

# **2017 INNOVATION FUND ANNUAL REPORT**

**January 2018** By Rebecca Ellis & Jaclyn Colona





This page intentionally left blank

About the Innovation Fund
The Year in Review
Fiscal Year 2018 Funding Cycle
Innovation Fund Accelerator
2017 Innovation Summit
Innovation Fund Tiny Grants7
Innovation Fund Grantee Spotlights
Pine Grove Middle School BLAST 8
Westside High School Personalized Pathways to Success
Charles R. Drew Charter School 21st Century Literacy in the Making14
Telfair County Schools Tiny Trojan Early Literacy Program17
Innovation in Teaching Competition Winners
Special Projects
Georgia Rural Advanced Placement STEM Initiative
New Leaders
Project Lead the Way
Words2Reading
Looking Ahead
Appendix i
Fiscal Year 2018 Innovation Fund Accelerator Granteesi
Fiscal Year 2018 Innovation Fund Implementation & Scaling Granteesiii

•

## **Table of Contents**

### **About the Innovation Fund**

The Innovation Fund, operated by the Governor's Office of Student Achievement (GOSA), strives to dramatically advance student achievement in Georgia. To accomplish this goal, we invest in school districts, charter schools, regional education service agencies (RESAs), and traditional public schools committed to planning, implementing and scaling programs that reimagine education for Georgia's students.

The Innovation Fund began in 2011 as a \$19.4 million competitive grant program created under Georgia's Race to the Top (RT3) plan. Since RT3, Governor Deal appropriated state funding in Fiscal Years (FY) 15, 16, 17 and 18 to continue Georgia's investment in revolutionizing education. Since its

inception, the Innovation Fund has expanded to encompass multiple grant opportunities that elevate the quality of Georgia's teachers and leaders and provide students with never-before-seen approaches to STEAM (science, technology, engineering, arts and mathematics) education, personalized learning, and birth to age eight language and literacy.

Specifically, the Innovation Fund implementation and scaling grants support districts and schools in launching and expanding innovative programs. The Innovation Fund Accelerator, piloted in FY17, builds the capacity of schools and districts to develop purposeful innovations with strong potential to disrupt education in Georgia. We also invest in the power of classroom teachers to transform education through the Innovation in Teaching Competition and Tiny Grant Program. Finally, special projects like the Georgia Rural Advanced Placement (AP) STEM Initiative, Words2Reading, and partnerships with Project Lead the Way and New Leaders support specialized work in targeted areas of the state.

Together, these initiatives have provided over \$35 million of state and federal funding through 164 grants to school districts, traditional public schools, charter schools, RESAs, postsecondary institutions, and nonprofit organizations and 36 grants to the Innovation in Teaching Competition winners. In addition, the Innovation Fund Foundation, Inc. (IFF) received tax-exempt status in FY16 – allowing it to raise funding from businesses and foundations as an additional source of capital for promising innovations. Over the past year, the IFF has set up its board and begun defining its vision, mission and strategy to raise funding to disrupt the status quo of Georgia education.

The pages that follow describe the Innovation Fund's work over the past year, including the FY18 funding cycle, the Innovation Fund Accelerator, the Innovation Summit, Tiny Grant program, Innovation in Teaching Competition winners, and special projects. We also include updates about how our FY16 grantees have fulfilled the Innovation Fund's mission by transforming their students' educational experiences.

## The Year in Review

#### Fiscal Year 2018 Funding Cycle

The FY18 funding cycle launched in August 2017. Based on learning from previous years, GOSA improved several components of this year's funding cycle. The goal of these changes was to ensure GOSA invests in programs that target the root causes of complex education challenges with neverbefore seen approaches to education. Here's what we changed:

• Innovation Fund Accelerator: In previous years, planning grants provided schools and districts \$10,000 to develop innovative programs. In 2016, GOSA recognized the need to provide schools and districts with additional support in this development process. This year, the Innovation Fund Accelerator officially replaced the planning grant opportunity. The Accelerator engages schools and districts in a six-month, GOSA-facilitated planning process where they develop purposeful innovations. At the end of the six months, participants can apply for up to \$45,000 to pilot the programs they invented during the Accelerator.

## Innovation Fund Priority Areas

Applied Learning with a Focus on STEAM Education

Birth to Age Eight Language and Literacy Development

Blended & Personalized Learning

Teacher and Leader Development for High-Need Schools

• **Technical Assistance Webinar:** GOSA also replaced the traditional in-person Technical Assistance Day with a Technical Assistance Webinar Series – providing applicants additional flexibility in meeting the technical assistance requirements. This three-part interactive webinar series covered the Innovation Fund priority areas and available grants, types and levels of innovation, and provided application tips and strategies for each type of grant.



GOSA received a total of 54 applications for the FY18 funding cycle (Tables 1 and 2). On November 13, 2017, <u>Governor Deal awarded</u> six Accelerator grants. On November 29, 2017, <u>Governor Deal awarded</u> two implementation grants and one scaling grant (Tables 3 and 4). Descriptions of the FY18 grant award winners are available in the Appendix.



#### **Innovation Fund Accelerator**

In FY17, GOSA developed and piloted the Innovation Fund Accelerator – a new approach to spurring educational innovations throughout Georgia. The Accelerator's strategic planning process supports schools and districts in understanding innovation, using qualitative and quantitative data to identify urgent problems and their root causes, and, ultimately, developing and piloting their own innovative programs. Over six months, participating schools and districts attend GOSA-facilitated workshops, visit innovative schools, and collaborate with their teams between workshops and visits to grow their ideas. Throughout the process, schools and districts receive hands-on, ongoing support and feedback from GOSA. At the end of the six months, participants can apply for up to \$45,000 to support a one-year pilot of the programs they developed.

In FY17, teams from the Baldwin County School District, Clarke County School District, Elm Street Elementary School (Rome City Schools), and North Heights Elementary School (Rome City Schools) engaged in the Accelerator process. As they grew their ideas, teams grappled with several challenges. First, they had to balance the urgency and desire of serving every child in need with the practicality of developing a measurable and feasible pilot program. Participants challenged their assumptions about how poverty impacts student achievement and wrestled with the extent to which schools can mitigate poverty's effects. Grantees also had to relinquish their original ideas – such as a STEAM lab and student-run garden – to allow for new ideas that would more accurately tackle the most pressing challenges their students, teachers, and schools were facing. Ultimately, all four schools and districts received funding to pilot the programs they developed, described below:

#### **BALDWIN COUNTY SCHOOL DISTRICT: LINC**

LINC (Literacy In Neighboring Communities) boosts the literacy skills of children from communities with limited resources and provides their parents with strategies to foster their children's literacy skills at home. LINC is a four-week summer learning experience where three-year olds participate in field trips, activities, and learning centers designed to develop oral language and emergent literacy through play and child and adult interactions. In addition, each week LINC hosts a family day, where parents and their children take community field trips and practice extension activities they can use to support their children's literacy development.

#### **CLARKE COUNTY SCHOOL DISTRICT: PATHWAY OF SUPPORT**

The Clarke County School District (CCSD) will boost the literacy achievement of three to five year-old children who have experienced complex trauma. To accomplish this goal, CCSD will train teachers and caregivers on trauma-informed care. Through this training, caregivers and school staff will learn how to create a buffer that promotes a safe, nurturing environment where children can learn, develop, and use coping and oral language to successfully navigate social and academic situations.

#### ELM STREET ELEMENTARY SCHOOL: A REASON TO READ

Through Reason to Read, Elm Street Elementary School will raise the literacy achievement and engagement of a select group of 20 to 25 third graders who are reading below grade level. Reason to Read will accomplish this goal through two initiatives: (a) an intensive morning literacy block, and (b) an afternoon community apprenticeship linked to each child's interest. During the intensive literacy block, students will hone their foundational reading skills through practice and one-on-one attention from certified teachers and student teachers. In the afternoon, students will connect reading with the real world through selected "passion projects" facilitated by community and business mentors. These mentors will connect each student's growing ability to read to a purpose for their reading, providing students with A Reason to Read.

#### NORTH HEIGHTS ELEMENTARY: CAREER QUEST

North Heights Elementary Career Quest will increase student engagement and achievement by connecting its curriculum to real-world careers. Through Career Quest, third and fifth graders will explore four different career fields, one per nine weeks. They will conduct research, interview experts, and visit community partners to answer a list of career questions and unlock their Career Quest – a STEM-based learning opportunity related to the career field of their choice.

Based on participant feedback, the Innovation Fund Accelerator successfully supported districts in understanding innovation, developing purposeful innovations, and learning a strategic process to solve complex education challenges they may face in the future. Specifically:

- 88% of participants agreed or strongly agreed that their understanding of innovation changed over the course of the Accelerator;
- 100% of participants agreed that the program they designed during the Accelerator was stronger than their original idea for an innovative program; and
- 100% of participants agreed or strongly agreed that they will use the process they went through during the Innovation Fund Accelerator to address challenging and complex problems in other areas of their work.<sup>1</sup>

Due to this positive feedback, GOSA will continue the Accelerator during FY18 with a newlyselected cohort of six Georgia schools and districts – Carrollton City Schools, the Department of Juvenile Justice, Latin Grammar School, Peachcrest Elementary School, Villa Rica Elementary School, and West Jackson Elementary School. Descriptions of the programs these schools and districts will grow and refine are available in the Appendix.

<sup>&</sup>lt;sup>1</sup> Innovation Fund Accelerator Survey. Administered May 2017.

#### **2017 Innovation Summit**

For the past four years, GOSA has hosted an annual Innovation Summit for current and former Innovation Fund grantees to gain momentum from each other's ideas, challenges, and successes. In FY17, however, GOSA expanded the Innovation Summit to include all schools and districts involved in one of GOSA's innovative grant programs, including the Reading Mentors Program, Project Lead the Way, Growing Readers, and more.

On June 6 and 7, 2017, over 250 representatives from these grantees convened at the University of Georgia Hotel and Conference Center in Athens, GA to reimagine what is possible for Georgia's students. During the Summit, participants attended general Launchpad Sessions where they heard from local and national experts both in and outside of education. Mary Cantwell and Shelley Paul of <u>Deep Design Thinking</u> commenced the Summit by engaging attendees in the design thinking process. IV Bray, the principal of <u>The Gwinnett School of Mathematics, Science and Technology</u>, challenged participants' thinking about developing high-quality teachers. Jake Maguire of <u>Community</u> <u>Solutions</u> dared participants to think laterally as he explained how Community Solutions has used the process of innovation to decrease street homelessness in America. Finally, Dr. Travis Bristol, an assistant professor from Boston University who has served as a thought leader for the <u>XQ Super Schools Project</u>, shared his thinking about innovation in education.

Participants also attended breakout sessions led by current and former grantees, leaders of innovative schools and districts, and other local and national education thought leaders. The breakout sessions aligned with the following strands: innovation, STEAM Applied Learning, Birth to Age Eight Language and Literacy, Blended and Personalized Learning, and Teacher and Leader Development. Following the Summit, attendees could extend their learning by signing up for a post-Summit site visit to one of the schools or districts that presented at the Summit.

Overall, attendees indicated that the Summit was a meaningful event that generated new ideas. Specifically,

- 90% of attendees agreed or strongly agreed that they left the Summit feeling energized and excited to continue their work;
- 90% of attendees agreed or strongly agreed that the Summit expanded their thinking about what is possible in education; and
- 95% of attendees agreed that the Innovation Summit was an effective use of their time.<sup>2</sup>

GOSA will host the 2018 Innovation Summit on June 13 and 14, 2018 at the Loudermilk Hotel and Conference Center in Atlanta, GA.

<sup>&</sup>lt;sup>2</sup> Innovation Summit Survey. Administered June 2017.

#### **Innovation Fund Tiny Grants**

In FY16, GOSA recognized that, sometimes, the most impactful innovations start small. To fuel innovation at a classroom and school level, GOSA introduced a new Innovation Fund grant opportunity – Tiny Grants. In FY17 Tiny Grants ranged from \$1,000 to \$10,000 and funded hands-on projects that directly engage students and have the potential to permanently impact a classroom or school's academic environment.



The Tiny Grant application is always open – allowing teachers and schools to apply whenever is convenient for them.

GOSA

then reviews and awards grants on a rolling basis – in February, May, and September. Over the past year, GOSA received 119 applications and awarded 66 grants – totaling \$480,025.87 – to schools and districts representing 35 of Georgia's counties. Projects ranged in focus from creating school-based makerspaces, STEAM labs, and tiny houses to creating personalized learning environments and engaging community partners in building children's language and literacy skills.

To view a list and description of the winning Tiny Grants, please visit GOSA's website.

#### **TROUP COUNTY SCHOOLS: THE JUNGLE BUS**

Troup County Schools will make literacy portable through its community bookmobile, The Jungle Bus. The Jungle Bus will travel to Troup County elementary schools, early learning facilities, community events, and neighborhoods with a focus on high-poverty areas. During its travels, The Jungle Bus will deliver books directly into the hands of children in need, as well as build the capacity of parents, teachers, and caregivers to help children become readers.

#### BENJAMIN E. MAYS HIGH SCHOOL: CULTURALLY RELEVANT COMPUTING

Mays High School will prepare its students for college and career success in Computer Science. Through the Culturally Relevant Computing program, students will take two courses: Computer Science Principles and AP Computer Science while receiving support from Morehouse College. Specifically, Morehouse College students will mentor Mays High School students and Morehouse College's iCORE center will provide in-person and virtual tutoring. In addition, students will extend their learning through career exploration activities and Saturday workshops focused on college and career readiness, standardized testing strategies, financial aid, and the college selection process.

## Innovation Fund Grantee Spotlights Pine Grove Middle School BLAST

#### Applied Learning with a Focus on STEAM

At Pine Grove Middle School (PGMS) in Valdosta, GA, persimmons and mint flourish in the student and teacher designed and maintained food forest. Several yards away, the greenhouse holds a hydroponics and aquaponics lab where students, in collaboration with community experts, grow everything from basil to tilapia. Plants and fish are not the only things growing at PGMS, though, so are students' understanding of and enthusiasm for STEM content, their appreciation of productive failure, and their desire to pursue STEM-focused coursework and careers.

The food forest, greenhouse, hydroponics and aquaponics labs, and integrated STEM curriculum are all part of PGMS' BLAST (Boosting Learning Through Authentic STEM Teaching) program – funded by an FY16 \$700,000 Innovation Fund implementation grant. With its funding, BLAST sought to accomplish the following goals:



- Develop hands-on curriculum units that connect STEM content with direct, on-site opportunities for students to apply and strengthen their critical thinking, communication, problem-solving, and self-management skills;
- Cultivate teacher development and support practices that produce innovative STEM course content and applied learning experiences; and
- Assimilate real-world, wraparound extensions that provide student connections to STEM beyond the classroom.

"When I started my STEM class, I really never thought about my future and what I wanted to do with my life. I was in this regular class, and they taught us the surface. So, I thought, I guess I'll just go with whatever my parents want me to do. Then I got in to the STEM class. This is what I want to do with my life – I want to be connected in all these things that I'm learning." -Pine Grove Middle School Student As part of BLAST, 15 PGMS teachers received extensive professional development, including Project-Based Learning training from the Buck Institute. They also received ongoing, in-school support from Valdosta State University professors and assistance from community experts, such as master gardeners and staff from The Langdale Company, who provided technical advice and support in setting up the aquaponics lab. In addition, these teachers collaborated to plan integrated and rigorous units which connect the biosciences to curriculum standards.

Armed with this professional development, these 15 teachers supported a targeted cohort of 51 seventh graders during the 2015-2016 school year and 89 seventh graders during the 2016-2017 school year. Each cohort encompassed two groups: students with a history of strong academic achievement (accelerated students) and students who expressed an interest in STEM (interest-based students), regardless of their past academic achievement.

To further foster student interest in STEM, PGMS also hosted a summer camp each year of the grant for rising fourth through eighth graders. Over two years, 225 students delved into STEM beyond the classroom through activities like making necklaces in binary code, using engineering principles to problem solve, and using the food forest to learn about sustainable gardening principles and the importance of bees to the ecological system.



After participating in BLAST, students report more positive attitudes towards STEM. Specifically, based on the Applied Learning Student Questionnaire – a GOSA-administered self-report survey which measures changes in students' attitudes towards STEM – students in both cohorts experienced statistically significant increases in their intrinsic motivation, self-management skills, and their intent to persist in STEM coursework or careers.<sup>3</sup>

Students in the BLAST program also outperformed their peers on state science assessments. For example, 99% of BLAST accelerated students, and 72% of BLAST interest-based students scored proficient or distinguished on the 2016 Life Science Milestones assessment, as compared with 64% of all PGMS seventh grade students (Table 5).<sup>4</sup>

This rigorous, integrated STEAM curriculum has also earned PGMS statewide recognition. In May 2017, PGMS received STEM certification from the Georgia Department of Education – making it the first middle school in South Georgia and the ninth middle school in Georgia to earn this credential. "They change up the media we use to learn. Instead of using handwritten notes all the time, we'll use Chromebooks, we'll watch videos, we'll do webcasts, and also what we learn outside is repeated in what we learn in the classroom, like the different methods of watering plants ."

> - Pine Grove Middle School Student

PGMS, however, will not stop at the BLAST program. Based on learnings from its Innovation Fund grant, PGMS will expand its STEM programming by incorporating the arts and bringing its rigorous curriculum and real-world experiences to both sixth and eighth grade students – igniting a passion for STEAM in its whole student body.



<sup>&</sup>lt;sup>3</sup> Applied Learning Student Questionnaire. Administered May 2016 and May 2017.

<sup>&</sup>lt;sup>4</sup> Pine Grove Middle School, 2017 Innovation Fund End-of-Year Evaluation Report (September 2017).

#### Westside High School Personalized Pathways to Success

#### Blended & Personalized Learning

Students at Bibb County School District's Westside High School (WHS) in Macon, GA no longer have the option to fail. What they do have, though, is multiple options for success. Through personalized learning, WHS has revolutionized its schedule to meet the needs of every student, regardless of their academic records or personal circumstances, and raise the quality of teacher practice. Students who need additional rigor participate in the Modular Flex program where they rotate through short learning



blocks that include teacher-directed instruction, small group instruction, collaborative learning, and independent study time. These short learning blocks, or "mods" as WHS calls them, have also aided teachers in ensuring they leverage a variety of engaging instructional strategies, rather than just whole group instruction. Students who are struggling or need flexible schedules participate in Twilight School where they take online courses – with the support of a certified teacher – both before and after school. "I think this style of learning helped me to improve in more ways than one. I learn quickly; I remember more; and I am more responsible," says one WHS student.

For WHS, though, things have not always been this way. At the end of the 2011- 2012 school year, WHS was in a state of emergency. A dismal school culture had led to a mass exodus of teachers and staff – leaving 42 open positions for the upcoming school year.<sup>5</sup> It's graduation rate had dropped to 46%, and its College and Career Readiness Performance Indicator (CCRPI) score was a 46.5 – landing WHS on Georgia's list of priority schools.<sup>6</sup>

"I like that we get instruction from the teacher in large group and practice what we learn in small group, and then get to practice on our own. This style of learning helped me to improve quickly in more ways than one. I learn quickly; I remember more; and I am more responsible." - Westside High School Student

<sup>&</sup>lt;sup>5</sup> Breedlove, D., Eppinger, N., Pleas, T. & Serls, T. "RTI the Master Schedule for Personalized Learning." 2017 Innovation Summit (June 2017).

<sup>&</sup>lt;sup>6</sup> Georgia Department of Education. 2012 College and Career Performance Index (CCRPI) Report.

http://ccrpi.gadoe.org/2012/

Under new leadership, WHS's CCRPI and graduation rate had risen since the 2011- 2012 school year. Despite this growth, however, WHS knew it needed an additional change for its over 1,000 students – almost 100% of whom are considered economically disadvantaged – to compete at a state and national level. With the help of a FY16 \$700,000 Innovation Fund scaling grant, WHS expanded its existing Twilight School and developed and piloted its Modular Flex program – serving 1735 students and 125 teachers over the two-year grant period.<sup>7</sup>

With this increased flexibility, WHS's academic achievement has turned a corner. From the 2014-2015 school year to the 2016-2017 school year, the percentage of students scoring developing learner or above on the Georgia Milestones assessments increased for 9th Grade Literature & Composition, American Literature & Composition, Algebra, Geometry and Physical Science (Table 6).<sup>8</sup> In addition, its 2017 graduation rate was 74.9% –up 7.6 percentage points from the 2015-2016 school year.<sup>9</sup> It's CCRPI rose, too, from 57.7 in 2016 to 67.6 in 2017.<sup>10</sup>



<sup>&</sup>lt;sup>7</sup> Westside Flexible High, 2017 Innovation End-of-Year Evaluation Report (September 2017).

<sup>&</sup>lt;sup>8</sup> Ibid. Percentages reflect spring EOC data for each school year.

<sup>&</sup>lt;sup>9</sup> Governor's Office of Student Achievement. K-12 Public Schools Report Card.

<sup>&</sup>lt;sup>10</sup> Georgia Department of Education. 2016 and 2017 College and Career Readiness Performance Index (CCRPI) Reports. http://ccrpi.gadoe.org

"This program helps keep students, who otherwise would drop out of school, in school and puts them on a path to individual success. This is real personalized learning," says one WHS teacher. Now, with the investment of an FY18 \$700,000 Innovation Fund scaling grant, WHS will expand these personalized learning options to its entire student body – offering all its students a personalized pathway to success.



"This program helps keep students, who otherwise would drop out of school, in school and puts them on a path to individual success. This is real personalized learning."

– Westside High School Teacher

### Charles R. Drew Charter School 21st Century Literacy in the Making

### Birth to Age Eight Language & Literacy Applied Learning with a Focus on STEAM

When a STEAM Trunk rolls into a classroom at Charles R. Drew Charter School in Atlanta, GA, it carries more than just construction paper, glue, or even 3D printers. It carries an opportunity for teachers to increase instructional rigor and for students to create, collaborate and problem solve. Drew Charter School's fleet of 15 STEAM Trunks come in six different designs – Arts and Crafts, Construction, 3D Printing, Electronics, Robotics, and Fun and Games. Teachers can reserve a cart in advance and, on the day requested, it arrives with the supplies needed to implement an authentic, Project-Based Learning (PBL) unit.

These STEAM Trunks, in addition to school and communitybased makerspaces, and a summer camp to support struggling readers are all part of Drew Charter School's 21<sup>st</sup> Century Literacy in the Making (21CLM) program – funded by a \$700,000 FY16



Innovation Fund implementation grant. 21CLM sought to accomplish the following goals:

- Increase opportunities for students to develop 21<sup>st</sup> Century Skills,
- Increase the rigor and creativity of PBL, and
- Decrease summer learning loss.

To boost students' 21<sup>st</sup> Century Skills and instructional rigor, Drew Charter School connected its students with classroom, school, and community-based makerspaces. Makerspaces are community centers with tools where people come together to learn, tinker, design, and prototype ideas. The STEAM Trunks serve as mobile makerspaces that bring tools directly to classrooms – allowing teachers to incorporate making into daily instruction.





Drew Charter School also established a school-based Makerspace – stocked with power tools, craft supplies, electronics, 3D printers and a myriad of other tools and technologies, like sewing machines, a vinyl cutter, and a button maker – for students and their families to use after school and on weekends. Since the 2015-2016 school year, over 750 students and their families have come to this Makerspace to tinker and build everything from birdhouses, fidget spinners and solar models to a robot for a grandmother's birthday present.

Finally, as part of the grant, a select group of 29 fourth through eighth grade students and five parents and community members received scholarships to Decatur Makers – a nonprofit, family-friendly Makerspace in Decatur, GA. With these scholarships, students deconstructed and built computers, learned how to code, built iPhone speakers out of popsicle sticks, and much more. These MakerScholars also shared their experiences with other students on the DrewMakerScholars blog.

To decrease summer learning loss, Drew Charter School incorporated 21<sup>st</sup> Century activities, like coding and 3D storytelling, into the Summer NEST program. The Summer NEST Program is an intensive, four-week summer camp designed to maintain and improve the literacy skills of struggling readers. During each summer of the grant, the program targeted 30 rising first through third graders. Over four weeks, students participated in daily activities that integrated literacy and STEAM, such as practicing sight words with letter stamps and reading informational text to build a portion of a large bridge with K'nex.



This multifaceted approach has paid off. During the 21CLM grant, students experienced gains in math, science, and reading achievement. Specifically, the percentage of Drew Charter School students demonstrating average or high growth on the reading, math and science Measure of Academic Progress (MAP) assessments increased from Fall 2016 to Spring 2017 (Table 7).<sup>11</sup>

<sup>&</sup>lt;sup>11</sup>Charles R, Drew Charter School, 2017 Innovation Fund End-of-Year Evaluation Report (September 2017). The percentage of students demonstrating average or high growth in reading and math includes data for kindergarten through eighth grade students. The percentage of students demonstrating average or high growth in science includes data from fourth through eighth grade students. Drew Charter School kindergarten through third grade students do not take the science MAP assessment.

In addition, based on the AIMS Web assessment, a universal screener that assesses students' literacy skills, 77% of 2017 Summer NEST students either maintained or increased their performance on grade level skills, including letter word sound fluency for rising first graders and oral reading fluency for rising second and third graders.<sup>12</sup> Similarly, 76% of 2017 Summer NEST students either increased or maintained their MAP Reading Assessment scores from Spring 2016 to Fall 2017 – indicating that these students did not experience summer reading loss.<sup>13</sup>

Even though the 21CLM grant ended in October 2016, its impact will outlast its funding. Teachers and students will continue to use the STEAM Trunks to support rigorous, daily instruction, and students and their families will continue to use the Makerspace to tinker, create, and build students' interest and enthusiasm for STEAM.



<sup>&</sup>lt;sup>12</sup> Charles R, Drew Charter School, 2017 Innovation Fund End of Year Evaluation Report (September 2017).

<sup>&</sup>lt;sup>13</sup> Ibid.

### **Telfair County Schools Tiny Trojan Early Literacy Program**

Birth to Age Eight Language & Literacy



In January 2015, Telfair County made national news when it was identified as the poorest county in Georgia.<sup>14</sup> In addition to widespread poverty, Telfair County faced another challenge – its students were struggling to read. In fact, over 77% of its students were not proficient in reading by third grade.<sup>15</sup> In response, the county sought to arm its young children with the literacy skills they need to succeed in school and beyond.

In FY17, Telfair County Schools (TCS) received a \$10,000 Innovation Fund planning grant to develop Tiny Trojans – a

program that would expand quality childcare offerings for low-income families. Specifically, Tiny Trojans would train Telfair County High School (TCHS) students in the Early Childhood Education (ECE) career pathway to assist teachers in providing high quality language and literacy instruction to three-year old children. Over the past year, the grant team – comprised of district leadership, TCHS faculty, and community stakeholders – created an implementation plan through several planning activities, including a needs-assessment and visits to early literacy high school programs.

In collaboration with the Georgia Family Connection Partnership – a state grant program dedicated to linking families with community resources– TCS surveyed the community to assess how often parents and caregivers engage in literacy activities in the home, as well as what they think about the community, district schools, and the availability of childcare services.<sup>16</sup> The analysis revealed that the quality and availability of childcare services were among the top five concerns for parents and caregivers. Additionally, more than 50% of parents and caregivers with children under five years old reported being concerned or very concerned about early literacy in the county, and 60% reported that the county needs a new childcare facility.<sup>17</sup>

In addition, the planning team visited two Georgia early literacy high school programs that closely aligned with TCS' vision for Tiny Trojans – Dodge County High School in Eastman, GA and Eagle Preschool at Northside High School in Warner Robins, GA. Both site visits provided TCS insight on certain program components such as facility and equipment needs, staff needs,

<sup>&</sup>lt;sup>14</sup> http://247wallst.com/special-report/2017/01/05/the-poorest-county-in-every-state/3/

<sup>&</sup>lt;sup>15</sup> Governor's Office of Student Achievement. K-12 Public Schools Report Card. Telfair County, 2014-2015 School Year.

<sup>&</sup>lt;sup>16</sup> Telfair County Schools, Innovation Fund Final Planning Grant Update (September 2017).

<sup>17</sup> Ibid.

curriculum development, class scheduling, recruitment strategies, and the process of acquiring daycare licensing.

Based on survey data, research, and site visits, the district developed a robust implementation plan. TCS plans to recruit three-year old children through partnerships with community organizations, including Babies Can't Wait, the Division of Family and Children Services, and local daycare centers. Its goal is to serve 10 to 15 three-year old children beginning in August 2019 and, eventually, expand to serve 30 children per year. Based on recommendations from the site visits, in addition to its own research, TCS selected two curricula: "Language for Learning," an early literacy curriculum for children, and "Working with Young Children," a high school curriculum for ECE career pathway students. To jumpstart Tiny Trojans, the district trained high school faculty on how to use the curricula during the planning grant. The district will also offer continuous coaching to high school faculty involved in the Tiny Trojans program. Finally, the site visits led TCS to renovate the high school to include child-appropriate facilities and classrooms, which will open in August 2019. When they open, Telfair County believes that Tiny Trojans will also open the doors for its children to succeed in school and beyond.





## **Innovation in Teaching Competition Winners**

The Innovation in Teaching Competition recognizes and rewards Georgia's most innovative educators and makes their resources – including unit plans and videos – available on <u>Georgia</u> <u>Public Broadcasting's website</u>. Since 2013, the Innovation in Teaching Competition has recognized 36 educators across Georgia.

During the 2016-2017 school year, the Innovation in Teaching Competition selected and filmed three Georgia educators. Each winner received a \$3,000 stipend for themselves and a \$4,000 grant to support innovative practices at her school. The winning unit plans all focus on STEAM Applied Learning. Here are our 2017 Innovation in Teaching Competition Winners:



## **CLAUDIA FITZWATER**

#### Charles R. Drew Charter School, Atlanta Public Schools Second and Third Grade

#### STEAM Applied Learning

As a young girl in Colombia, Claudia's teachers fostered an artistic and engaging environment where Claudia controlled her own learning. As a teacher, she nurtures freedom in her own classroom by emphasizing student-centered instruction, creativity, and relevance. She describes her classroom as "an open learning studio where collaboration, co-discovery, and experimentation align with a deep respect for children and the many languages they use to express themselves."

Claudia's teaching exemplifies the power of integrating subject areas. She seamlessly marries the Spanish language with STEAM education to provide students with unique opportunities to solve real world problems. "As a Spanish and robotics teacher, I strive to develop authentic and interdisciplinary Project-Based Learning units while engaging students in the design thinking process," says Claudia. Claudia also acknowledges that the true strength of her teaching comes from collaborating with others. She is "interested in codesigning learning experiences with students, fellow teachers, experts, and community partners at the intersection of STEAM disciplines, foreign language, and social emotional learning." The most exciting part of her job is learning alongside her students, helping them identify their strengths, and nurturing their skills.

Claudia holds a bachelor's degree in foreign languages from Santiago de Cali University and a master's degree in education leadership, with a technology concentration, from Kennesaw State University. She is currently a kindergarten through fifth grade Spanish teacher at Charles R. Drew Charter School in Atlanta, GA.

In her unit, students combine traditional story-telling with technology to create a digital storybook about a monster. Using the book, The Color Monster: A Pop-Up Book of Feelings (El monstruo de los colores), students learn about emotions in Spanish and apply this knowledge to write a story of their own. Each student develops a monster character, scripts a story about it, and designs a puppet to perform in a mini-theater and the culminating digital storybook. Although the plan is written to teach Spanish standards, it can easily be modified to teach English Language Arts standards.

### CHERI NATIONS North Gwinnett Middle School, Gwinnett County Public Schools Eighth Grade

#### STEAM Applied Learning

Cheri Nations teaches more than just science content. She prepares students for the jobs of tomorrow by teaching them to become lifelong learners, problem solvers, and collaborators. Before becoming a science teacher, Cheri worked as a scientist in labs and a chemical manufacturing facility. She actively incorporates the 21st Century skills she learned as a scientist in her classroom to create unique and engaging units. "I want my students to enjoy science because it is amazing," she says.

"One of the keys to keeping students engaged is to make personal connections," Cheri says of her teaching approach. She believes making personal connections with students creates a classroom environment where students feel confident asking questions, taking risks, and making mistakes.

Cheri graduated from the Georgia Institute of Technology with a degree in chemistry. After taking time off to raise her daughters, she took a position as a kindergarten paraprofessional and tutored high school students. In 2013, she took her teaching to the next level when she created and taught the STEM class at Puckett's Mill Elementary School. In 2014, she accepted her current position at North Gwinnett Middle School to start a STEM Connections program. Cheri was selected as a finalist for the 2017-2018 Gwinnett County Public Schools Teacher of the Year.

In her Project Based Learning unit that integrates engineering, physical science, and visual arts, students assume the role of engineers to build a safe, stable, and fun roller coaster. Using the Engineering Design Process as a guide, students research roller coaster designs, sketch a prototype, build the roller coaster, and calculate its average speed and energy. Throughout the unit, students document the design process and create an online presentation. Students finish the unit by grading their peers' work. "This unit taught us much more than kinetic and potential energy," says one of Cheri's students." It showed us how to balance our budget, work as a team, keep a schedule, and follow a set of restrictions. It blended the science and engineering into one project that maximized our learning,"



"This unit taught us much more than kinetic and potential energy. It showed us how to balance our budget, work as a team, keep a schedule, and follow a set of restrictions. It blended the science and engineering into one project that maximized our learning." – Eighth Grade Student



#### KAYCIE ROGERS East Jackson Elementary School, Jackson County School System Third Grade STEAM Applied Learning

Kaycie Rogers knew that teaching was her calling from a young age. As a thirdgeneration educator, her mother and grandmother inspired her to eventually lead her own classroom. After spending a short time exploring other careers, she returned to her first passion: elementary education.

Kaycie strives to make elementary school one of the happiest times for her students. She believes that if she can hook students on education early they will become lifelong learners. As a teacher, Kaycie fosters children's natural curiosity and creativity and encourages them to take risks in their learning. "We really work very hard to develop a culture of 'it's okay to fail'" says Kaycie. "It's really cool to see kids have to figure out: 'okay, so what do I do if it doesn't work?" Her teaching approach provides students with multiple opportunities to problem solve through a rigorous learning environment where students apply classroom content to real-world experiences.

Kaycie is a first through fifth grade STEM and gifted teacher at East Jackson Elementary School in Commerce, GA. She received her bachelor's degree in early childhood education and master's degree in language education from the University of Georgia, and her education specialist degree from Piedmont College. Kaycie holds teaching endorsements in gifted and elementary science education She has been teaching in the Jackson County School System for 16 years.

In her unit plan, Kaycie integrates engineering, English language arts, mathematics, and social studies to teach students about countries and robotics. In the first half of the unit, students delve into writing by researching a country to create an informational booklet. During the second half of the unit, students build robots, which will represent the "athletes" in the culminating Robot Olympics. Throughout the unit, students hone their research, writing, engineering, and coding skills.

"We really work very hard to create a culture of `it's okay to fail' . . . It's really cool to see [students] have to figure out: `Okay, what do I do if it doesn't work?''' – Kaycie Rogers

## **Special Projects**

### Georgia Rural Advanced Placement STEM Initiative

In 2016, GOSA, in partnership with College Board, established the Georgia Rural Advanced Placement (AP) STEM Initiative. The initiative aims to create a vertical pathway to student success in AP STEM courses in high-need, rural Georgia school districts. The project's main goals are to build enrollment and increase the number of students taking and earning qualifying scores on the AP exams in Computer Science A, Computer Science Principles, and Statistics.

In winter and spring 2017, GOSA awarded grants to seven school districts. Each district received up to \$30,000 to create, strengthen, and implement rigorous middle and high school STEM courses in collaboration with College Board. As part of this initiative,

#### Georgia Rural AP STEM Initiative Grantees

Appling County School District Baldwin County School District Coffee County School System Colquitt County Schools McDuffie County Schools Peach County Schools Thomas County Schools

College Board will also provide ongoing, personalized, professional learning for grant-funded teachers and administrators. In addition, it will facilitate a mentorship program between grant participants and Georgia AP teachers who have demonstrated successful teaching practices in the identified courses.



#### **New Leaders**

In FY17, GOSA partnered with <u>New Leaders</u> – a nonprofit organization dedicated to developing transformational school leaders – to elevate the quality of school leadership throughout Georgia. Specifically, this partnership will provide Leading Instruction, an intensive professional development opportunity, to 70 teachers from the Richmond County and Dougherty County School Systems. Through Leading Instruction, these 70 teachers will receive targeted professional learning which emphasizes real-world, reflective practice combined with expert coaching and classroom-centered assignments. Ultimately, the program will equip these current and aspiring leaders with instructional expertise aligned to high standards and prepare them to elevate achievement in their classrooms and schools.

#### **Project Lead the Way**

Through its partnership with <u>Project Lead The Way</u> (PLTW) – a nonprofit organization that provides a transformative learning experience for K-12 students and teachers – GOSA has offered school districts in the Chattahoochee-Flint, Coastal Plains, and Southwest Georgia RESAs the opportunity to implement rigorous STEM pathways. Specifically, this project has supported 77 elementary, middle, and high schools in implementing PLTW's hands-on, real-world curricula, including the Launch program for kindergarten through fifth grade students, the Gateway program for sixth to eighth grade students, and Computer Science, engineering, and biomedical science for high school students. To strengthen the quality of implementation, participating teachers received training from PLTW during summer 2017. Now, in the 2017-2018 school year, these schools will implement PLTW's curricula to boost their students' academic achievement and interest in STEM. <u>To see a full list of participating schools, please visit GOSA's website</u>.



#### Words2Reading

In FY17, GOSA recognized the need to provide Georgia's families, caregivers, and teachers resources to develop and sharpen their young children's language and literacy skills. With this need in mind, GOSA developed <u>Words2Reading</u> – a web tool that provides quick access to easy-to-use resources, strategies and learning tips, all categorized by age and type.



To build the platform, GOSA partnered with Georgia-based organizations and other education providers to compile the best resources for developing early language skills. In partnership with Ready4KGA, an evidence-based text messaging program, the platform also delivers weekly fun facts and easy tips to the parents of children ages zero to five who subscribe the service.

Since its launch in July 2017, Words2Reading has provided resources and information to over 8,900 parents, caregivers, and teachers that have visited the site, and over 3,000 individuals have subscribed to Ready4KGA.



"Words2Reading promotes increased engagement in childhood education by putting effective learning resources in the hands of families and early educators anywhere in the state. By making these resources readily available for families, caregivers, and educators, we are further investing in Georgia's greatest resource, the minds of our youngest learners, for generations to come." – Governor Nathan Deal

### **Looking Ahead**

In the year ahead, the Innovation Fund will continue to spur innovation at the classroom, school, district, and community levels through its different grant offerings. Tiny Grants and the Innovation in Teaching Competition will continue to support teachers throughout the state by providing a small amount of funding to seed big ideas. The newly-welcomed FY18 Innovation Fund Accelerator cohort will reimagine their students' educational experience by growing and piloting never-before-seen approaches to



education. The FY17 and FY18 implementation and scaling grantees will test and evaluate new approaches to birth to age eight language and literacy, STEAM applied learning, blended and personalized learning, and teacher and leader development. The Innovation Fund Foundation, Inc. will finalize its strategy and begin fundraising to support ideamakers who partner to positively disrupt public education. In addition, the Innovation Fund will develop an Accelerator-type grant program to develop the capacity of the bottom 5% of Georgia's schools. Finally, in June, the Innovation Fund teachers, schools and districts will convene at the 2018 Innovation Summit to leverage the collective power of the Innovation Fund and continue building the next generation of Georgia's schools.

# Appendix

### **Fiscal Year 2018 Innovation Fund Accelerator Grantees**

Grantee	Carrollton City Schools
Priority Area	Birth to Age Eight Language and Literacy
Project Name	Literacy Without Limits
<b>Program Description</b>	Carrollton City Schools will refine their idea for Literacy Without
	Limits – a program that will identify and equip teachers and
	leaders with the knowledge and skills they need to address the
	literacy needs of their students and community.

Grantee	Department of Juvenile Justice
Priority Area	Teacher and Leader Development for High-Need Schools
Project Name	Operation Turnaround: Recruit, Retrain, and Retain
Program Description	The Department of Juvenile Justice will develop a program to recruit and retain high-quality teachers who can effectively serve its student body.

Grantee	Latin Grammar School
<b>Grantee School District</b>	Fulton County Schools
Priority Area	Teacher and Leader Development for High-Need Schools
Project Name	Teachers are Brain Surgeons
<b>Program Description</b>	Latin Grammar School will develop a program that delivers
	personalized professional development designed to maximize each
	teacher's potential, and ultimately, positively impact students'
	learning experiences.

Grantee	Peachcrest Elementary School
<b>Grantee School District</b>	DeKalb County School District
Priority Area	Applied Learning with a Focus on STEAM Education
Project Name	The Peach Goes Green
Program Description	Peachcrest Elementary School will design a program that leverages STEAM technology, like aquaponics, to advance student achievement and effectively engage parents and families.

Grantee	Villa Rica Elementary School
<b>Grantee School District</b>	Carroll County School System
Priority Area	Birth to Age Eight Language and Literacy Development
Project Name	Improving Early Literacy
Program Description	Villa Rica Elementary School will develop a program that transforms language and literacy instruction for pre-kindergarten through second grade students.

Grantee	West Jackson Elementary School
<b>Grantee School District</b>	Jackson County School System
Priority Area	Applied Learning with a Focus on STEAM Education
Project Name	AIM Higher
<b>Program Description</b>	West Jackson Elementary School will design a program that
	leverages innovative instructional practices, real-world learning
	experiences, and partnerships to encourage students to AIM
	(accelerate, innovative, motivate) higher.

## **Fiscal Year 2018 Innovation Fund Implementation & Scaling Grantees**

Grantee	Clarke County School District
Priority Area	Birth to Age Eight Language and Literacy
<b>Type of Grant</b>	Implementation
<b>Award Amount</b>	\$669,000.00
Project Name	Pathway of Support: Trauma-Informed Care
Program	The Clarke County School District (CCSD) will boost the reading achievement of
Description	over 100 three-and four-year-old children who have experienced trauma by disrupting
	traditional approaches to literacy instruction. In partnership with a multidisciplinary
	team of early learning experts from the University of Georgia and mental health
	professionals from Clarke County social service and community agencies, private
	providers, and nonprofit organizations, CCSD will train its Early Learning Center
	teachers and caregivers on trauma-informed classroom and home practices and
	provide intensive support to children at the Early Learning Center. Ultimately, the
	program strives to create safe and nurturing school and home environments where
	children can learn, develop, and use language and literacy skills to cope with trauma
	and successfully navigate academic and social situations.

Grantee	Crisp County School System
Priority Area	Birth to Age Eight Language and Literacy
<b>Type of Grant</b>	Implementation
<b>Award Amount</b>	\$671,895.00
Project Name	Early SUCCESS: Strategies for Underserved Children, Community Engagement, and
	Social-emotional Support
Program	The Crisp County School System (CCSS) – a rural and high-poverty community with
Description	98% of students qualifying for free and reduced-price lunch – will disrupt traditional
	approaches to early literacy and social emotional development through Early
	SUCCESS. The program aims to transform the traditional public-private silo
	approach to a cohesive, community-wide effort impacting every segment of the
	community: home daycare providers, private childcare centers, Head Start, public
	school classrooms, and families. Early SUCCESS will accomplish this goal by
	training both CCSS pre-kindergarten and kindergarten teachers as well as other
	community childcare providers on evidence-based literacy and social-emotional
	development strategies. In addition, Early SUCCESS will design a Mobile Family
	Literacy Center that brings literacy and social emotional development resources
	directly to families in their own communities.

Grantee	Westside High School
School District	Bibb County School District
<b>Priority Area</b>	Blended and Personalized Learning
<b>Type of Grant</b>	Scaling
<b>Award Amount</b>	\$700,000.00
<b>Project Name</b>	Westside STEAM Magnet High School RTI-Based Personalized Learning Program
Program	Westside High School (WHS), in partnership with Bibb County School District, local
Description	colleges and universities, and other business and community organizations, will scale
	its existing Noles Nation Flexible Learning High School to provide all students with
	personalized supports to ensure they are college and career ready. Specifically, WHS
	will implement four academies - the Twilight program, the Blended Learning
	Academy, the Challenge Academy, and the College & Career Academy – each
	designed to cater to the unique needs of all students, regardless of their academic
	records and personal circumstances.

This page intentionally left blank.





