Central Arkansas*, <sup>2</sup>*The University of Texas at Austin*

Being a scholar and expert in your field does not automatically transfer into being an effective teacher. Mentoring can be an important component in addressing the quality of higher education teaching. Particular viewpoints of mentoring roles will be presented from a Faculty member, a Department Chair, and a Faculty Coordinator of an University Instructional Development Center. Participants will be encouraged to identify and discuss their experiences as mentors and of being mentored. In addition, participants will examine the role(s) they may play on their campus for growth, encouragement, student learning and academic success.

## Project-Based Learning, Critical Thinking, and Intrinsic Motivation

Elizabeth Lasley, Lory Haas, Marilyn Rice - *Sam Houston State University*

Project-based learning is the instructional delivery model within an early childhood cognition course for undergraduate elementary education majors. The purpose is to promote student awareness of the relationship between course content, critical thinking and the real-world. This presentation identifies the key components involved in implementing project-based learning and student engagement within the learning process. It also provides preliminary results of an ongoing qualitative study of undergraduate teacher candidates' intellectual and emotional response to such an instructional framework.

## Transformative Approaches to Higher Education

Robert London - *California State University, San Bernardino*

We will explore processes, guidelines and strategies that facilitate transformation in students in higher education. The presentation will be based on the presenter's experience working with 12 cohorts in the MA in Holistic Education program, recognized by its students and professional researchers as transformative. The session will emphasize the results of research by the presenter primarily with the tenth and eleventh cohort to clarify what components, activities, etc. in the program facilitated transformation from the students' viewpoint. The session will include an interactive component that hopefully facilitates participants applying the content of the presentation to their professional context.

## How to Make Your Classroom a Brain-Changing Experience

Sarah Lovern and Thomas Saleska - *Concordia University Wisconsin*

This presentation will provide attendees with various teaching ideas that will engage students in higher-level thinking. These "classroom-specific" activities stimulate deeper understanding in any discipline. The presenters will explain how current research on brain physiology relates to four key areas that impact learning: emotion, prior knowledge, patterning, and rehearsal. Several examples such as a computer simulation, partner quizzes, concept maps, and pattern recognition activities will be explained and completed by the workshop participants. Attendees will be given a chance to apply examples to individual disciplines.

## Integrating Cross-Disciplinary Ethics Instruction and Learning at UT Austin

Daniel Mauro - *The University of Texas at Austin*

This poster showcases an innovative approach to developing and implementing cross-disciplinary ethics education. The poster presentation will highlight three key components of the current grant-funded initiative:



(1) Show how Ethics Unwrapped, an award-winning ethics video series and set of teaching materials, offers a versatile pedagogical approach to teaching ethics across disciplines; (2) Explain the project's methods of developing and assessing ethics curricula tailored to fit the goals and topics of different classes; and (3) Offer an example of the significance, challenges, and successes of the Ethics Integration Initiative from the experiences of teaching ethics in the fine arts.

### **Experience with a Flipped Learning Model in Nursing Education**

Linda McNeal and Angela Newman - *The University of North Carolina, Greensboro*

The need for college and university students to become active participants in the learning process has never been greater! Use of the flipped classroom is one approach to increased student engagement in and responsibility for their own learning. This learning model has been used in a variety of education curricula, from American K-12 into college programs. But this student learning approach remains uncharted waters for the majority of nursing education programs. This poster presents the strategies, challenges and lessons learned as faculty and students implemented a flipped learning model in one senior level nursing course.

### **Motivating Students to Work Hard and Study Right**

Sal Meyers and Brian Smith - *Simpson College and Graceland University*

Students' mindsets influence how they respond to academic challenges. In this session, we will present research findings about the consequences of mindsets of both intelligence and willpower. We will then explore ways of increasing students' motivation by fostering a growth mindset of ability and an unlimited mindset of willpower in our syllabi, comments we make in class, and feedback we give to students. Because motivating students to put forth more effort is not helpful if students are using poor study strategies, we will end the session by identifying learning strategies that are worth the effort.

### **Implementing Alternative Approaches to Teaching: Blending Theory and Practice**

Jamison Miller and Pamela Eddy - *The College of William and Mary*

From Barr and Tagg's (1995) appeal nearly 20 years ago to Doyle's (2011) more recent entreaty, learner-centered approaches to teaching have enjoyed tremendous advocacy yet continue to lack wide adoption. Based upon a qualitative study of the first three courses offered in a new college teaching certificate program, this session examines graduate student responses to classes using models based on learner-centered teaching and self-directed learning. The assessment serves to inform 1) curricular amendments to improve the new program's efficacy and 2) the larger question of the viability of alternatives to mainstream content/teacher centered approaches to instruction in higher education.

### **Using Multi-Media Assignments to Engage Students in Critical Thinking**

Pamela Monaghan-Geernaert - *University of Maryland Baltimore County*

Millennials are often called "digital natives" because their familiarity with new technology seems to be incorporated into their DNA. However, colleges have yet to harness this within their students and too often their scholastic output more closely resembles that of their parents' generation: a series of written words on a page. This presentation provides a comprehensive review of a multi-media student assignment. This assignment was designed to provide a contemporary and engaging opportunity for students in a Sociology of Deviance class. An outline of the assignment will be presented along with a thorough review of the grading rubric used.



## Challenging Faculty Mindsets: Teaching Well with Technologies

Karen Moroz, Bill Lindquist, and Vivian Johnson - *Hamline University*

Presenters will share their Professional Learning Community's focus on 21st Century dispositions and skills. The PLC has worked to shift faculty mindsets in the use of technology to support teaching and student learning. One priority has been using technology to increase classroom community by creating new ways for faculty-to-student and student-to-student interactions. Presenters will share examples of web 2.0 tools that have been utilized with our students and shared with colleagues. Through this sharing, we have seen faculty's willingness to implement the tools increase. Participants will leave with new ideas, tools, and resources to guide their own work.

## Hitting the Same MARC (Milestone Assessment of Resident Competency)

Scott Nass<sup>1</sup>, Jessica Devitt<sup>2</sup>, Jeniqua Duncan<sup>3</sup>, M. Chantel Long<sup>4</sup>, Travis Rulless<sup>5</sup>, Todd Zakrajsek<sup>6</sup> -  
<sup>1</sup>Family Medicine Residency, Eisenhower Medical Center, <sup>2</sup>St. Anthony Family Medicine Residency,  
<sup>3</sup>Family Medicine Residency, McLeod Health, <sup>4</sup>Smoky Hill Family Medicine Residency, Salina Health,  
<sup>5</sup>Family Medicine Residency, Nellis Air Force Base, <sup>6</sup>Family Medicine, University of North Carolina Chapel Hill

The Next Accreditation System instituted by the ACGME includes semi-annual resident evaluations with feedback using Milestones: observable developmental benchmarks of skills, knowledge, and behaviors. Residency programs are to develop tools to assess Milestone achievement toward improving the resident evaluation process. Field Notes are forms to document feedback about directly observed resident physician behaviors. Field Notes were implemented in 9 Family Medicine residency training programs for 6 months. Variability among Milestones assessments decreased across all tested Milestones when Field Notes were used. Faculty found Field Notes helpful in evaluating residents according to Milestones. Residents found Field Notes effective for quality feedback.

## Informing Faculty Development and Programmatic Planning: The National Survey of Student Engagement (NSSE) and Student Engagement in their Courses

Scott Nass<sup>1</sup>, Jessica Devitt<sup>2</sup>, Jeniqua Duncan<sup>3</sup>, M. Chantel Long<sup>4</sup>, and Travis Rulless<sup>5</sup>, <sup>1</sup>Eisenhower Medical Center, <sup>2</sup>St. Anthony Family Medicine Residency, <sup>3</sup>Family Medicine Residency, McLeod Health, <sup>4</sup>Smoky Hill Family Medicine Residency, Salina Health, <sup>5</sup>Family Medicine Residency, Nellis Air Force Base

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## Combining Online and Experiential Learning

Audrey Neville - *University of Illinois, Urbana-Champaign*

University educators are increasingly expected to provide a general understanding of a subject matter, provide socialization for entry into the workforce, as well as to train students to continue learning throughout their lives. Experiential and online learning each have their advantages and disadvantages in pursuing these different



goals, making us more inclined to pursue “blended” options as an alternative to, and in addition to, traditional classroom settings. We are interested in exploring how ought these learning styles be combined, in order to enhance the strengths and mitigate the weaknesses of both types of learning.

### **Sustaining a Community of Faculty Learners**

Jennifer O’Brien, Joseph Olivier, and Autumn Coppejans - *DePaul University*

Engaging and sustaining a community of learners across a diverse and diffuse instructor population is, at times, a trial and error process. Join us for an interactive session where we will explore how a faculty development program’s values and beliefs can be aligned with its offerings, requirements, and assessment practices. We will share lessons learned over the past three years as our program has grown and evolved. Participants will reflect on the core beliefs that guide their current or ideal community of faculty learners, identify potential challenges to sustaining the community, and compare methods for assessing the community’s impact.

### **Informing Faculty Development and Programmatic Planning: The National Survey of Student Engagement (NSSE) and Student Engagement in their Courses**

Taimi Olsen and Gwen Ruttencutter - *University of Tennessee, Knoxville*

This poster will present a subset of NSSE data focused on student engagement in the classroom and various analyses of that data. This study was originally conducted in 2010, so that this poster will present comparative data with the 2014 study. I originally created this approach—with a former graduate student—as an indirect method for measuring a Teaching and Learning Centers’ impact on faculty’s use of active learning in the classroom, the initial study has been used to inform departmental planning and the development of the university’s quality enhancement plan. This poster will present the results from both sets of data, with analysis of the second set and then a comparative analysis, followed by a discussion of how the data can inform assessment, evaluation, and planning at a variety of levels across campus.

### **Toward Dialogic Teaching: Using an Optimal Learning Model to Foster Deep Learning**

Kimiko Ott - *University of Wisconsin, Stevens Point*

Do you wonder why even the most provocative questions posed to undergraduate students are often met with long periods of uncomfortable silence? Do you puzzle over why the voices of a few frequently dominate class discussions? These behaviors may be explained in part by understanding students’ epistemological development. When conversations are placed within authentic contexts, however, and nested within an optimal learning model, it is possible to address these behaviors and improve the quality of learning. This session will help instructors transform flat classroom conversations into lively dialogue, collaborative inquiry and deep learning. Participants will take away practical ideas for scaffolding inclusive conversations.

### **Deep Music Study for the Intermediate Second-Language Classrooms**

Skye Paine - *The College of Brockport at State University of New York*

In my talk I share my experience using the Belgian rapper and house musician, Stromae, to teach intermediate French. I outline how I created a lab section that was exclusively dedicated to his lyrics, his interviews and his music videos. I explain how the popular music was used to illustrate language lessons and the way in which this facilitated engaged learning. My talk also shows how to best use various free technologies in the classroom to create a complete multimedia learning experience for the students.



## **Lecture is not Dead: Lecturing in a Flipped Society**

Adam Persky - *University of North Carolina, Chapel Hill*

There is an increasing movement for courses to flip - off-load content to out of class time and re-purpose class time for application. However, lecture still has a place in this format and lecture still has a place within our courses. This session will focus on when or why we should lecture, and how to do it more effectively based on the evidence on how adults learn. At the conclusion attendees will have a better understanding of how students learn, how to optimize lecture, and how to make classroom learning more meaningful.

## **Teaching the Pacific Islander Student: A Cross-Cultural Perspective on the Use of Metaphors and Storytelling**

Ban Phung and Linda Dam - *Brigham Young University-Hawaii*

A series of surveys with Polynesian students studying at Brigham Young University-Hawaii suggest that certain pedagogical practices patterned after the US mainstream educational system are often incongruent with indigenous approaches to teaching and learning. Compared to their US Mainland counterparts, this quantitative study focuses on the best practices for teaching business communication in diverse classrooms, especially involving Pacific Islander students.

## **Why Don't My Students Think I'm Groovy? The New "R"s for Engaging Millennial Learners**

Christy Price - *Dalton State College*

What factors influence student motivation and desire to learn? Obviously, there are some influences beyond the instructor's control, but research in educational psychology suggests one thing professors can do to increase student engagement is to create a learning environment that is in some ways linked to, and supportive of, the current student culture. During this address we will briefly review the literature and describe the findings of the presenter's research on engaging millennial learners. The characteristics of millennials' ideal learning environments, their preferences regarding assessments, the characteristics of their ideal professors, and ideal institutional practices will be discussed.

## **Crossing Lines: Working Together Outside Your Discipline**

Christine Purkiss and Heather Lehto - *Angelo State University*

The term "learning community" has been around for years but what does it take to form an effective learning community or a working relationship with faculty across your institution? Learning communities at the university level have been thought of as a way to look at classroom management techniques that help students learn in more meaningful ways. Thomson (2007) suggests this is a "restricted approach...that largely ignores the possibilities that exist for collaboration between faculty members" (p.27). In smaller institutions how do you go about building working relationships with others?

## **Learning: Putting Students in the Driver's Seat**

Angela Reeves - *Mott Community College*

Visualize a classroom of inquiring minds pursuing knowledge! Incorporate these five steps and create measurable learner gains: 1) Syllabus alignment of course objectives and assignments (incorporates proven Reading Apprenticeship strategies of providing assignment meaning and purpose). 2) Pre- and Post-Test assessments. Pre-Test provides diagnosis, prescription, and degree of prior knowledge. Post Test demonstrates learner gains. 3) Diagnosis/Prescription. Students describe the Pre-Test focus areas and pertinent areas in the





Syllabus. Both student and Instructor/Guide monitor progress. 4) Students assess the degree of change via Post Test. 5) Students discuss this change via Excel Chart and perception of knowledge acquisition.

### **A Writer-Centered Understanding of Critical Thinking**

Mary Rigsby and Karen Nulton - *University of Mary Washington and Drexel University*

This session will give a brief overview of the research on adult intellectual development and our investigation of its usefulness for revising pedagogy to support critical thinking. We find Marcia Baxter Magolda's concept of self-authorship to be necessary to understanding "critical thinking." We created a rubric for a large-scale writing assessment to investigate our assumption that writing development and the development of critical thinking would align with stages identified by Baxter Magolda. In this session, we will offer the rubric as a model adaptable for course contexts, as well as other large-scale assessments. Session participants will be invited to assess samples of student writing using this same rubric.

### **Using Online Technology to Create Communities of Math Learners**

Sam Riley - *University of Maryland Baltimore County*

Mathematics faculty at UMBC recently completed a 10-year study of the developmental math program which found that students in the last five years, after the implementation of programs using online technologies, did better both in their current and subsequent math courses. Notably, the courses which made the most use of online technology, also found ways to promote group learning and studying. This presentation will argue both for the inclusion of online programs for both their assistance to the students at the individual level, and for their ability to foster a group mentality among students.

### **Ramifications of Population Migration on Mixed Race and Indigenous Peoples**

Roy Roehl - *University of Alaska, Fairbanks*

The impact of population migration as indigenous peoples move to larger urban areas can be viewed in the increase of mixed race populations. This study uses multiple data strands to document that in Alaskan native populations mixed race groups are growing faster than traditional Alaska Native Populations. If current trends continue Alaska will have several indigenous populations that will have a majority of their tribal members of mixed race as compared a single indigenous race or heritage.

### **Online Formative Assessment Through Concept Checks**

Joe Ryan - *Northeastern University*

Formative assessment, which serves as purposefully placed diagnostic appraisal of student progress, is an element needed in online courses. The asynchronous format of most online learning makes immediate, corrective and supportive feedback in a learning object challenging. Well-written concept checks with constructive feedback can meet this need and create a trail of evidence through the analytics tool of a learning management system.

### **Producing Philosophy Teachers: Using A Graduate Seminar as Pedagogical Training**

Anne-Marie Schultz - *Baylor University*

I report on an innovative approach to teaching a graduate Plato seminar. It focuses both on the content of the Platonic dialogues and on preparing graduate students to become better classroom teachers. Most philosophers, regardless of research specialization, teach Plato in a variety of undergraduate contexts. I



decided to capitalize on this dimension of the profession of philosophy and made competency in teaching Plato a sub goal of the course. I report on how this focus changed the seminar experience.

### **History Labs: Flipping/Scrambling Humanities Classes for College Students**

Kelly Selby - *Walsh University*

The practice of flipping/scrambling classes has become a popular pedagogy for some disciplines, but the humanities have been slow to adopt this technique. Using recent scholarship on the teaching and learning of social studies for K-12 pupils, this presentation will share modified techniques that incorporate “history labs” into university classrooms that allow students to practice problem-based 21st century skills. This method moves students from receivers of historical information who memorize for essay exams to active participants in the uncovering, analyzing, and presenting (written and oral) of their own interpretations of the past, and can be adapted for other humanities courses.

### **Structuring the Syllabus for Engaging Students in Large Online Courses**

Peggy Semingson - *The University of Texas at Arlington*

Are you faced with the daunting task of designing a syllabus for a large online course? Do you have course material that relies on demonstrations and technical information? This dialogue-focused presentation provides ideas and insights the instructors have learned from teaching large (100-200+ students) online courses at a large public university. We will share the ways that our syllabuses are carefully designed to differentiate learning for large-scale online courses within an online-only degree program in a teacher education program. Resources, syllabuses, rubrics, and a pre-course planning checklist used by the instructors will be shared.

### **“Teacher-as-Writer”: Structuring Faculty Writing Groups for Success**

Peggy Semingson - *The University of Texas at Arlington*

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### **Learning Portfolio: A Student’s Path to Discovery, Learning and Reflection**

Jennifer Simpson - *Texas A&M University, Corpus Christi*

Learning Portfolios can play a major role in creating significant learning experiences. They can help students to develop critical thinking skills and understand the importance of the work and knowledge they are gaining in their college courses. These portfolios also give instructors the opportunity to better assess their students’ strengths and weaknesses. This presentation will explore what a Learning Portfolio consists of and how to implement one in your classroom. We will also provide sample assignment descriptions, sample rubrics, along with various student portfolio work. Participants will be provided a CD that contains the presentation and all sample work shown.



### **Retention Help: Utilizing Peer Mentors**

Jennifer Simpson, Elizabeth Bradshaw, and Regina Edwards - *Texas A&M University, Corpus Christi*

Student retention is a huge issue in college, particularly during the first year. One method that has been shown to improve student retention is the incorporation of peer mentors in the classroom. This can be intimidating. This presentation will address how they can be implemented into a small classroom and also a large lecture classroom. Lessons learned from the implementation process insights gained into successes and challenges we've experienced as we work to incorporate peer mentors into the classroom will be shared. Some specific examples on how one can successfully incorporate peer mentors into your classroom will be provided.

### **Student Administered Polls: Building a Personal Connection to Learning**

Jennifer Simpson - *Texas A&M University, Corpus Christi*

By incorporating a polling assignment, students are able to apply math skills, creativity, spoken and written skills, cooperation, evaluation of information skills, and technology skills. This presentation will go through the step-by-step process of introducing the topic of polling, how to conduct them in class, and introducing/ conducting/presentation/evaluation of the polling assignment. These activities are very flexible and can be done as an individual project, group project, or whole class activity and can be done with any lecture topic. A CD will be provided at the end of the session that contains the presentation, along with detailed sample lesson plans, the polling assignment, rubric and sample student polling projects.

### **A Novel Social Media Platform for Fostering Campus-Wide Ethical Engagement**

Kelly Smith - *Clemson University*

This Fall, Clemson University will be developing an online system designed to foster campus wide awareness and discussion of ethics in general and our shared institutional values in particular. The system entices students into a very sophisticated social media platform with weekly ethical dilemmas which invite them to weigh in as to what should be done. Their responses are used to compute each student's alignment with the classical values of virtue ethics as well as the virtue "fingerprint" of values unique to the university and other groups they belong to. We hope to soon establish a vibrant online ethical community.

### **Working Together to Develop Peer Review of Teaching**

Julie Stewart and Patrick Davis - *University of Texas at Austin*

This session explores the development and work of a multi-disciplinary faculty learning community to design and support departmental peer review of teaching that recognizes departments' signature cultures and focuses on developing effective teaching practices.

### **Teaching in Blended Learning Environments: Creating and Sustaining Communities of Inquiry**

Norm Vaughan - *Mount Royal University in Calgary, Alberta*

According to a survey conducted over ten years ago, more than 80% of higher education institutions in the United States offer courses in a blended format (Arabasz, Boggs & Baker, 2003). In the words of Gladwell (2000), we have gone over the "tipping point"; blended learning has become an educational epidemic. The three societal forces that have converged (the perfect wave) to drive this epidemic are technology, financial constraints, and



quality concerns. The blended approaches to learning that have arisen to address these forces have led to three major non-contradictory affordances – effectiveness, efficiency, and convenience. The result is an era of engagement and sustainable communities of inquiry. This session will provide participants with an opportunity to share and discuss strategies for designing, facilitating, and leading blended learning courses and programs.

### **Stereotype Threat: Three Interventions**

Cia Verschelden - *University of Central Oklahoma*

“Stereotype threat,” a term first used by Claude Steele in the mid-1990’s is “...a situation in which a member of a group fears that her or his performance will validate an existing negative performance stereotype, causing a decrease in performance” (Rydell, Shiffrin, Boucher, Van Loo, & Rydell, 2010, p. 14042). There is ample evidence that this phenomena has serious consequences for non-majority college students. Fortunately, there is some promising research on some brief and simple interventions that seem to mitigate the negative effects of stereotype threat. In this session, you will learn how to apply three of these interventions.

### **What We’re Learning About Teaching from Online Course Design**

Josh Walker, Stephanie Corliss, Leslie Hall, Holly Custard - *University of Texas at Austin*

As The University of Texas at Austin more earnestly engages online learning, we are collectively gleaning insights about best practices for designing, managing, and evaluating learning experiences that have helpful implications for the on-campus classroom as well. In this session, we report on the current state of online education at UT Austin and share examples of how key principles of instructional design, assessment planning, and project management have emerged in support of online course development and digital content design. From MOOCs to self-paced modules, from online to in-class, we are learning, “What makes for good teaching?”

### **The Learning Paradigm: The Heart of Course Transformation**

Michael Wallace and Gail Grabner - *University of Texas at Austin*

Today, despite mounting evidence from the learning sciences, the typical college course focuses on efficiently covering content where students sit passively listening to lectures given by experts then are expected to replicate the thinking and behaviors by completing homework on their own. A critical mass of instructors dedicated to the “learning paradigm” is needed to reach the tipping point where the majority of college courses are designed around high-impact practices and active learning environments. This session explores how a dedicated instructor, who experienced this paradigm shift, collaborated with a center for teaching and learning to transform a Biochemistry course.

### **An Application of Bioecological Theory to Inspire Effective Teaching Practices**

Jill Walls - *Ball State University*

SoTL scholars have written about the importance and utility of teaching from a guiding theoretical framework. In this presentation, ecological theory and specifically Bronfenbrenner’s Process, Person, Context, Time (PPCT) model, is examined as a potential framework for effective teaching practices at the college level. An overview of the PPCT model of human development and its application to teaching are provided. Personal examples from the author’s teaching experiences and relevant literature are included to further illustrate the proposed application of the PPCT model. The value of using the PPCT as a framework for teaching is discussed.



## **ROMPing Through STEM**

Jessica White-Phillip<sup>1</sup>, Shelly McGee<sup>1</sup>, Betty Ann Bailey<sup>2</sup> - <sup>1</sup>*Our Lady of the Lake University*, <sup>2</sup>*HB Group*

Each of the “Four Learning Styles” approaches learning situations by asking one core question. When examining each core question and considering learning, we find that each group approaches conceptual understanding differently. Integration of these core learning questions creates a framework to teach course concepts from all “four directions”. This framework enables students to build foundations that support conceptual understanding, mechanistic application and pattern-based analysis. Using this method, we enable students to harness their personal strengths and validate their differences while developing communication skills and fostering acceptance for others with different cognitive preferences.

## **High and Low-Tech Ways to Keep Students Motivated and Engaged in ANY Class**

Shayla Wiggins and Avis Washington - *Prairie View A&M University*

Too often, many students lose that “lovin’ feelin’” for the academic adventure that is college either by the time they reach our campuses or by their first bout with mid-term exams. This session will offer several high-tech and low-tech methods to engage and motivate students. Session participants will explore creative uses of technology and traditional teaching strategies that can be used to help students reignite their passion for learning. Participants will also devise a plan to even better engage and motivate students in their own classrooms.

## **Course Design on a Shoestring Budget**

Denille Williams and Ed Queen - *Johns Hopkins University Engineering for Professionals*

Educational institutions often do not have access to instructional design staff to help design or redesign online or face-to-face courses. In these situations, faculty, who are no doubt experts in their content domain, but who may lack the full skillset necessary for effective course design, are left on their own to design a course. Faculty can design highly effective courses themselves, and in this session, we’ll show how.

## **Classroom Dialogue about Student Incivility**

Emily Williams - *Virginia Commonwealth University*

Research consistently shows that professors with disprivileged statuses experience high levels of classroom incivility. Students may behave rudely or suggestively based on stereotyped assumptions about an instructor, especially young, female, or minority professors. Unfortunately, the practical advice within the academy often tends toward capitulation, despite the theoretical value of open dialogue with students about such issues. I explore the balance between a pedagogical transparency that seeks to address the problem in order to create a culture of mutual respect, particularly in learner-centered classrooms, and the problem of acquiescing to inappropriate behavior or validating stereotypes and prejudices by giving them voice.

## **Using Evidence-Based Change Leadership to Make Academic Change Happen**

Julia Williams and Ella Ingram - *Rose-Hulman Institute of Technology*

Embarking on any change project—such as transforming teaching in a department or college—is challenging. Too often, faculty are unsuccessful not because of lack of experience, effort, or engagement, but because they don’t employ the evidence-based change strategies that can facilitate the development and implementation of their projects. In this session, we review specific aspects of the literature of change. In two different activities, we help participants apply this research to their own institutions and projects. These two approaches are strategies faculty can adopt right now to increase the likelihood of success in their current or next change initiative.



## Motivation Through Collaboration in the Online Teaching and Learning Classroom

LeAnna Wilson - *Connections Learning*

Keeping students engaged and motivated through the duration of an online course can be cumbersome, if not impossible. While studies have focused on retention and attrition rates of online students, little research has compared student and faculty perceptions regarding student motivation and self-efficacy in the online classroom. This session presentation will provide the participant with not only a brief overview of student and faculty perceptions regarding student motivation from research study results, but implications for practical and effective collaboration strategies that can be utilized to instill high levels of engagement, motivation, and intrinsic drive to learn in the online environment.

## Building and Sustaining Centers that Support Faculty Work: From CTLs to Educational Development Centers

Todd Zakrajsek - *University of North Carolina, Chapel Hill*

This session is designed to both have a conversation about effective centers designed to support the work of faculty and also to point to some resources that exist in this area. Over the past 20 years, I have founded two centers and had a primary role in reconfiguring a third center. At present I am working in a medical school and have found physicians to be fabulous to work with, but have had to develop a very different approach to delivering resources and consultations. Whether you have an established center on your campus or are thinking about starting one, please come by this session as we learn from one another.

## The New Science of Learning: How Research is Changing the Way We Teach

Todd Zakrajsek - *University of North Carolina, Chapel Hill*

Research continues to emerge that explains how humans learn. Applying those concepts to the classroom can be difficult, but when done effectively amazing results emerge. In this session we will look very specifically at evidence-based suggestions for both delivering a better educational experience for our students and also methods to help the students to be more self-regulated learners. Students who better understand effective methods to employ when studying and why learning works the way it does can learn more with less effort. This workshop will provide strategies you can use in your classroom, using the content of student learning as the subject matter.

## Who We Are, What We Do, and How We Do It

Todd Zakrajsek - *University of North Carolina, Chapel Hill*

Good teaching is NOT an easy task. Unfortunately, what we do is increasingly perceived as a task that does not take a great deal of time or talent. It is strange that the presence of so much digital information may be seen as a move to needing expertise less, whereas the opposite is true. An additional challenge we face as faculty members is the expectation to be proficient in a variety of tasks that we were never trained to do. In this session we will explore the role of the faculty member and specific strategies to make our jobs just a bit more realistic.



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Abilene Christian University  
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 Appalachian State University  
 Ashford University  
 Austin Community College  
 AVID  
 Ball State University  
 Baylor University  
 Barry University  
 Bloomsburg University of Pennsylvania  
 Brigham Young University, Hawaii  
 California Lutheran University  
 California State University, Chico  
 California State University, San Bernardino  
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 Chatham University  
 City University of Seattle  
 Clayton State University  
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 Concordia University Wisconsin  
 Connections Learning  
 Cornell College  
 CUNY, York College  
 CUNY, Queensborough College  
 Dalton State College  
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 Grand Valley State University  
 Hamline University  
 GB Group  
 High Point University  
 Huston-Tillotson University  
 International Teaching Learning Cooperative  
 Johns Hopkins University  
 Johnson & Wales University  
 Kent State University  
 Kent State University, Stark  
 Kettering University  
 Lamar Institute of Technology  
 Miami University  
 Michigan State University  
 Minnesota State University  
 Mott Community College  
 Mount Royal University  
 Nellis Air Force Base  
 North Carolina A&T State University  
 North Dakota State University  
 Northeastern University  
 Northeastern State University  
 Ohio State University Agricultural  
 Technical Institute  
 Palo Alto College  
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 Rose-Hulman Institute of Technology  
 Sam Houston State University  
 San Antonio College  
 Santa Clara University  
 San Jacinto College Central  
 San Jacinto College North  
 San Jacinto College South  
 Shenandoah University  
 South Puget Sound Community College  
 South Texas College  
 Southern Connecticut State University  
 Southwestern Oklahoma State University  
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 St. Cloud State University  
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 SUNY, The College at Brockport  
 Tartleton State University  
 Texas A&M University, College Station  
 Texas A&M University, Corpus Christi  
 Texas Tech University  
 Texas Woman's University  
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 The University of Texas at Arlington  
 The University of Texas at Austin  
 The University of the Incarnate Word  
 Thinking Collaborative  
 Towson University  
 Triton College  
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 University of Central Arkansas  
 University of Central Oklahoma  
 University of Illinois at Urbana-Champaign  
 University of Maryland Baltimore County  
 University of Maryland Eastern Shore  
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 University of North Carolina, Greensboro  
 University of North Carolina, Pembroke  
 University of San Diego  
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