Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grants

Technical Assistance Webinar

Stacey Lutz
Governor’s Office of Student Achievement

September 29, 2015
Goals of Today’s Webinar

By the end of today’s webinar, you should be able to answer the following questions:

– What is the Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grant?
– Who is eligible to apply for this grant?
– What is the application process and timeline?
– How can I build a successful grant application?
Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grant

Educational Priority Areas:

- Applied Learning with a Focus on STEM (Science, Technology, Engineering and Math) Education
- Birth to Age Eight Language and Literacy Development
- Blended Learning School Models
- Teacher and Leader Development for High Need Schools
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Educational Priority Areas:

- Applied Learning with a Focus on STEM (Science, Technology, Engineering and Math) Education
- Teacher and Leader Development for High Need Schools
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Goals of this Grant:

- Creating and/or scaling innovative, effective professional learning models for two specific populations
  - K-8 Mathematics
  - K-12 Computer Science/coding
- Supporting development and implementation of high quality instruction
- Impacting student achievement and success in mathematics and Computer Science/coding
- Increasing the availability high-quality, application-based coding and programming opportunities for all students
Potential Impacts of Professional Learning on Student Learning:

- Increasing the effective use of authentic learning tasks in instruction
- Increasing technology-enabled learning experiences through which students engage with tasks with appropriate technologies
- Employing effective instructional design tools or innovative products
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Grant Timeframe:

- Proposal Deadline: November 10, 2015
  - All applications must be postmarked by this date for consideration
- Award Notification: December 10, 2015
- Grant Period: January 1, 2016 – June 30, 2017
  - January 2016 – May 2016: planning and development of professional learning
  - May 2016 – August 2016: delivery of professional learning
  - August 2016 – June 2017: implementation and monitoring of professional learning
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Eligibility for Participation

- Georgia public districts or schools serving one or both of the following populations
  - K-8 mathematics
  - K-12 Computer Science/coding
- Georgia Charter schools serving the identified population(s)
- Regional Education Service Agencies (RESAs) in partnership with a Georgia school(s) or district(s) serving the identified populations
- Institutions of Higher Education (IHEs) in partnership with a Georgia school(s) or district(s) serving the identified populations
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Application Process:

– Application packets should be mailed – no electronic submissions will be accepted – to the address below and must be postmarked by November 10, 2015.

– No application packets postmarked after November 10 will be considered for award.

– Mail completed packets to the following address:

  Stacey Lutz  
  Governor’s Office of Student Achievement  
  205 Jesse Hill, Jr. Drive SE  
  952 Twin Towers East  
  Atlanta, Georgia 30334
Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grant

Application Process:

Application packets should include the following:

– Application Cover Sheet
– Proposal Narrative
– Any Appendix Attachments
– CD or USB with all required files
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Application Component Overview

<table>
<thead>
<tr>
<th>Component</th>
<th>Limits</th>
<th>Value</th>
<th>Supporting Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>300 words</td>
<td>10 points</td>
<td>Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Evidence of Need Template (optional)</td>
</tr>
<tr>
<td>Need for Initiative</td>
<td>500 words</td>
<td>15 points</td>
<td>Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Goals and Outcomes Chart (optional)</td>
</tr>
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<tr>
<td>Action Plan</td>
<td>1000 words</td>
<td>15 points</td>
<td>Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Scope of Work Template (optional)</td>
</tr>
<tr>
<td>Budget</td>
<td>1-page narrative</td>
<td>20 points</td>
<td>Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Budget Template (required)</td>
</tr>
<tr>
<td>Capacity</td>
<td>500 words</td>
<td>15 points</td>
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<tr>
<td>Evaluation/Sustainability</td>
<td>300 words</td>
<td>10 points</td>
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**Executive Summary** – The Elevator Pitch

- What is your theory of change?
- What is your target population?
  - Number of teachers
  - Number of students
  - Grades
- What are your goals and intended outcomes?
  - Must include specific student growth or performance targets anticipated from effective implementation of professional learning
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Need for Initiative – Evidence Based Establishment of Need
General

- What evidence or data suggest a need to engage K-8 mathematics and/or K-12 Computer Science/coding teachers in professional learning to enhance instructional practices?
- What area are you targeting – mathematics or Computer Science/coding, or an integrated approach to mathematics and Computer Science/coding, and how does this data or evidence establish a need for instructional change in that area?

Planning Tool: Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Evidence of Need Template (optional)
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Need for Initiative – K-8 Mathematics

- How does student achievement or growth at your school differ from that of students in other schools across the region or state?
- What are the instructional challenges that teachers have identified in mathematics at your school?
- How will this program enable teachers to provide high quality mathematics instruction?
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Need for Initiative – K-12 Computer Science/Coding

- What is the availability of Computer Science/coding courses in your school or district?
- What is your current capacity to offer Computer Science/coding courses?
- How will this program enable teachers to better integrate Computer Science/coding principles into existing curricula into mathematics and science courses?
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Need for Initiative – Integrated Mathematics and Computer Science/Coding

- To what extent are Computer Science/coding principles integrated into mathematics instruction?
- How could an integrated instructional approach increase the authenticity of learning experiences for students?
- How could core training of mathematics teachers in Computer Science/coding principles help them incorporate coding and other technical skills into academic course work?
- How can an integrated instructional approach increase non-traditional STEM students’ interest in and exposure to STEM areas and careers?
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**Goals:** What should goals focus on?

- Identification of changes in *adult behavior* that directly impact student success in the identified area of need
- Explanation of action steps associated with changes
- Timeframe for expected changes
- Indicators of successful attainment of the goals
  - These indicators must include specific student growth and/or performance targets that are anticipated to result from effective classroom implementation of the professional learning.
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**Goals:** How should the goals be written?

SMART Goals (3-5)
- Specific, Measurable, Ambitious, Realistic, Time-Bound
- During the 2016-2017 school year 90% of teachers in Sunrise Middle School will effectively integrate a minimum of one Computer Science coding opportunity per unit in all mathematics courses using lesson design provided in professional learning.

Planning Tool: Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Goals and Outcomes Chart (optional)
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**Action Plan:** How will you reach your goals?

- What are the specific steps of your action plan?
- What research or evidence suggests that these steps will have their desired impact?
- What professional learning will be developed and/or delivered to teachers and leaders?
- When and how will it be delivered?
- How will it be monitored as it is implemented?

**Planning Tool:** Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Scope of Work Template (optional)
Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grant

**Budget:** Template and Narrative

- Excel Budget Template – *required*
  - Planning Tool: Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Budget Template (required)
- Narrative explanation – required
  - 1-page limit including narrative and/or graphics
  - Descriptions and assumptions for all cost categories
  - Rationale for expenditures and amounts budgeted
  - Other funding to support the work (not required)
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**Capacity:** Who will be responsible for making the grant work?

- Grant Project Personnel
  - Qualifications?
  - Availability?
  - Previous Successes?
- Professional Learning Partners
  - Success in delivering and monitoring programs
  - Evidence of high-quality professional learning materials and presentations
- Resumes and Letters of Intent – strongly recommended
  - *NOT* considered in word limit
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Evaluation and Sustainability: Monitoring and Scaling

- How will you know the professional learning was effective?
- How will you know that it was implemented with fidelity?
- How will you measure its impact on student learning?
- How will you continue the initiative after the grant period ends?
- How can you scale this initiative to a larger target population if you are successful?
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How do I write a successful grant application?

<table>
<thead>
<tr>
<th>DO</th>
<th>DON’T</th>
</tr>
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<tbody>
<tr>
<td>Use data specific to your school and students to establish need:</td>
<td>Use generic or universal data that does not directly pertain to or describe your particular population:</td>
</tr>
<tr>
<td>85% of female students in Sunnyvale Middle School showed a decrease in student growth percentiles between the 6th and 8th grades in mathematics during the period from 2011-2014.</td>
<td>Females are an underrepresented population in STEM and mathematics courses and research states that those low numbers can be attributed to loss of female interest and success in mathematics in the middle school grades.</td>
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<td>Use templates provided with application materials for planning and drafting:</td>
<td>Assume you can respond generally to the application components or simply make a bulleted list of suggested questions:</td>
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Although these are not required or scored, these templates provide an outline of the thought process behind your grant planning and can provide insight to grant application reviewers. While questions are provided for guidance, there are multiple ways of establishing need, capacity and other components of the grant. Thorough discussion and solid rationales will strengthen your application.
## Innovation in K-8 Mathematics and/or K-12 Computer Science/Coding Professional Learning Grant

### How do I write a successful grant application?

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<td>Stay within the word counts, answer all aspects of the required component, and have multiple reviews of the application draft.</td>
<td>Exceed word limits or submit applications without proofreading for errors or omissions.</td>
</tr>
<tr>
<td>Double check orders and required submission pieces to make sure that all hard copies and electronic files are included in the mailed packet.</td>
<td>Send partial packets or email any part of the grant application.</td>
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**How do I write a successful grant application?**

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<td>Ensure that all parties associated with grant implementation are aware of their roles and expectations.</td>
<td>Assume that others will want to participate or have additional time beyond their current duties and responsibilities to participate.</td>
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<tr>
<td>Ensure support from school and district leaders prior to beginning work on a grant proposal.</td>
<td>Start planning or submission process without proper approval from school and/or district leadership personnel.</td>
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</table>
Questions?

A request for proposals will be published on Governor's Office of Student Achievement website in conjunction with this webinar (www.gosa.georgia.gov). If you have additional questions, please call or email Stacey Lutz using the contact information below.

Contact Information
Stacey Lutz
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RESA Professional Learning Grants and Contracts
stacey.lutz@georgia.gov
(404) 640-9667