Centers for Teaching & Learning at Georgia State

Laura Carruth, Ph.D.

Director, Center for Instructional Effectiveness
Associate Professor, Neuroscience Institute
Centers for Teaching & Learning

• Together the Center for Instructional Effectiveness (CIE) and the Center for Instructional Innovation (CII) are here to support all of your instructional needs.

• Laura Carruth, Ph.D., Director of the CIE & Harry Dangel, Ph.D., Director Emeritus

• Julian Allen & George Pullman, Ph.D., Co-Directors of the CII
Overarching CIE Mission

To develop a comprehensive system for the professional development of the instructional workforce in pedagogy and best practices in education

• From Graduate Teaching Assistant (GTA) to full professor

• Across all schools, colleges and disciplines
Specific CIE Target Programs

• New Faculty Pedagogy orientation and training

• International Graduate Teaching Assistants (ITA) training

• Spring Pedagogy Conference

• GIFTS and feedback on teaching

• Faculty Teaching Fellows

• Faculty Teaching Mini-Grants
Specific CIE Target Programs

- Workshops
  - Example topics: Applying Active Learning Strategies, Hybridized classes, Classroom Management, Designing Effective Assessments, Academic Honesty, Developing Teaching Portfolios, Using Technology to Enhance Learning, Friday Lunch & Learns

- Large Lecture Redesign
- Writing Across the Curriculum
- Help with SoTL Research
- Distance Education Council
People learn best when

• They are intrinsically motivated
  – They think the subject is personally significant
  – They know & admire people who do it
• They believe they can learn it
• They are appropriately challenged
• They get timely and useful feedback
• They persevere against resistance and adversity
Motivation

Active Learning

Student Engagement: How do we get here?
An engaged student is:

- Challenged
- Driven
- Involved
- Sharing
- Participative
- Active
- Reflective
- Enthusiastic
- Reciprocal
- Responsible
- Taking initiative
- Motivated
- Productive
Student learning conditions should be:

• Meaningful
• Relevant
• Collaborative
• Exciting
• Interactive
• Challenging
• Creative
• Promoting creative thinking
• Project-based

• Promote mastery
• Non-threatening
• Giving students freedom
• Making use of students’ prior experience
• Building relationships
• Relevant to the real world
• Academically rigorous
• Project-based
Student Engagement Techniques (SETs)

• Why is it so hard to engage and motivate students?

• *Student Engagement Techniques: A Handbook for college Faculty*
  by Elizabeth F. Barkley

• Teaching style

• Essential characteristics:
  – Primary mode (individual or collaborative)
  – Activity focus (writing, reading, discussion etc.)
  – Duration (single or multiple sessions)
  – Online transferability
SET: Pre- and Post-Knowledge/Content Quiz or Survey

• Motivation and learning involves working at a level that is appropriately challenging
• Background knowledge probes
• Helping students self-assess
  – What do your students know?
  – What do they think they know?
  – What don’t they know?
  – What do you want them to know?
What can pre-surveys tell you and your students?

Figure 1. Histogram plot of pre-course and pre-exam knowledge survey and first mid-term exam results for students (n = 15) in the Macalester College Dynamic Earth and Global Change course. Survey results are normalized to 100 for comparison with exam results. For most students, the pre-exam survey results correlate well (r = 0.90 for all students excluding #9) with exam score. Students 12 and 13 indicated a lack of preparation on the pre-exam I survey, and their exam scores reflect lower levels of understanding. Student 9 indicated low confidence on the pre-exam I survey, but completed a very strong exam suggesting lack of self confidence, poor self-assessment skills, or additional pre-exam preparation after taking the survey.

Simple SETS

- Minute Papers and Think/Pair/Share good examples
- Good for formative assessment
- Low stakes
- Help develop classroom routine
- What formative assessment strategies do you use?
Engagement: Hybridized classes

• Studies across the many STEM disciplines at the college level have shown that active learning is a more effective classroom strategy than lecture alone

• Evidence supports that active learning works

• Time to ask more focused questions, including how and for whom these classroom interventions work.
Article

Getting Under the Hood: How and for Whom Does Increasing Course Structure Work?

Sarah L. Eddy* and Kelly A. Hogan†

*Department of Biology, University of Washington, Seattle, WA 98195; †Department of Biology, University of North Carolina, Chapel Hill, NC 27599

A

Classroom Structure:
- Traditional Lecture
- Increased Structure

Predicted Exam Performance

Black Student Populations

White Student Populations

B

Classroom Structure:
- Traditional Lecture
- Increased Structure

Predicted Exam Performance

First Generation Student Populations

Continuing Generation Student Populations
How can the CIE help you?

• Targeted workshops, brown bag lunches, and discussions
  – What do you need help with?

• Grants

• GIFTS

• Curriculum design and learning outcomes review
CIE Staff

• Harry Dangel, Ph.D.
• Jennifer Thompson Hall, Ph.D.
• Brennan Collins, Ph.D.
• Volkan Topalli, Ph.D.
• Viviana Cortes, Ph.D.
• Faculty Teaching Fellows

• How to contact us:
  – Go to: http://cie.gsu.edu/
  – Email me at: lcarruth@gsu.edu
CII Services for Faculty

- Face-to-face, Online, and Hybrid Course Design and Consulting
- eLearning Multimedia and Module Development
- Educational Technology Support and Training
- Learning Space Design
- Technology Checkout

Center for Instructional Innovation (CII)
CII Upcoming Events

• Course Design Week
• Online Mini-courses
• Educational Technology Workshops

cii.gsu.edu