



National Science Foundation

4201 Wilson Boulevard, Arlington, Virginia 22230

Dear Colleague Letter —

Centers for Learning and Teaching: *Accumulating What We've Learned* Initiative

The Centers for Learning and Teaching (CLT) program seeks to fund supplements to awards made under the Centers for Teaching and Learning (CTL) and Centers for Learning and Teaching solicitations that:

- exemplify rigorous qualitative and quantitative methods to synthesize what has been learned through the collective work of the centers;
- disseminate that knowledge to key audiences (e.g., policymakers, researchers, practitioners); and
- identify directions for further research and development.

The *Accumulating What We've Learned* initiative is intended to document CLT program contributions to a growing knowledge base supporting science, technology, engineering, and mathematics (STEM) education. The results of this initiative are intended to complement findings of the CLT program evaluation (See *Final Report on the Evaluation of the National Science Foundation's Centers for Learning and Teaching Program. Volume I: Technical Report*. Cambridge, MA: Abt Associates and SRI International, March 2005). The CLT program intends to evaluate the overall impact of what is produced by the activities funded by these supplements. Additionally, the program intends to provide support within the next year for a longitudinal study of the impact of the program on CLT doctoral graduates.

OVERVIEW OF WORK TO BE ACCOMPLISHED. It is expected that the syntheses and reports of findings will focus on issues addressed by more than one center; therefore, proposals for supplemental funding must involve collaboration of two or more centers. The proposed work may also incorporate findings from other large-scale NSF projects (e.g., Math and Science Partnership-Research, Evaluation, and Technical Assistance projects and Curriculum Dissemination and Implementation projects supported under the Instructional Materials Development program) whose efforts contribute to the particular domains of research and/or practice being addressed. Proposals for supplements should have a well-defined area of focus. Examples include:

- performance studies of effective strategies for increasing and diversifying the pool of graduate students and faculty participating in STEM education;
- synthesis of studies and/or practices on mathematics or science teaching and learning for students of traditionally underserved populations;
- assessment and interpretive analyses of critical teacher knowledge;
- syntheses of studies related to mathematics and science curricula;
- process evaluation of forming and operating large, complex centers that support STEM education;
- descriptive review of the nexus of formal and informal learning; or
- best practice studies of the design and implementation of multi-institution STEM education doctoral programs.

Among the activities eligible for support under the provisions of this initiative are:

- conducting studies and/or synthesizing existing work;
- development and dissemination of publications related to studies or findings; and,

- conferences, forums, workshops that bring together personnel critical to the proposed work and/or to dissemination of findings to key audiences.

It is expected that key center personnel will lead the proposed efforts and, along with doctoral and postdoctoral students, will be engaged in supported activities.

A PI or COPI contemplating the development of a proposal for supplemental funding in response to this *Dear Colleague Letter* should discuss with their cognizant program officer the planned work well before submitting a proposal.

ELIGIBILITY INFORMATION.

Organization Limit: Only currently funded CTL and CLT centers are eligible to submit proposals for supplemental funding under this initiative. A center may receive only one supplement under this DCL as the lead organization.

A center may be the lead organization on no more than one proposal per deadline, but may be included in other proposals in which it is not the lead. However, see the "Limit on Number of Proposals" below. A center that receives a supplement as the lead organization under a proposal to the December 12, 2005 deadline is not eligible to submit a proposal as the lead organization to the August 21, 2006 deadline.

PI Eligibility Limit: The Principal Investigator of such a proposal must be the PI or a COPI of the center.

Limit on Number of Proposals:

- A center may submit only one proposal as the lead organization to the deadline of December 12, 2005.
- Those centers that do not submit to the deadline of December 12, 2005 -- and those centers that do submit to that deadline but have their proposal declined -- may submit only one proposal as the lead organization to the deadline of August 21, 2006.
- For each of those deadlines, a center may be included in more than one proposal in which it is not the lead.

AWARD INFORMATION. Awards will be made as supplements to existing CTL or CLT grants.

PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS.

Proposal Preparation Instructions. Proposals submitted in response to this *Dear Colleague Letter* must be prepared and submitted in accordance with the general guidelines contained in the *NSF Grant Proposal Guide (GPG)*. The complete text of the GPG is available at http://www.nsf.gov/pubs/gpg/nsf04_23/. Information on supplemental funding can be found in Section V.B.4.

The **Project Description** is limited to 15 pages, single spaced, and must include the following components:

1. Clear identification of the issue(s) or theme(s) that will be pursued and a rationale for their selection. Issue(s) or theme(s) should build on the work of the collaborating CLTs, but products might also extend beyond these projects to draw on other related efforts in the field.
2. A review of the research and/or the body of practice in the area to be pursued, particularly research generated by the participating CLTs, CTLs, and other collaborators.
3. Identification of all the associated projects that will be involved, including their role in the synthesis effort.

4. Identification of key personnel who will be the intellectual leaders of the effort. Their roles in the synthesis and dissemination efforts must be clearly articulated.
5. A description of the work plan, including any conferences or workshops that will convene key leaders and constituents, and highlight the current state of the knowledge through sessions and commissioned papers.
6. A description of the dissemination strategy that ties research products to critical target audiences. The strategy might include, for example,
 - A monograph or other appropriate publication (e.g., special issue of a refereed journal) that summarizes/synthesizes knowledge around the issue/theme and draws on supported papers, meeting proceedings, and syntheses. A part of the supported effort must connect research to practice, providing implications for practitioner audiences. The latter may require incorporation of specialized dissemination efforts.
 - A final publication (e.g., a book) that summarizes and incorporates all themes selected for investigation, as well as the contributions made to the body of research supporting STEM education.

Budgetary Information. Budgets for *Accumulating What We've Learned* proposals are expected to range from \$200,000 to \$400,000 total, for a total duration of no more than two years. It is expected that \$1,000,000 per year will be available for this initiative, pending availability of funds. Cost sharing is not required.

Deadline Dates. Deadlines for submission of proposals for supplemental funding under this initiative are:

- December 12, 2005 and August 21, 2006.

PROPOSAL REVIEW INFORMATION. Proposals for supplemental funding submitted in response to this *Dear Colleague Letter* will be reviewed by panel.

CONTACT PERSONNEL. Questions about this letter should be directed to Janice Earle (703-292-5097, jearle@nsf.gov) or Michael Haney 703-2925102, mhaney@nsf.gov) Division of Elementary, Secondary, and Informal Education, Directorate for Education and Human Resources.

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