

October 11, 2005

**MEMORANDUM**

**To:** Dr. Vermelle Johnson, Chairman, and Members, Committee on Academic Affairs and Licensing

**From:** Dr. Gail M. Morrison, Director of Academic Affairs and Licensing

**Consideration of**  
**Additional Improving Teacher Quality Competitive Grants Award,**  
**Project Year 2005-06**

**Background**

Since 1984, the Commission on Higher Education has been responsible for administering federal funds under a Title II program of *The Elementary and Secondary Education Act (ESEA)*. In 2001, the federal legislation was re-authorized under *The No Child Left Behind Act*. Title II Part A *Preparing, Training, and Recruiting High-Quality Teachers and Principals*, authorizes the Commission to conduct a competitive awards program. The purpose of this part of the federal legislation is to provide support to: increase student academic achievement through strategies such as improving teacher and principal quality and increasing the number of highly qualified teachers in the classroom and highly qualified principals and assistant principals in schools.

The Commission is authorized to provide a competitive grants program to partnerships comprised, at a minimum, of schools of education and arts and sciences from higher education institutions along with one or more high-need local education agencies (LEA; defined as school districts). Additional partners may be included as defined by the legislation. Funds to the state are allocated based on the FY 2001 amount received under the former *Eisenhower Professional Development* and *Class-Size Reduction* programs. Any remaining funds from the federal appropriation are distributed through a formula based on the State's school-age population and percent of these children in families with incomes below the poverty level.

Under federal regulations, 2.5 percent of the *Improving Teacher Quality Higher Education Grants* (ITQ) funds for the state are allocated to the Commission to be used for the competitive grants program. The Commission has approximately \$900,000 with which to make awards for the project year 2005-06. Proposed projects may request up to \$125,000 in funds per year. Average budget requests range from \$50,000 to 125,000. The Commission seeks proposals that will have maximum impact and encourages multi-year programs to assure positive results on the target audience. The number of grants awarded will be determined primarily by the quality of the proposals submitted and the size of the negotiated final budgets in comparison to the total funds available. Equitable geographic distribution (i.e., districts served) must be considered in making awards, assuming proposals are deemed to be of high quality. No proposal is considered unless it meets the minimum federal definition of a partnership (as stated in the *ITQ Guidelines and in the Federal Title II Non-Regulatory Guidance*).

**Due to a relatively a small number of eligible proposals received in time for the July 22, 2005 competition, the grant review panel agreed that Commission staff should re-issue an updated Request for Proposals to the submitting institutions, with revised proposals due October 1, 2005. Significant attention in the re-issued RFP was placed on the importance of LEA involvement, student achievement, and the presentation to the review panel.**

A listing of the proposals received is included as **Attachment 1**. A review panel consisting of K-12 and higher education representatives **Attachment 2** will meet on October 7, 2005, to review and rate the re-submitted proposals. Abstracts describing all of the proposed projects are included in **Attachment 3**. A total of four proposals were received by the Commission for consideration.

### **Overview of Improving Teacher Quality Higher Education Grants *Guidelines***

The higher education program is a competitive grants program with the primary focus on professional development; however, but there are several significant changes under the new legislation. Foremost is that the Commission will only award grants to eligible partnerships that must be comprised of at a minimum (1) a private or public institution of higher education and the division of the institution that prepares teachers and principals; (2) a school of arts and sciences; and (3) a high-need local education agency (defined in the legislation as a school district meeting certain criteria related to poverty levels. Additional partners may also be included. Another change is that there is no longer a focus on science and mathematics but that nine core academic areas (English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography) can be addressed in proposals. Professional development may focus on in-service teachers as well as principals and paraprofessionals. Pre-service may participate in the projects. The emphasis of the

proposed projects must be on low-performing districts and schools and the Commission is charged with ensuring an equitable geographic distribution of grants.

The *Guidelines* approved by the Commission were developed to reflect the new legislation and have been developed in collaboration with the S.C. Department of Education. Federal regulations require that the Commission work in conjunction with the Department in meeting statewide educational needs. The priority areas that proposals must address derive from the federal legislation as well as those identified in the State's Consolidated State Plan submitted to the U.S. Department of Education.

Under this program, grants may be awarded to multi-year projects for project year 2005-06.

### **Recommendation**

Because the Review Panel meets after the Committee mail-out, the panel's report and recommendation as well as staff recommendation will be mailed under separate cover Friday afternoon, October 7, 2005.

**Attachment 1**

**Additional New Teacher Quality Grant  
Project Year 2004-05 Proposals**

<b>Institution</b>	<b>Project Title</b>	<b>Director</b>	<b>Funds Requested</b>
Clemson University	Building a Mathematical Learning Community	Donna Diaz	\$125,000
Clemson University	Digital Express	Anna Baldwin	\$124,997
USC-Upstate	Integration of Geographic Integration System & Global Positioning System Technologies into the Middle Grades II	Judy Beck	\$ 50, 269
USC-Columbia	Developing Highly Qualified Middle School Teachers of Mathematics	Laura Kent	\$123,828

**Attachment 2**

**Improving Teacher Quality  
Review Panel Additional FY 2005-06**

Jeffrey Priest, Head School of Education University of South Carolina- Aiken	Randy La Cross, Director Center of Excellence Governor's School for Science And Mathematics
Kitty Farnell, Coordinator Science Education Lexington/Richland District Five	Leonard McIntyre, Dean College of Education, Humanities and Social Science South Carolina State University
JoAnn Anderson Executive Director S.C. Education Oversight Committee	Michael Raley Program Manager S.C. Commission on Higher Education
Deborah Larkin Education Associate S.C. Department of Education	Esther Kramer Program Manager S. C. Commission on Higher Education

### Attachment 3

#### **“Developing Highly Qualified Middle School Teachers of Mathematics”**

**University of South Carolina - Columbia**

**Project Director: Laura Brinker Kent**

This project will prepare identified middle school teachers in Richland County School District One to achieve “highly qualified” status in middle level mathematical. These teachers will have the opportunity to improve their content knowledge and enhance their overall instructional practices through a graduate level course focused on teaching middle and high school mathematics topics using various manipulatives and on-site support for enactment of a new curriculum materials. It is expected that their participation in these activities will prepare them to take and pass the Middle Level Mathematics PRAXIS II in the 2005-06 academic year.

The manipulatives course, offered through the University of South Carolina graduate program in education, designed to cover a broad spectrum of 7-12 content as recommended by National Council of Teachers of Mathematics Standards documents (2000) and South Carolina Mathematics Standards (2001). Developmentally appropriate tools to enhance teaching of number, algebra, geometry, measurement, data analysis and probability are introduced along with activities to help teachers gain a better understanding of the underlying content. Since the course is offered through video tape, it also provides flexibility for teachers to complete the work at their own pace and try out with their students as they increase their comfort level with the content.

Additional professional development sessions, conducted at participating schools and with small groups of teachers will support enactment of SpringBoard mathematics units, new supplementary curriculum materials adopted by Richland One. Many of these units include the use of manipulative materials similar to the ones used in the manipulatives course. The SpringBoard units will provide the opportunity for teachers to enact manipulatives in contextualized and extended problem solving situations.

The premises of the professional development sessions are that teachers are reflective practitioners and that all middle school students are capable of success in mathematics, particularly when various instructional strategies, such as collaborative groups are utilized and individual students’ thinking is valued and validated (Campbell & White, 1997). University faculty and researchers from the mathematics department and education, as well as highly qualified middle school and high school mathematics teachers will lead the professional development sessions. These sessions will be focused on content, pedagogy, and student work. In addition, the project directors will provide support through observations and demonstrations.

The combination of graduate course work and on-site support will serve as a model for simultaneous professional development related to instructional practice and enhancement of teachers’ content knowledge. Participating teachers will be encouraged to further their professional development by sharing their work and experiences with other mathematics teachers across the state, region, and nation, at various related conferences. The directors will also lead efforts to disseminate ideas and outcomes through various state and national mathematics journals

**“Integration of Geographic Information Systems (GIS) and Global Positions System (GPS) Technologies into the Middle Grades II”  
University of South Carolina – Upstate  
Project Director: Judy Beck**

This project is aimed at training teachers in the effective use of new technologies, namely Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technology.

The project goals are to:

- Develop the knowledge and skills of participating teachers in the utilization of GPS and GIS technologies.
- Enhance the content knowledge of participating teachers in the areas of math, science, and social studies through the use of GIS and GPS technology.
- Provide middle level students (grades 5-8) in high-need schools with quality instruction through teacher created units integrating GPS and GIS technologies.
- Provide on-going support to assist teacher participants with implementation of GIS and GPS technology and accompanying subject matter in their classrooms.

The project consists of the following components:

- Professional development workshops during the summer and academic year to increase knowledge and skills related to Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technology.
- Creation of collaborative lesson/unit plans integrating Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technologies.
- Action research project including videotaping of lesson and reflection by teacher to improve teaching and student learning.
- On-going support throughout academic year.

**“Digital Express”**  
**Clemson University**  
**Project Director: Anna Baldwin**

The Digital Express is a project that will increase student achievement in English/Language Arts by enabling teachers to make effective instructional use of technology in the classroom. Specifically, teachers will learn to use digital cameras and digital image editing software to stimulate and support student writing in a wide variety of standards-based instructional activities. They will also use a teacher-controlled, online publishing environment called the Xpress to allow students to publish their written compositions for others to read and react to. This use of digital media and the authentic outside audience for student work made possible through the Xpress will increase motivation and cognitive engagement among learners, resulting in increased achievement on the Palmetto Achievement Challenge Test.

This four year project will match high-need districts to form collaborative partnerships. These partnerships will increase the diversity of student interactions among all schools involved, and will especially help students from high-need schools expand their vision, set their academic sights higher, and bring their level of achievement into compliance with State standards. A teacher support system consisting of customized training and an online collaborative community will help ensure the success of the project.

The project will have a direct impact on 2000 students and 96 teachers at 8 school districts across South Carolina. It will also establish and validate a low cost model for increasing achievement in English/Language Arts that will benefit schools and students statewide by presentations made at state and national conferences. Teachers across the state and nation will have access to the Digital Express model and lesson ideas through the project’s website.

## **“Building a Mathematical Learning Community”**

**Clemson University**

**Project Director: Donna Diaz**

The partnership described in this proposal is not a new one. The School District of Greenville County and Clemson University have collaborated in a curriculum development field test project since Fall 2003. In this project Clemson University has provided curriculum materials, instructional resources, and professional development support for third grade teachers at Grove Elementary. In return the third grade teachers have field tested lessons of a K-5 mathematics curriculum program being developed through the College of Engineering and Science at Clemson.

The work and results of the field test project informs the expansion of the existing partnership between the School District of Greenville County and Clemson University. The intent of this proposal is to expand the participant base and focus of the already existing partnership to include additional grade levels at Grove Elementary and to invite two additional schools in the District to participate in a program of professional development and curriculum implementation.

The ultimate goal of this project is to improve the mathematics achievement of the students at three Greenville County elementary schools—Grove Elementary, Sue Cleveland Elementary, and Welcome Elementary—and to close the achievement gaps that currently exist among the various populations of students in the three schools. This goal will be accomplished through a curriculum implementation project which includes a program for professional development that will enhance the content and pedagogical knowledge of the participating K-5 teachers in the academic area of mathematics. Through this project, it is expected that a mathematical community of learners will be built in the three schools which will impact the District and surrounding school communities for years to come.