



Scaling up educational improvements at CU: TRESTLE

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TRESTLE

Transforming Education, Stimulating Teaching and Learning Excellence http://colorado.edu/csl/trestle

TRESTLE is an NSF-funded grant to test models of educational improvements at 7 universities in the U.S. and Canada, all part of the Bay View Alliance.

TRESTLE Institutions:

University of Kansas (Lead) Indiana University University of Colorado University of California, Davis University of Texas at San Antonio University of British Columbia Queens University

History: The SEI

http://colorado.edu/sei Postdocs partnered with faculty

	U. Colorado	UBC	
# Years	8	7 (ongoing)	
Total Funding	\$5.3M USD	~9.7M USD	
Funding / Dept.	\$150-860K (ave \$650K)	\$300K-\$1.75M (Ave \$1.68 M)	
# Depts.	7	7	
# EE's / Dept.	1-3	2-5	

Impact on		CU	UBC
COURSES	# courses (ave % per dept)	103 (25%)	146 (33%)
STUDENTS	Annual enrollment (ave % annual)	18,000 (50%)	43,000 (59%)
FACULTY	# faculty (ave	190 (66%)	Not available

RESULTS ACROSS DEPARTMENTS

Objective: Widespread use of evidence-based

evidence-based teaching practice in STEM departments.



Observation: The Science Education Initiative hired and trained postdocs to partner with faculty on course transformation projects. Effective, but costly.

Question: How can we propagate change through a more limited infusion of resources and personnel?

Proposed solution: By building communities of scholars around course transformation, to amplify the effects of local experts.

Stay tuned for results: We are starting Year 2 of a 5-year grant

TRESTLE across 7 institutions

Scaffolding change through strong networks focused on course transformation!

Experts embedded in departments

- Postdocs and grad students
- Faculty leaders
- · Faculty learning communities
- Assessment and education experts

Communities

- National TRESTLE network
- Bay View Alliance network
- Communities of practice for educational experts
- · Interdepartmental communities around teaching
- Faculty learning communities

Assessments

- · Surveys of faculty practice
- · Observations of classrooms
- Syllabus and document analysis
- Institutional case studies
- · External evaluation

TRESTLE @ CU Boulder

Mini Stimulus grants

\$1000 / Deadline ongoing Small grants to support course transformation pilots or extensions.

Course transformation awards

\$10,000 / Deadline Oct 1 Grants to support experienced personnel to work on course transformation, to spread expertise within or across departments.

TRESTLE Scholars

Faculty communities around teaching and learning. Spring '16: ATOC program objectives

Fall '16: Group worthy activities

Spring '17: Helping students reflect on learning

ShInDiG and other communities

Shared Innovation Discussion Group; drop-in discussion of teaching & learning with faculty experts. TRESTLE awardees lunches.

TRESTLE national meeting @ CU

Hosting TRESTLE annual meeting, Oct 20-22.

Assessment

Survey, COPUS, etc., partnered with ASSETT/OIT

evaluation

Resources for experts

Acknowledgments
This material is based upon work supported by the
National Science Foundation under Grant No. 1525331

More Information

http://colorado.edu/csl/TRESTLE and http://colorado.edu/sei Chasteen@Colorado.edu References Chasteen et al., Phys. Rev. Spec. Top. - Phys. Ed. Rsrch., 11, 020110 (2015)