

Art & Science:

Flipped Faculty Engagement

for Student Success, Retention & Graduation

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FACULTY ENGAGEMENT

7 PRINCIPLES FOR GOOD PRACTICE IN UNDERGRADUATE EDUCATION WITH TECHNOLOGY AS LEVER

- Encourage contact between students and faculty.
 - Phone, Email, Zoom.us Web Conferencing, Google Hangouts, Skype, Twitter, Slack
- Develop reciprocity and cooperation among students.
 - Discussion Boards, Group Work, Zoom.us, Google Hangouts, Google Documents
- Encourage active learning.
 - Case Studies, Classroom Assessment Techniques, Polling./Clickers, Team Projects, Games
- Give prompt feedback.
 - Low Stakes Quizzes w/ Feedback, Adaptive Homework, Peer Review, Surveys/Polling
- Emphasize time on task.
 - Google Calendar, Weekly Quizzes, Team-based Projects, Wikis, Blogs, Games
- Communicate high expectations.
 - Learning Objectives, Rubrics, Assignment Examples, Peer Mentoring
- Respect diverse talents and ways of learning.
 - Variety of Methods (Hybrid, Inverted, etc), "Remix" Assignments, Assistive Technology

Arthur W. Chickering and Zelda F. Gamson .1987. 7 Principles for Good Practice in Undergraduate Education. AAHE Bulletin, 3-7.

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STUDENT ENGAGEMENT

In 2016, ECAR collaborated with 183 institutions to collect responses from 71,641 undergraduate students about their technology experiences. The findings in this snapshot were developed using a representative sample of 10,000 students from 153 U.S. colleges and universities.

78% of students agree that the use of technology contributes to the successful completion of courses.

46% of students say they get more actively involved in courses that use technology.

NEW MODELS FOR EDUCATION
Four in five students say they have taken a course with a blend of some online and some face-to-face work.

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New Models for Education

3D-PRINTED LEGO-LIKE SCIENCE TOOL

Digital Zombies are here!

Innovators & Early Adopters

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Advancing New Models of Education

empathy
challenge
discovery
sharing

FACULTY Top 3 motivators for integrating technology in the classroom


- Clear indication/evidence that students would benefit
- Release time to design/redesign courses
- Confidence that the technology would work as planned



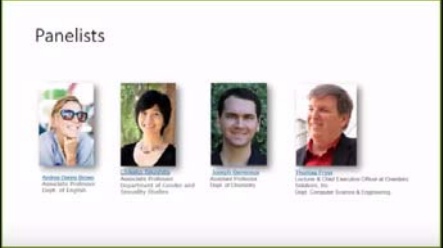
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EMAIL INVITATIONS

Four Innovative Courses



Panelists






Name	Title
Andrea Carter Stone	Assistant Professor, Dept. of English
Christina Lippert	Associate Professor, Department of Gender and Sexuality Studies
Amel Durrant	Assistant Professor, Dept. of Chemistry
Thomas Egan	Associate & Head, Executive Officer of Chemical Institute, Dept. Computer Science & Engineering

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GOOGLE DOCUMENT

Five Guiding Questions




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Five Guiding (5) Questions:


- Relevant course name, number of students, and short description
- Learning problem that made you rethink your instructional approach
- How you addressed that challenge
- How students responded, any challenges, and/or lessons learned
- Any pictures, resources or links that may help tell your story

Reflective Practitioner | Professional Testimonials | EvidenceBased Impact



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Flipped Curated Content



FLIPPED FACULTY PANEL DISCUSSION
Lunch sponsored by SFTC

Speaker: [Lorenz Landauer](#)
Professor of Psychology, Ph.D. University of Rochester
Area of specialization: Cognitive science, memory mechanisms that underlie language comprehension, the processing of semantic and syntactic ambiguity, as well as figurative language
In general, I am interested in how meaning can be represented at the cognitive, neural, and computational levels. From a methodological perspective, I try and investigate the complementary roles of the two central components in learning mechanisms necessary using both neural, computational and brain-stimulated subject populations.

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Speaker: [Lorenz Landauer](#)
Professor of Chemistry CEM in Elec. & Mech. Eng. and Physics, Ph.D. [UCSD](#)
Area of specialization: Physical Chemistry, Analytical Chemistry, Computational Chemistry, Materials Chemistry ([Research Group](#))
Research in the Landau Lab addresses three different areas of surface chemistry: physics and materials science (the growth and properties of thin film molecular coated dielectric resonators), the processes involving adsorption and self-assembly of molecular layers on metal surfaces, and the control of molecular motion at surface during the development of functional devices.

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Speaker: [Lorenz Landauer](#)
Professor of Physics, Ph.D. University of California, Los Angeles
Area of specialization: Experimental condensed matter physics: the transport and thermodynamic properties of 2D and low-dimensional correlated electron systems.
Dr. Alfred Brueckner is an Associate Professor of Physics. His research focus is in the area of thermodynamic, magnetic, and transport properties of exotic materials over a wide range of temperature and applied magnetic field.

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Speaker: [Lorenz Landauer](#)
Professor of Media & Cultural Studies, MFA, University of California, San Diego
Area of specialization: Areas of interest include experimental film, media arts, installation, archival theory, website practice(s), and queer theory.
Crista Sudberg is a filmmaker and artist. She has written on art, performance, media theory, and education and film history. Her work has been exhibited in film festivals, museums, and on television including the Pacific Film Archives, Berkeley, the Museum of Modern Art - New York, the Museum of Contemporary Art - Los Angeles, Los Angeles - Chicago, Film International (Los Angeles - Spain, International Media Festival, Bonn, the Museo - Mexico City, and The Getty Museum - Los Angeles, among many others.

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CAMPUS INVITATION

Schools & Departments





UCR Faculty Instructional Innovation Studio

Schedule (PDF)



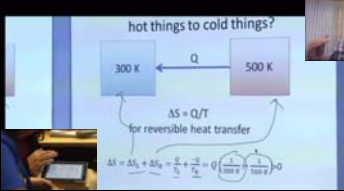
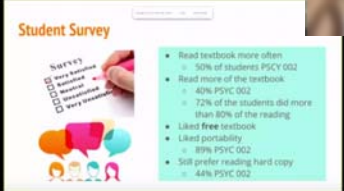
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LIGHTNING TALKS

Six Minutes

Student Survey

- Read textbook more often = 50% of students PSYC 002
- Read more of the textbook = 40% PSYC 002
- 72% of the students did more than 80% of the reading
- Liked free textbook
- Liked portability = 89% PSYC 002
- Still prefer reading hard copy = 44% PSYC 002

Created by Helen Kiyochi from www.Selfies.com

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INTERACTIVE DISCUSSION

Thirty Minutes

DISCOVERY: ID SUPPORT & COLLEAGUES

Knowing that the capacity to work with the designers and colleagues [on course redesign] is there, this has already made me think more creatively about the kinds of things I want to do in the classroom in the future.

Associate Professor, English

DISCOVERY: OPPORTUNITY & CHOICE

The workshop series was beyond my expectations. I signed up to attend face-to-face but I was feeling ill and couldn't go, so I managed to attend via zoom.

I felt like I was in the room with other people. I had all my questions answered and got a chance to talk 1-to-1 with speakers during the break out groups. I can see how I might use this technology in my course.

Assistant Professor, Environmental Science

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4-day Grand Totals: Participants & Speakers (77+)

2016 Faculty Instructional Innovation Studio

48 Participants

Department	Percentage
CHASS	30.2%
CNAS	45.3%
BCOE	11.3%

29 Speakers

Department	Percentage
CHASS	25%
CNAS	32.1%
BCOE	28.6%

IMPACT SUMMARY

During the 4 day event, there were 77 participants, 29 of which were speakers. There was significant representation from both CNAS & CHASS, and surprisingly from Staff.

From this event alone, the potential impact on students is between 1000 – 5760 (classes of 20-120.)

Teaching Style	Fall 2016	Winter 2017	Spring 2017	Summer 2017	Total
Generic	2	1	0	0	3
Hybrid/Flipped	1	1	1	1	4
Tech-Enhanced	10	10	10	10	40
Multiple	1	1	0	0	2
Unsure	10	10	10	10	40
Not Teaching	1	1	1	1	4
None	1	1	1	1	4

Legend: In past quarters at UCR or on other campuses, I have taught: Summer 2017, Spring 2017, Winter 2017, Fall 2016