

**Mathematics and Science Professional Development Projects
Guidelines for Submitting Applications
2000-2001**

I. BASIC INFORMATION

<u>Total Amount Available:</u>	\$500,000 to \$2,500,000
<u>Application Deadline:</u>	November 15, 2000
<u>Who Can Apply:</u>	The fiscal agent must be a Florida public school district, state university or community college. Partnerships may be formed with Florida colleges and universities, Area Centers for Educational Enhancement, and/or private entities such as laboratories or museums.
<u>Grant Period:</u>	December 1, 2000 – September 30, 2001
<u>Where to Request Assistance:</u>	Judith Harriss Room 124, Turlington Building 325 West Gaines Street Tallahassee, Florida 32399-0400 Phone: 850-922-9738, SunCom 292-9738 Fax: 850-413-0026 E-mail: harrisj2@mail.doe.state.fl.us
<u>Required Application Components:</u>	DOE 100A Form (original signature), DOE 103 Form, Project Narrative, Budget Narrative, Evaluation Plan, Letters of Support, Documentation of Prior Results
<u>Where to Send Application:</u>	Grants Management Office Room 501, Turlington Building 325 West Gaines Street Tallahassee, Florida 32399-0400

Allowable Expenditures:

Activities and resources that relate directly to the design and implementation of professional development in mathematics and/or science for teachers of grades K-8. Examples include materials, workshops, training programs, consultant fees, and associated costs such as travel and per diem, printing, and faculty stipends. Limited purchase of electronic or telecommunications equipment with project funds is permissible if it is established that the use is directly related to implementation of the program.

Reporting Requirements:

At the close of the project, a final FA-399 Budget summary and disbursement form must be submitted to the Department of Education, Office of the Comptroller. Any unexpended funds must be remitted to the Department by the date stipulated on the project notification form.

II. SUMMARY AND BACKGROUND

Florida has long acknowledged the need to improve student achievement in mathematics and science. In 1989, the Florida Department of Education published *A Comprehensive Plan: Improving Mathematics, Science, and Computer Education in Florida* which recommended strong action to strengthen curriculum, revitalize learning, prepare more qualified teachers, and improve the statewide testing program.

In the eleven years since that report was published, Florida has received national recognition for its achievements in revitalizing learning and strengthening curriculum through the development of the Sunshine State Standards and the statewide Florida Comprehensive Assessment Test (FCAT). However, research reveals that work is needed to improve teacher quality, especially in the areas of science and mathematics.

The National Science Board maintains that world-class achievement in science and mathematics education is of critical importance to our nation's future. The National Center for Educational Statistics reports that in 1997, 45% of Florida's public school fourth graders and 46% of eighth graders scored below basic achievement level on the National Assessment of Education Progress (NAEP) Mathematics Test. Furthermore, the 1996 NAEP test revealed that only 29% of eighth grade students achieved a level of proficient or above in science. A 1994 study showed that only 83% of Florida's math teachers and 57% of its science teachers had completed a college academic major or minor in their subject. The connection between teacher qualifications and

student achievement is well supported by research and punctuates the need for professional development programs for mathematics and science teachers already employed in Florida's classrooms.

The 2000-01 General Appropriations Bill provides funds for the improvement of mathematics and science instruction. The intent of these funds is to establish a significant professional development initiative to impact the quality of mathematics and science instruction in grades K-8. Building the knowledge and skills of science and mathematics teachers translates to higher student achievement in mathematics and science.

III. PROJECT DESCRIPTION AND INFORMATION

PROJECT PERIOD

The project period will be December 1, 2000 through September 30, 2001.

MATHEMATICS & SCIENCE PROFESSIONAL DEVELOPMENT PROJECT GOAL

The primary goal of the Mathematics and Science Professional Development Project is to establish a significant professional development initiative that will have statewide impact on the quality of mathematics and science instruction in grades K-8. It is intended that students will be better served by teachers who are well-prepared and knowledgeable in these subject areas. These projects must be replicable at other school sites.

Because of the short time line for completion of these projects, they are intended to be Quick Start: that is, they build upon programs that have demonstrated impact on student learning.

PROJECT ACCOUNTABILITY

The project design must demonstrate ability to impact student achievement in mathematics and/or science. Hence, the design must build upon programs which have demonstrated effectiveness.

It is intended that the funds expended in these projects be directed toward activities that will have the greatest impact on teacher competencies, with minimal funds directed toward the administration of the projects.

Administrative costs will be a major factor in the project selection process, notwithstanding other criteria. Projects with excessive administrative costs will be required to decrease budget expenditures in that category as a condition for approval.

PROJECT REQUIREMENTS

Each project must design professional development that shall be fully implemented by the beginning of the 2001-2002 school year and that meets the following requirements.

1. Projects must focus on improving teachers' understanding of content knowledge and subject specific pedagogy based on the Florida Sunshine State Standards and the subject matter content standards for teachers developed by the Education Standards Commission.
2. Products and training supported by the project must be designed to produce systemic, measurable improvement in student learning, thus should be built on programs that have proven effectiveness.
3. Projects must be designed for systemic implementation, with impact on a significant number of teachers. For example, projects could require that teams of teachers from schools throughout the district be trained, provide administrator training, or include a component for preservice teacher preparation.
4. Projects must provide intensive professional development for teachers, no fewer than 30 inservice hours or the equivalent. Training could be conducted throughout the school year or using a summer institute format. Projects should include follow-up strategies that go beyond the initial training to ensure program implementation and positive impact on student achievement. This professional development should be conducted prior to the beginning of the 2001-2002 school year.
5. Projects must support school improvement plans and identified student needs data.
6. Professional development must be based on current research in the areas of effective instruction in mathematics and science.
7. Project evaluation, documenting implementation of new mathematics and science strategies, will be expected by December 1, 2001. Because the project period is short, student learning gains will not be immediately seen. Therefore, it is expected that an impact study on the effectiveness of the new strategies to improve student learning will be conducted and will be reported by January 30, 2002.

IV. GENERAL INFORMATION

DEADLINE

An original and three copies of the project application must be submitted. The original must bear original signatures.

Applications must be received on or before 5:00 p.m. (EST) on November 15, 2000.

Applications must be submitted to:

Grants Management Office
Florida Department of Education
325 West Gaines Street
Room 501, Turlington Building
Tallahassee, Florida 32399-0400

APPLICATION REVIEW PROCESS

A review committee will evaluate project applications. The committee will make recommendations for funding one or more project(s).

VI. CHECKLIST FOR MATHEMATICS & SCIENCE PROFESSIONAL DEVELOPMENT PROJECT APPLICANTS

- 1. Cover page (DOE 100A) with original signature
- 2. Project narrative
- 3. Budget narrative
- 4. Budget description form (DOE 103)
- 5. Letters of Support
- 6. Evaluation Plan
- 7. Documentation of Prior Program Results
- 8. Applications must be received (not postmarked) by 5:00 p.m., November 15, 2000

V. APPLICATION REVIEW CRITERIA

CRITERIA	POINTS
1. Project Design/Goals, Objectives, and Activities	120
(a) How well do goals, objectives, and timelines move the project toward full implementation within the project period? (20)	
(b) How well does the planning process address the needs of students and teachers? (25)	
(c) What programs are already being implemented by the applicant that demonstrate impact on student learning in mathematics or science? (20)	
(d) How well does the applicant incorporate current research in the areas of mathematics and science instruction in the design of the project? (15)	
(e) How well does the planning process indicate easy replication by other schools? (10)	
(f) How well does the planning process describe how attainment of the project goals and objectives will be evaluated? (15)	
(g) How well does the planning process address the required impact study? (15)	
(h) BONUS: How well does the planning process address the ability of the project to be self-sustaining beyond the project period? (up to 10)	
2. Collaboration/Partnerships	35
(a) How well does the project make use of district/community/regional resources? (10)	
(b) How well does the project support school- and district-wide implementation of the professional development, including follow-up? (10)	
(c) How well does the project narrative identify the key people who will be responsible for implementation of the project and describe their qualifications and roles? (10)	
(d) Are there letters of support from the project's partners and other stakeholders? (5)	
3. Use of Funds	35
(a) Are the planned expenditures appropriate for the scope of the project? (10)	
(b) Are the funds being used primarily to directly provide professional development opportunities for teachers within the project period? (25)	

NOTE: Administrative costs will be a major factor in the project selection process, notwithstanding other criteria. Projects with excessive administrative costs will be required to decrease budget expenditures in that category as a condition for approval.

**Mathematics and Science Professional Development Projects
Application Review/Comment Sheet**

Reviewer: _____

Project Title: _____

Applicant: _____

Check for inclusion of the following:

- _____ DOE 100A with signature
- _____ Project Narrative
- _____ Budget Narrative
- _____ DOE 103 Budget Description Form
- _____ Evaluation Plan
- _____ Documentation of Prior Program Results
- _____ Letters of Support

Major strength(s) of the application:

Major weakness(es) of the application:

Additional Comments:

Final Score: _____/190

Recommend for funding: _____ Yes _____ No

Reviewer's Signature: _____

Date: _____