Memorandum

To: Computer Science Educators
From: ACM’s Office of Public Policy
Date: March 19, 2010
Subject: Funding Opportunities for K-12 Computer Science Education

ACM’s Office of Public Policy is issuing this memo to the computing community to build awareness of two potential funding opportunities at the Department of Education for improving computer science education at the K-12 level. (ACM is not in a position to lead grant proposals.)

As part of the American Recovery and Reinvestment Act of 2009, the Department of Education received unprecedented funding to improve K-12 education. We specifically call your attention to two funds:

• Invest in Innovation Fund (i3)
• Race to The Top Fund

Both programs fund states and local school districts to improve student learning, but the grants take much different forms as detailed below. Computer science is an eligible discipline for both programs.

ACM worked with the Department of Education to secure the following clarification:

“Consistent with the Race to the Top Fund program, the Department interprets the core academic subject of “science” under section 9101(11) to include STEM education (science, technology, engineering and mathematics) which encompasses a wide-range of disciplines, including computer science.”

The final guidance for the i3 funds was released last week. Please note that the letter of intent for i3 funding is due April 1. Proposals are due May 11. Below is a high-level description of the funds.

What You Can Do

The i3 and Race to the Top Funds share similar goals, but are very different in structure and scope. If you have interest in pursuing an i3 application, read the guidance material and work with a local education agency and private partner to develop a proposal.

The Race to the Top funding is largely distributed to states. All states that submitted proposals have STEM education as part of their plans. You can contact your state department of education to point out that computer science is an eligible discipline and asking how computer science education fits into your state’s plan. To the extent that states may be putting new STEM
education standards into state plans, you can refer to the ACM/Computer Science Teacher Association Model K-12 computer science curriculum framework as a marker for rigorous computer science standards\(^1\). Further, only a handful of states are likely to win funding in the first round. Applications for the next round will be due on June 1, allowing time to review state plans.

**Policy Framework**

Both of these funds seek proposals to address the following four priorities:

- College and Career Ready Standards
- Teacher Effectiveness
- Enhanced Data Systems
- Improve Low-Performing Schools

The extent to which the priorities must be addressed by grant proposals changes depending on the program (described below), but these four principles should be kept in mind as the overarching framework for goals of these programs. (Further information on what exactly is in these areas can be found in the implementation documents.)

**The Invest in Innovation Fund (i3)**

The following is a high-level overview of the i3 program. Interested parties are strongly encouraged to read the detailed guidance available on the Department of Education’s website\(^2\). Letters of intent are due on April 1 and applications are due on May 11.

This is a competitive grant program funded by $650 million for this fiscal year, targeted at proposals “that are demonstrated to have an impact on:

- improving student achievement or student growth,
- closing achievement gaps,
- decreasing dropout rates,
- increasing high school graduation rates, or
- increasing college enrollment and completion rates.”

Grant applications must include at least one local education agency (LEA), which are schools or school districts, but can be lead by either an LEA or nonprofit organization, including institutions of higher education.

\(^1\) [http://www.csta.acm.org/Curriculum/sub/ACMK12CSModel.html](http://www.csta.acm.org/Curriculum/sub/ACMK12CSModel.html)

\(^2\) See [http://www2.ed.gov/programs/innovation/index.html](http://www2.ed.gov/programs/innovation/index.html) for detailed information
There are three different types of grants (Scale Up, Validation, and Development) at three different funding levels. The level of evidence required to demonstrate effectiveness decreases as the funding level decreases:

- **Scale Up Grants** (up to $50 million in funding) -- the level of evidence must be “strong” including both high internal validity and high external validity. The program must be able to be scaled up to the national, regional or state level.

- **Validation Grants** (up to $30 million in funding) -- the level of evidence must be “moderate” with either “high internal validity” and “medium external validity”, or vice versa.

- **Development Grants** (up to $5 million in funding) -- the level of evidence must be “reasonable” with research findings or hypotheses, including related research or theories in education and other sectors.

All grants must have a 20% match, but the match need not be secured at the time of the funding.

Grants must address high-need students, address one of the four absolute priorities noted at the beginning of this memo, demonstrate that the LEA and/or private partner has a record of improved student achievement, establish partnerships, secure matching requirement, and meet the evidence requirements noted above. Finally, all grants have evaluation requirements.

For more information, including how the program defines the requirements of the grants, see: [http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480abc28e](http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480abc28e)

The grant application can be found at: [http://www.ed.gov/programs/innovation/i3-application.doc](http://www.ed.gov/programs/innovation/i3-application.doc)

**Race to the Top**

The Race to the Top (RTTT) Fund is a competitive grant program that will go directly to the states. States are required to pass on at least 50% of the funding to LEAs. Forty-one states filed applications for the $4.35 billion that is available through this program.

The RTTT applications must address several priorities. First, states have to demonstrate certain policy reforms and that they have filed for federal stabilization funding. Second, there is a set of “absolute priorities”:

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Applications must “comprehensively and coherently address” all four reform areas noted in the “Policy Framework” section above and “State Success Factors Criteria” to demonstrate a systemic approach to education reform.

States must demonstrate sufficient LEA participation and commitment to successfully implement the state’s plan to increase student achievement, decrease achievement gaps across student subgroups, and increase high school student graduation rates to prepare students for college and careers.

STEM education is a “competitive preference” for states, meaning that those states that include this in their plans will be awarded additional points toward a final proposal score. To meet this priority, States must have a “high-quality plan” to:

- Offer a rigorous course of study in STEM subjects;
- Cooperate with industry experts, museums, universities or other STEM-capable community partners to better prepare teachers; and
- Prepare more students for advanced study and careers in STEM including addressing the needs of underrepresented groups and of females.

Lastly, there is a set of “invitational priorities” that do not result in any additional application points:

- Innovations for improving early learning outcomes. Of particular interest are programs and strategies that improve educational outcomes of young children (pre-K through grade 3) by improving the quality of preschool programs.
- Expansion and adaptation of statewide longitudinal data systems.
- P-20 coordination and vertical alignment.
- School-level conditions for reform, innovation and learning, which can include:
  - Implementing new structures and formats for the school day or year that result in increased learning time
  - Creating school climates and cultures that remove obstacles and support student achievement
  - Implementing strategies to effectively engage families and communities

The Department has named 16 finalists of the 41 applicants:

Colorado, Delaware, the District of Columbia, Florida, Georgia, Illinois, Kentucky, Louisiana, Massachusetts, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina and Tennessee.

The first round winners will be chosen in April, and a second round of applications will be accepted in June.