

## AGREEMENT EXECUTIVE SUMMARY

<b>Grant Program</b>	<b>National Science Foundation – STEM+C supplement</b>
Funds	\$190,135 sub-award to University of Chicago
Financial Impact Statement	The financial impact of this Agreement is \$190,135. The funding source of this Agreement is the Applied Learning Department budget through the grant provided by National Science Foundation (NSF). The principal NSF grant supplement in the amount of \$249,750 was approved by the Board at the June 12, 2018 School Board Operational Meeting. The supplement brings total NSF award for this project to \$1,499,615.
Schools Included	The following elementary schools will be given the option to participate to continue the work done with the current awarded STEM+C grant schools: Bennett, Silver Shores, Silver Lakes, Pompano Beach, Deerfield Park, Riverglades, Indian Trace, Eagle Point, Morrow, Panther Run, Bayview, Sunshine, Dolphin Bay, Sunset Lakes, Village, Margate and Gator Run.
Managing Department	Applied Learning
Source of Additional Information	<ol style="list-style-type: none"> <li>1. Susan Cantrick, Director – Applied Learning <span style="float: right;">754-321-1859</span></li> <li>2. Dr. Lisa Milenkovic, Supervisor, STEM+Computer Science – <span style="float: right;">754-321-2623</span> Applied Learning</li> </ol>
Project Description	<p>Broward County Public Schools (BCPS) is partnering with UChicago STEM Education at the University of Chicago to expand an exploratory NSF STEM + C project (NSF #1542842) in BCPS that has infused computer science (CS) into the elementary school day through the introduction of Grade 3-5 Interdisciplinary Problem-Based Learning (IPBL) modules. Initial findings of the exploratory study are shared at <a href="http://outlier.uchicago.edu/TimeforCS">http://outlier.uchicago.edu/TimeforCS</a>.</p> <p>The project will continue the development of the IPBL modules and take them through a rigorous data-informed design and development process. Currently, the modules are taught in the context of the literacy block so that time for using them is assured. While connecting to the literacy activities, the IPBL modules focus on a problem derived from Florida science and social studies standards. Students engage in solving the problem through learning experiences that connect to the literacy standards while integrating computer science and science lessons. The module development process will be led by curriculum development experts at UChicago STEM Education who will assure that the lessons are pedagogically and conceptually sound. Concurrent with the development process, BCPS Instructional Facilitators will provide professional development and, with Elementary Master Teachers, will regularly collaborate with the UChicago Team providing practical input, expert teacher experience, and lesson feedback.</p> <p>NSF has offered BCPS the opportunity to apply for a supplement of the original STEM+C grant award to perform an extension of the project through June 30, 2019.</p>
Evaluation Plan	Outcomes: this project will 1) provide young learners with opportunities to learn subjects that are often swept aside at the elementary level and 2) create refined and tested IPBL modules; 3) create models of professional development (PD) for supporting teachers using the modules; 4) generate knowledge about the extent to which teacher attitudes moderate and mediate student outcomes; and 5) generate findings about relationships between students' participation in IPBL experiences and their academic outcomes as well as their attitudes about science and CS.
Research Methodology	The CS education field is engaging in unprecedented efforts to broaden participation in CS education. BCPS has been a staunch advocate of this work and has committed to bringing CS opportunities to all students, K-12. While a great deal of national attention has been directed to the high school level, fewer efforts have focused on lower grades.

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Alignment to Strategic Goals	This grant is aligned to the District’s Strategic Plan under Goal 1: High-Quality Instruction (Early Learning) and Goal 2: Continuous Improvement.
Level of Support provided by GAGP	GAGP staff provided Level 3 support with contract writing, routing facilitation, and stakeholder management. GAGP also prepared the executive summary for the board agenda, facilitated inclusion of the grant and contract on the board agenda, and will track the grant within the grants management system.