February 4, 2010

MEMORANDUM

To: Dr. Bettie Rose Horne, Chair, and Members, Committee on Academic Affairs and Licensing

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

Consideration of Awards for Improving Teacher Quality Competitive Grants Program, FY 2010-11 (New and Continuing)

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, entitled 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 (LEAs) which are 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.
The higher education program is a competitive grants program with the primary focus on professional development; however, there are several recent significant changes under the legislation. Foremost is that the Commission will only award grants to eligible partnerships that are 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 classified as high-needs based upon U.S. census data). Additional partners may also be included. A second change is that there is no longer a focus on science and mathematics. Instead, 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. A third change allows professional development to focus on in-service and pre-service teachers, as well as principals and paraprofessionals (in the core academic areas that the teachers teach). Finally, 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 priority areas that proposals must address are determined by the federal legislation and are identified in the State’s Consolidated State Plan submitted to the U.S. Department of Education by the South Carolina Department of Education.

Under federal regulations, 2.5 percent of the Improving Teacher Quality Higher Education Grants (ITQ) funds for the state is allocated to the Commission to be used for the competitive grants program. The Commission is expected to receive $982,492 with which to make Federal FY 2010-11 awards. This year, given the amount of funding available, proposed new projects may request up to $90,000 in funds per year (In previous years, available funding allowed up to $150,000 per year.) 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 of districts served must be considered in making awards, assuming proposals are deemed to be of high quality. No proposal will be 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).

**Review Panel Recommendations**

A review panel consisting of K-12 and higher education representatives (Attachment 1) met on January 22, 2010, to review and rate the nine proposals submitted for consideration. Three fundable projects were identified by the FY 2010-11 review panel (Attachment 2) for funding because of their excellence and geographic representation. The funding amount requested for the new awards for FY 2010-11 is $267,291.67 contingent upon availability of funds from the federal government.
The three new proposals will allow two new school districts (Lee and Charleston) to receive professional development in mathematics and science content.

In addition to the three new projects, seven continuing projects were submitted and approved by the CHE staff for funding in FY 2010-11 (Attachment 3). These projects were reviewed by staff for their success in meeting the stated goals and objectives in their original proposals and for appropriate activities as identified by the federal guidelines. The total amount requested for continuing proposals in their second through fourth years of funding for awards made under the FY 2007-08 through 2010-11 grant competitions total $641,931 contingent upon availability of funds from the federal government. The total funding amount requested for all approved projects is $968,443.41.

A map (Attachment 4) is attached which shows the high-needs LEAs that are eligible to participate in the Improving Teacher Quality Grant programs and also identifies those that are current partners as well as those that will become partners with the FY 2010-11 projects.

Abstracts describing the three proposed projects recommended for funding are included in Attachment 5. Nine new proposals were received by the Commission for consideration for FY 2010-11.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing approve on behalf of the Commission the review panel’s funding recommendations as shown in Attachments 2 and 3. In keeping with and following the Committee’s authority to make the awards on behalf of the Commission for the Improving Teacher Quality grant program from previous years, the staff requests authority to negotiate the final program activities and budgets with the project directors. Funding will be contingent upon the project directors’ revisions of the proposed projects in accord with the review panel’s recommended changes and availability of federal funds.
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**CHE**
### Improving Teacher Quality (No Child Left Behind)

#### FY 2010 – 11

#### New Proposals Submitted

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Institution</th>
<th>High-Need LEA</th>
<th>Project Director Name</th>
<th>Funds Requested</th>
<th>Recommended for Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toward Excellence in Math and Science (TEMS)</strong></td>
<td>Columbia College</td>
<td>Lee County</td>
<td>Lynne Noble</td>
<td>88,689.47, 82,857.47, 80,770.77, 80,770.77</td>
<td>YES</td>
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<tr>
<td><strong>Improving Teacher Content Knowledge with SC MAPS and Geospatial Technology</strong></td>
<td>USC-Columbia</td>
<td>Calhoun, Richland 1</td>
<td>Sarah Battersby</td>
<td>80,560.00, 82,139.00, 82,830.00, 83,531.00</td>
<td>NO</td>
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<tr>
<td><strong>The History Mystery</strong></td>
<td>Newberry College</td>
<td>Fairfield, Saluda</td>
<td>Karl Rhor</td>
<td>89,996.40, 89,996.40, 89,996.40, 89,996.40</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Developing Highly Qualified Science and Mathematics Teachers through Project-Based Learning</strong></td>
<td>The Citadel</td>
<td>Charleston, Colleton, Hampton1</td>
<td>Tony Johnson</td>
<td>89,563.20, 88,821.00, 89,262.00, 89,792.00</td>
<td>YES</td>
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<tr>
<td><strong>The 4-5-6 Science Project</strong></td>
<td>College of Charleston</td>
<td>Charleston</td>
<td>Meta Van Sickle/Paula Egelson</td>
<td>89,536.00, 89,985.00, 89,985.00, 89,985.00</td>
<td>NO</td>
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<tr>
<td><strong>Improving Teacher Content Knowledge by Empowering Teacher Leaders (Project ETL)</strong></td>
<td>Clemson University</td>
<td>Sumter 17</td>
<td>Sandra Lindler</td>
<td>89,649.00, 89,682.00, 89,722.00, 89,709.00</td>
<td>NO</td>
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<tr>
<td><strong>Unveiling Mathematics Standards</strong></td>
<td>USC-Upstate</td>
<td>Sumter 2, Sumter 17</td>
<td>Marilyn Izzard</td>
<td>89,039.00, 89,473.00, 87,225.00</td>
<td>YES</td>
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</table>
## Improving Teacher Quality (No Child Left Behind)
### FY 2010 – 11
#### New Proposals Submitted

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Institution</th>
<th>High-Need LEA</th>
<th>Project Director Name</th>
<th>Funds Requested</th>
<th>Recommended for Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raising the Bar with Data Driven English/Language Arts (ELA) Instruction and Assessment</td>
<td>USC- Columbia</td>
<td>Florence 4</td>
<td>Rhonda Jeffries</td>
<td>YR1 85,427.00</td>
<td>NO</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td>YR2 83,267.00</td>
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<td>YR3 78,181.00</td>
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<td>YR4 77,767.00</td>
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<tr>
<td>Concept-Focused Inquiry (CFI): A program for mathematics and science teachers in grades 6-8</td>
<td>Coastal Carolina</td>
<td>Horry, Marion 7, Florence 1, Dillon 2</td>
<td>Denise Forrest/Austin Hitt</td>
<td>YR1 89,424.00</td>
<td>NO</td>
</tr>
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<td>YR2 89,424.00</td>
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<td>YR3 89,424.00</td>
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**FIRST YEAR FUNDING REQUEST TOTAL**: 791,884.07

**FIRST YEAR FUNDING AWARDED**: 267,291.67
## Improving Teacher Quality Higher Education
### Continuing Projects
#### FY 2010 - 11

<table>
<thead>
<tr>
<th>PI</th>
<th>Grant</th>
<th>Institution</th>
<th>High Need LEA(s)</th>
<th>Number of Participants Served 2009-10</th>
<th>Requested Budget</th>
<th>Amount Awarded</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Megan Che (formerly Elaine Wiegert)</td>
<td>Meeting the Need for High Qualified Mathematics Teachers</td>
<td>Clemson</td>
<td>Anderson 3, Anderson 5</td>
<td>15 teachers</td>
<td>$82,386</td>
<td>$82,386</td>
<td>Year 3 (of 4)</td>
</tr>
<tr>
<td>Tom Reid</td>
<td>Distance Education for Developing Highly Qualified Middle School Mathematics Teachers</td>
<td>USC-Aiken</td>
<td>Colleton, Hampton 1, Hampton 2, Jasper, McCormick, Orangeburg 4</td>
<td>No participants until Spring and Summer 2010. Estimate of 20 teachers.</td>
<td>$96,923</td>
<td>$96,923</td>
<td>Year 3 (of 4)</td>
</tr>
<tr>
<td>Bert Ely (formerly Mary Earick)</td>
<td>Nature-Based Inquiry</td>
<td>USC-Columbia</td>
<td>Georgetown</td>
<td>13 teachers</td>
<td>$84,882</td>
<td>$84,882</td>
<td>Year 3 (of 4)</td>
</tr>
<tr>
<td>David Virtue</td>
<td>On-Track: Teaching Reading and Content Knowledge</td>
<td>USC-Columbia</td>
<td>Clarendon 1, Colleton, Darlington, Georgetown, Greenville, Newberry, Sumter 17</td>
<td>29 teachers</td>
<td>$124,756</td>
<td>$124,756</td>
<td>Year 4 (of 4)</td>
</tr>
<tr>
<td>Cindy Johnson-Taylor</td>
<td>Inquire to Engage in Chemistry (ITEC)</td>
<td>Newberry College</td>
<td>Laurens 56, Lexington 4, McCormick, Newberry</td>
<td>16 teachers</td>
<td>$90,000</td>
<td>$90,000</td>
<td>Year 2 (of 4)</td>
</tr>
<tr>
<td>Michelle Cook</td>
<td>Project RES: Reform-based Environmental Science</td>
<td>Clemson University</td>
<td>Orangeburg 3, Orangeburg 5</td>
<td>14 teachers</td>
<td>$79,986</td>
<td>$79,986</td>
<td>Year 2 (of 4)</td>
</tr>
<tr>
<td>Allen Coles</td>
<td>The Writer's Edge: Empowering Students to Become Writers</td>
<td>Benedict College</td>
<td>Sumter 2, Sumter 17, Richland 1</td>
<td>26 teachers</td>
<td>$82,998</td>
<td>$82,998</td>
<td>Year 2 (of 4)</td>
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</tbody>
</table>

**Continued Funding Requested** $641,931

**Continuing Funding Awarded** $641,931
Funded High Needs LEAs (Districts) 2010-11

LEAs currently funded, but NOT eligible for new partnerships

LEAs currently funded FY 2009-10 AND eligible for new partnerships

NEW LEAs receiving funding FY 2010-11 AND eligible for new partnerships

Eligible LEAs not receiving funding – Priority Points given for these districts.
Proposal # ITQ10-01: Toward Excellence in Math and Science (TEMS)

Project Directors: Lynne Noble
School of Education
Columbia College

Abstract

Towards Excellence in Mathematics and Science (TEMS) is a collaborative project offered by Columbia College and Lee County Schools. The project was developed through conversations between Columbia College faculty Dr. Lynne Noble – Education and Dr. Kirt Moody – Math and Science and Lee County faculty Dr. Cleo Richardson – Superintendent and Dr. Cheryl Stover – Executive Director of Instruction. Lee County is particularly interested in securing a strong professional development program for their teachers, specifically interested in providing a strong foundation in the early and elementary years and primarily interested in focusing on math and science. The 2008 PACT scores indicate the need for instructional attention in these disciplines.

The TEMS project will be an intensive and extensive professional development program for all the teachers in two designated elementary schools – West Lee Elementary and Dennis Intermediate – for years 1 and 2, and then the same program in Bishopville Primary and Lower Lee Elementary in years 3 and 4. The school-wide professional development program will be TEMS. A beginning workshop will be held prior to the start of school in August. The first Wednesday of each month is an early dismissal day, and the afternoon will be devoted to the TEMS program. Each month will feature a three-hour workshop focused on a mathematics strand, a science strand or on the pedagogy and integration of math and science. For example, in September of 2010, the workshop will focus on the content needed to adequately and effectively instruct students on Math Processes. In October, the focus will be on the content of Matter, and in November, the workshop will turn to pedagogy and planning and integration opportunities. This three workshop cycle will repeat for two years – all six strands in Math and seven strands in Science will be covered.

All workshops will be designed and delivered by Columbia College faculty. Some delivery will take place via Dimdim, and some will be face-to-face in Lee County. Participants will be evaluated on their understanding of each strand the month following the presentation. The pedagogy / integration workshop will include lesson planning, strategies for presenting, monitoring and evaluating students and integrating math and science with each other and with other disciplines.

SmartBoards will be supplied by the grant and by the district and will be an integral piece of the methodology / instruction. The grant will purchase manipulatives for both mathematics and science.

Student progress in math and science will be evaluated using a paired sample non-equivalent comparison group design. Instruments used, depending on grade level, will include the PASS, MAP and district benchmarks. Teacher progress will be measured by content tests and classroom observations / coaching and an evaluator-conducted group interview process at the end of each year.
Proposal # ITQ10-02: Developing Highly Qualified Science and Mathematics Teachers through Project-Based Learning

Project Directors: Tony Johnson
School of Education
The Citadel

ABSTRACT

The Citadel School of Education in—partnership with the School of Science and Mathematics, Charleston County School District, Colleton County School District, and Hampton One School District—seeks funding for a multi-year middle and high school science and mathematics initiative to assist in developing highly qualified science and mathematics teacher through project-based learning. This project-based learning initiative provides the middle and high school science and mathematics teachers in these districts with content specific and pedagogically appropriate professional development to enhance their ability to enable their students to more effectively learn the appropriate science and mathematics knowledge and skills.

The intent of this project is to serve middle and high school level science and mathematics teachers by expanding their content knowledge in their field and applying this knowledge in their classroom through a project-based learning approach. The content will be based on specific, current K-12 national and state science and mathematics standards. The focus for the project-based learning will be the historical Morris Island Lighthouse and surrounding ecosystem, a local context problem. The objectives of this initiative are: 1) increase middle and high school level science and mathematics teachers’ content area knowledge and skills; 2) increase student learning by preparing current middle and high school teachers to implement standards-focused, project-based learning instruction; 3) increase teacher’s effective use of technology in the classroom to better facilitate student learning; and 4) increase teacher’s ability to effectively use differentiated instruction to meet the needs and learning abilities of their student and to integrate the subjects of math, science and history to provide a more relevant and meaningful learning experience.

The scope of the project is to provide a standards-focused professional development initiative each year with a cohort of 20-25 science and mathematics teachers. A summer institute, workshop days, seminars and observations will offer content, activities, strategies, reflective practice and faculty/peer input. During the institute taught by faculty in the School of Mathematics and Sciences, participants will increase their knowledge and pedagogy using the Morris Island Lighthouse and surrounding ecosystem the local context problem for this yearlong initiative. Teachers will earn CEUs for recertification during the institute. Through a three-credit graduate course taught by the School of Education faculty teachers will integrate content knowledge into their curriculum through designing and implementing a standards-focused, project-based instructional unit. Participants will receive on-going support through on-site seminars and off-site via technology. On-going project evaluation will be conducted by an external evaluator and includes assessment of participants, as well as impact on student learning.
Proposal # ITQ10-03: Unveiling Mathematics Standards
Project Directors: Marilyn Izzard
School of Education
USC-Upstate

ABSTRACT

The proposed partnership between USC Upstate, USC Sumter, Sumter County School District Two, and Sumter School District 17, Unveiling Mathematics Standards (UMS), will provide exemplary professional development to improve mathematics teaching so that students meet or exceed state level performance on PASS. UMS will accomplish two goals: 1) establish and maintain a content-based, collaborative professional development model among the partners, 2) improve teachers’ content knowledge and instructional strategies.

Due to the fact that South Carolina has administered the new test, PASS, only one year and the fact that test data has not been released at this time, PACT (the old test) data was analyzed to determine need. Our critical need for quality Professional Development in math is evidenced by elementary math PACT scores showing that less than one third of the students in Sumter County meet proficient and advanced. Further in-depth analysis of the MAP formative assessments data indicates number and operations is the critical content area with less than 30% of the students meeting expected grade level performance in this area. A second factor verifying the need for quality professional development is the fact that over 94% of our elementary math teachers have two, or less, courses in math and one, or less, course in math pedagogy at the college level. After a review of the research, the Leadership Team determined that a program with primary focus of increasing content knowledge and a secondary focus of improving instructional strategies has the greatest likelihood of translating into increased student performance.

During year one for both cohorts, USC Upstate education and USC Sumter math professors will provide thirty or more teachers from the school districts over 60 hours of research-based professional development in mathematics, including a summer institute, seminars throughout the year, and follow-up classroom mentoring. Participants will continue their second year with summer workshops on developing classroom formative assessments and quarterly workshops on analyzing and utilizing formative assessment data. The third year will culminate with a final summer seminar focusing on technology as an instructional tool and targeting weaknesses identified by review of the new PASS data (as it becomes available). In addition to the seminar, teacher development of and presentation of mathematics workshops to their colleagues will be a focus of year three.

Multiple measures will be used and analyzed for the formative evaluation to inform project progress and the summative evaluation of UMS to report project impact. Pre/post tests will measure the improvement of teacher mathematical knowledge, surveys, observations and lesson plan analysis will document change in teaching. Student performance on the PASS will be the primary documentation of student achievement in mathematics as a result of the UMS interventions. The summative evaluation will include lessons learned, promising and/or effective practices for continuation and dissemination.