

**Request for Proposals**  
**Type 2: Enhancing Sustainability**  
**(open to previously-funded departments)**  
**Fall 2010**

Science and math departments in the College of Arts & Sciences are invited to contribute a proposal for funding from the CU Science Education Initiative (SEI). **The deadline for submission is December 17, 2010.** Proposals will be reviewed by the SEI Director and representatives of the SEI advisory board. Funding decisions will be made by January 15, 2010.

Between 2006 and present, 5 departments have received funding to enable sustained improvements in undergraduate science education. These departments are: Chemistry, Geological Sciences, Integrative Physiology, MCDB, and Physics.

In this round of funding, two categories of proposals will be accepted: Type 1 New Department-based Initiatives, and Type 2 Enhancing Sustainability in previously-funded departments.

**Type 2: Enhancing Sustainability (open to previously-funded departments)**

Departments funded previously can submit proposals for additional funding with the explicit goal of enhancing the sustainability of activities, practices, structures, cultures, or outcomes that were achieved with SEI funding, but are at risk of not being sustained.

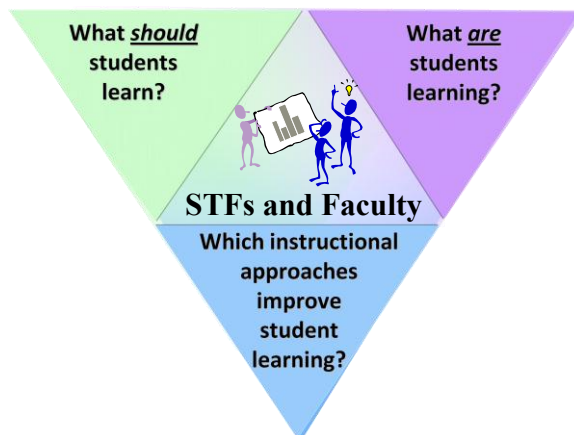
Budget: up to a total of \$150K distributed over 1-4 years.

Proposal length: up to 5 pages single-spaced, including budget.

(Individual faculty interested in funding of smaller education projects are encouraged to apply for funding from ISTEM, see <http://www.colorado.edu/istem/ChancellorAward.html>).

As a reminder, the fundamental criterion of the initial SEI-funding was the probability of achieving widespread sustained improvement in undergraduate education. It is expected that to receive additional funds, efforts will need to focus on increasing the sustainability of the progress the department has made in the three foundational areas:

- 1) Reaching agreement within the department on measurable educational goals ( i.e. what students should be able to *do*).
- 2) Rigorously evaluating what students are actually learning to determine how well they are achieving those goals.
- 3) Where necessary, making changes in materials, curriculum, and/or teaching practices to better achieve the desired goals.



Departments interested in participating should submit a proposal by December 17, 2010 to the SEI Director, Kathy Perkins ([Kathy.Perkins@colorado.edu](mailto:Kathy.Perkins@colorado.edu)).

## **Type 2 Proposals: Enhancing Sustainability**

These proposals need to address the explicit goal of enhancing the sustainability of activities, practices, structures, cultures, or outcomes that were achieved over the last 4 years with SEI funding, but are at risk of not being sustained. Specifically, these proposals should discuss:

- A review of what has been accomplished with previous SEI funding (this can be attached as an Appendix up to 5 pages).
- Description of the changes or aspects of the SEI-funded work the department aims to sustain (that are at risk), how these support the achievement of the 3 foundational elements of the SEI described above, and the activities/approaches/model that will be used to enhance sustainability that go beyond what has been done under the current funding.

Example activities include:

- organizing/improving/building web archives of materials for courses transformed under prior SEI funding
  - implementing sustainable mechanisms and structures for engaging faculty in teaching transformed courses who have not previously participated (e.g. future new faculty)
  - fostering collegial conversations about teaching and learning that help to extend and deepen previous work
  - increasing departmental-wide communication about, knowledge of, and use of course learning goals and their alignment across the departmental curriculum.
  - establishing easy-to-use practices and departmental support mechanisms for faculty to monitor their students' learning in order to inform their own teaching
  - reviewing and publicizing department policies about how research-based teaching activity is evaluated and valued in tenure, promotion, and merit processes
  - communicating the department's goals, activities, and accomplishments to external stakeholders, as a sign of commitment to them
  - participation in fundraising and grant writing activities that will sustain SEI initiated activities/approaches to research-based teaching
- How leadership and oversight of the effort will be provided within the department.
  - The scale of faculty participation, how faculty efforts will be recognized within the department, and what the mechanisms will be for establishing faculty consensus on educational goals, practices, and assessments.
  - A measure of faculty interest and support in this activity, including a faculty vote approving the application and committing the department to carrying out the proposed program.
  - A budget, including breakdown by major categories of expense. Expenditures must be justifiable with the goal of sustainability. Examples of acceptable expenditures include, but are not limited to, funding of:
    - Full-time or part-time STF-like positions, but with activities oriented towards enhancing sustainability

- Grant proposal writing or fundraising activities
- Support for Faculty and STF refinement or documentation of curriculum / materials that will substantially increase sustainability
- Student assistants to help with data collection / processing / archiving
- STF professional development / training: Conferences and publication

Evidence of departmental commitment to these activities through contributions of resources – such as assignment of TA resources or reducing faculty teaching loads to support sustainability of educational improvement efforts, reallocation of funds, restructuring teaching space to support alternative teaching models (e.g. tables/desks for group work, creation of collaborative HW study space, etc.), or restructuring assignments of faculty committee service to support sustainability of activities – will be reviewed favorably.

While most-relevant to new department proposals, supplementary materials describing the SEI and associated departmental activities are available:

<http://www.colorado.edu/sei/SEI-SupplementaryMaterials.pdf>.