TRESTLE

University of Colorado Annual TRESTLE meeting
Sponsored by the Center for STEM Learning
Monday, January 23, 3-5:30 pm. Flatirons room, C4C.

What is TRESTLE?

The Transforming Education, Supporting Teaching and Learning Excellence (TRESTLE) is a 7-institution 5-year NSF-funded project to support improvements in undergraduate STEM education using disciplinary "embedded experts." See http://colorado.edu/csl/trestle for info. and mailing list. CU PI: Stephanie Chasteen.

History: TRESTLE builds on the experience of the Science Education Initiative (http://colorado.edu/sei) which placed postdoctoral fellows in departments to support course transformations and evidence-based teaching practice.

Key question: Can we propagate change through a smaller infusion of resources and expertise? Can we leverage existing expertise at CU to further propagate change?

Approach:
(1) Enhancing educational expertise in departments
(2) Building communities within and across campuses to enhance the impact of local STEM education experts.
(3) Generate and make visible evidence of impact

COURSE TRANSFORMATION AWARDS & MINI-GRANTS

Five $10,000 awards (Type II) and several $1000 awards are offered per year to support knowledgeable faculty and instructors in developing courses to incorporate evidence-based teaching practices.

Awardees: MATH (Tubbs), IPHY (Casagrand, Heisler, Foley), ENVS (Hinckley, Neff), PHYS (Bolton).

STEM EDUCATION ADVISORS & SHINDIG

Educational experts give 1:1 feedback, and the informal Shared Innovation Discussion Group (ShInDiG) meet to spread and deepen expertise in STEM education.

ShInDiG: Every 4th Thursday, 2-3
Advisors: By appointment
See TRESTLE website.

TRESTLE SCHOLARS PROGRAM

Faculty engage in a one-semester learning community around specific topics in evidence-based teaching practice. These are called Type I awards.

Spring 2016: ATOC learning goals
Fall 2016: Group activities
Spring 2017: Metacognition

Plus assessments & cross-campus meetings and discussions

Center for STEM Learning
UNIVERSITY OF COLORADO BOULDER

Attendees

*CSL = Center for STEM Learning

Name	Department	Email address	TRESTLE role
Abbie Liel	CEAE	Abbie.liel@colorado.edu	Fall 2016 Scholar
Amanda McAndrew	ASSETT	amanda.mcandrew@colorado.edu	Collaborator (VIP program)
Andrew Martin	EBIO	am@colorado.edu	Friend and supporter
Anne-Barrie Hunter	CSL*	abhunter@coloarado.edu	Advisory Board Member
Atreyee Bhattacharya	ENVS	atreyee.bhattacharya@colorado.edu	Spring 2017 Scholar (Type I)
Becca Ciancanelli	SASC	Rebecca.ciancanelli@colorado.edu	Fall 2016 Scholar; Spring 2017 Scholar's group facilitator; ShInDiG
Cheryl Pinzone	EBIO	cheryl.pinzone@colorado.edu	Fall 2016, Spring 2017 Scholar; ShInDiG
Daniel Bolton	Physics	daniel.bolton@colorado.edu	Spring 2017 awardee (Type II)
Eve-Lyn Hinckley	ENVS	eve.hinckley@colorado.edu	Spring 2017 awardee (Type II)
Ioana Fleming	Comp. Sci.	ioana.fleming@gmail.com	Spring 2017 Scholar
Janet Casagrand	IPHY	Janet.Casagrand@colorado.edu	Fall 2016 awardee (Type II)
Jean Hertzberg	Mech. Eng.	hertzberg@colorado.edu	Spring 2017 Scholar
Jenny Knight	MCDB	knight@colorado.edu	Fall 2016 and Spring 2017 Scholar Facilitator
Joel Corbo	CSL*	joel.corbo@colorado.edu	Friend and supporter
John Nardini	APPM	John.nardini@colorado.edu	Spring 2017 Scholar
Katherine McConnell	Mech. Eng.	katherine.mcconnell@colorado.edu	Interested in project
Katherine Stange	MATH	kstange@math.colorado.edu	Spring 2017 Scholar
Kathryn Plath	CHEM	kathryn.plath@colorado.edu	Spring 2017 Scholar
Kyle McJunkin	Dean's Office	kyle.mcjunkin@colorado.edu	Friend and supporter
Lisa Corwin	EBIO	lisa.corwin@colorado.edu	Interested in project
Marie Boyko	IPHY	boyko@colorado.edu	Spring 2017 Scholar
Mark Werner	OIT / ATDT	Mark.J.Werner@Colorado.Edu	Collaborator (VIP program)
Mike Klymkowsky	MCDB / CU Teach	klym@colorado.edu	CSL Fellow
Nikki Lovenduski	ATOC	nicole.lovenduski@colorado.edu	Spring 2016, Fall 2017 Scholar
Noah Finkelstein	PHYS	finkelsn@colorado.edu	Advisory Board Member
Rob Tubbs	Mathematics	tubbs@colorado.edu	Fall 2016 awardee (Type II)
Robert Buchwald	Honors	buchwald@colorado.edu	Spring 2017 Scholar
Ruth Heisler	IPHY	ruth.heisler@colorado.edu	Fall 2016 awardee (Type II)
Teresa Foley	IPHY	teresa.foley@Colorado.EDU	Fall 2016 awardee
Valerie Otero	EDUC	valerie.otero@colorado.edu	Advisory Board Member

Agenda

Goal: To foster connections and find resources and ideas for sustainable, student-centered course design strategies.

3:00-3:15 Welcoming remarks

3:15 Lightening talks (5 minutes): Student centered learning

TRESTLE participants will share results and upcoming plans

1. TRESTLE Scholars Fall ’16: Designing and Facilitating Group-Worthy Activities. (Facilitator Jenny Knight)
2. Course transformation award 2015-16: Development of case studies (Janet Casagrand, Ruth Heisler, Teresa Foley, IPHY)
3. TRESTLE Scholars Spring ‘17: How can I help students take charge of their own learning? (Facilitators Rebecca Ciancanelli and Jenny Knight)
4. The Visualizing Instructional Practices (VIP) service: COPUS data (Mark Werner, OIT).

3:30 World Café: Student-centered learning

Choose among table discussions as desired to discuss topics of interest.

1. How do we support, or be, the person doing the transformation work (embedded expert)?
2. How do we assess and measure course changes and student learning?
3. How do you write a great group activity?
4. How do we help students reflect on their learning (metacognition)?
5. Birds of a Feather: Connect with others doing similar projects, or just chat.

4:00 Lightening talks (5 minutes): Course design

TRESTLE participants will share results and upcoming plans.

1. Course transformation award 2015-16: Transition to statistics (Rob Tubbs, Math)
2. Course transformation award 2016-17: Quantitative analysis and critical thinking (Eve Hinckley and Jason Neff, ENVS)
3. Course transformation award 2016-17: Experimental Physics (Daniel Bolton, Phys)
4. TRESTLE Scholars Spring ’16: Developing learning goals for the major (Nicole Lovenduski, ATOC)

4:30 World Café: Course Design.

Choose among table discussions as desired to discuss topics of interest.

1. How do you use learning goals to guide the work, and generate consensus on them?
2. How do you set the stage for sustainability in course changes?
3. How can we involve students in authentic research experiences?
4. Birds of a Feather: Connect with others doing similar projects, or just chat.

4:50 Call back and thank you

5:00-5:30 Mingle

Bar open until 5:30, room available until 6:00