8th Grade Math
March 28, 2019
Who’s In the Room?

- Name
- Title
- Organization

At your Tables –

If you could choose one superpower:

*Flight* or *Invisibility*
Who We Are

Five Core Counties

K-12 Students

2016-2017
608,145

2010-2011
569,159

Non-white
Change in Six Years, 2010-2017
77% in 2017
50,000+

Low-Income
Change in Six Years, 2010-2017
60% in 2017
39,000+

Limited English
Change in Six Years, 2010-2017
13% in 2017
20,000+

Source: The Governor's Office of Student Achievement (GOSA), 2010-2011 & 2016-2017, Enrollment by Subgroup Programs; Georgia Department of Education, FTE Enrollment by Grade Level (PK-12). Aggregated full-time equivalency (FTE) enrollment counts for school systems.
Strategic Planning Process

November
- Leadership Council

December
- Planning, data review, industry research

January
- Executive Committee Interviews
- Member survey analysis

February
- Executive Committee Interviews

March
- Leadership Council

Refined strategy, plan to implement
Learn4Life is a collective impact effort focused on “raising the education bar” in Metro Atlanta.

Our mission:

To ensure that every child in our region becomes a thriving citizen who achieves success in school, career, and life.
Our Theory of Action will focus our work for the next three years

What we do: We…

- **Amplify bright spots**
  - Through data-driven analysis, *identify* and *codify* bright spots, *support* implementation, and create conditions for *scale*

- **Create shared understanding [of data]**
  - *Collect* and *analyze* data to measure Metro Atlanta’s progress against cradle-to-career indicators and indicate where additional focus is needed

- **Engage partners**
  - *Engage* education, business, and community partners in aligning efforts, resources, and voice – in the service of families and students

- **Engage partners**
  - *Forge* strong relationships – and a learning mindset – between individuals and organizations through intentional interactions

...in an environment of **sustained trust, learning, and momentum**
What Will L4L Look and Feel Like in 2022

• **L4L will drive change through Metro ATL;** by identifying proven strategies to address the core indicators, L4L will enable improvement of overall outcomes for students throughout the region.

• **“Bright Spots” impact will grow;** by building a data-driven continuous improvement process, L4L will enhance the scale and impact of each bright spot strategy.

• **Partnership and stakeholder engagement will remain high;** by building a mature “backbone”, L4L staff will communicate progress and share thought leadership to facilitate CAN engagement.

• **The Leadership Council and CANs will be tightly connected,** to allow the sharing of best practices and lessons learned.
Key Indicators

1. Kindergarten Readiness
2. 3rd Grade Reading Proficiency
3. 8th Grade Math Proficiency
4. High School Graduation
5. Post-Secondary Enrollment
6. Post-Secondary Completion
Eighth Grade Math Proficiency

42% of children are proficient in math by the end of the 8th grade.
8th Grade Math Proficiency Factors

- Access to Rigorous Courses
- Gender Expectations
- Racial Expectations
- School Culture
- Relevant Curriculum
- Interventions for Struggling Learners
- Teacher Effectiveness
- Academic Preparation
- Access to Appropriate Technology
- Math Anxiety
- Language and Literacy Skills
- Use of Assessment Data
Conducted Schools Visits to High Performers

Selected Schools
- Drew Charter School
  - Atlanta Public Schools
- Rex Mill Middle School
  - Clayton County
- Fantastic Freedom MS
  - DeKalb County
(*Tapp Middle School
  - Cobb County)

Source: GOSA, 2016-2017 EOG Georgia Milestones Report & Enrollment by Subgroup Programs
Framework to Identify Bright Spots

Key Factors

- Interventions for Struggling Learners
- School Culture
- Teacher Effectiveness

What’s Working?

Leadership Council Criteria

Selected Strategies

Bright Spots to Scale
Strong fit with L4L

- **Scalable**: started with one vehicle serving 500 students in 2015, and now has six trucks serving over 10,500 students.

- **Culturally aware**: ‘builds’ solve community-based issues by applying content standards to real world applications.

- **Equitable**: addresses broken STEM pipeline by serving most underrepresented youth.
Strong fit with L4L

• **Complementary to districts**: curriculum and content standard alignment between districts and DOE.

• **Addresses root causes**: extensive research base for integrated STEM education; aligns to our three math factors.

• **Proven model**: 8th grade math proficiency has increased in certified schools.
The Reason for Bright Spots…

- Prove that progress can be made

- Goal is a movement around successful practice, but it starts with Bright Spots
Work of the Change Action Network

1. Eliminate barriers to scale proven solutions
2. Use data as a flashlight
3. See ourselves in this work
4. Apply these protocols to all of our work
STE(A)M TRUCK

Igniting a passion for learning and forging collaborative communities by making things together.
Our mission is to close opportunity gaps and eliminate inequities by transforming teaching and learning through an experiential maker approach.
Using Real Tools
Core Features

- Curated mobile maker spaces with a breadth of tools and equipment
- Codified, age- and developmentally-appropriate curriculum
- “Real-world,” applied STEM expertise
- Highly skilled team with diverse role models
- Metrics to measure progress and report outcomes
- Strong and sustained partner, funder, and stakeholder relationships
Student Programming

• Repeated opportunities for exposure to content that ignites an academic interest and excitement for/comfort with STE(A)M
• Clear connections made between school and life
• Skill development around self-advocacy for the things that matter in life
• Attention to mastery of the skills proven to be important for success in college and career

Capacity Building

• Access to coaching from professionals who can elevate teacher practice and align it with STE(A)M objectives
• Active engagement in and testing of interventions that reflect the realities of the classroom
• Built-in time for educators to think about their work and incorporate feedback
• Sustained space to develop effective practices
We will build support of our partners over time

**Cultivation & “Engagement”** (Year 1)

- Lighter-touch programming to start: 5 days (or less) per grade level.

**School Model/ “Impact” Implementation** (Years 2-3)

- Capacity building with a cadre of teacher-leaders identified in year one
- Schools opt into support for STEM or STE(A)M certification

**“Sustaining” Support** (Years 3+)

- Sustaining gains, focused on building partner capacity
- Scales practice throughout school/site or grade levels across a cluster
- Provides targeted consulting support for educators/adults

WE ARE FOCUSED ON DEEPENING LEARNING RELATIONSHIPS WITH OUR PARTNERS
CRITICAL PRIORITIES

❖ Invest in supporting **multi-year programming**, through longer-term (vs. one-off) contracts

❖ Double down on **program development and codification**

❖ Expand **program staff, organizational structures and resources**, and physical space to enable consistent, high-quality program delivery

❖ Continue to **explore opportunities** to connect with the broader Community Guilds vision
CHARTING A COURSE FOR SUCCESS:
AMERICA’S STRATEGY FOR STEM EDUCATION

STEM/STEAM Strategic Goals

**White House Strategic Plan for STEM**
(December 2018)

**IMPORTANT HIGHLIGHTS**

*Make Mathematics a Magnet*

- Mathematics and statistics are foundational to success across all STEM fields of study, providing a universal language to describe and reason about models of real-world phenomena.

...
Implementation of STEM/STEAM in GEORGIA shows PROMISING RESULTS

[Logos for STEM, GaDOE, STEAM]

WWW.STEMGEORGIA.ORG

Average Grade 8 Georgia Milestones Achievement
% Developing Learner & Above

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>81.3</td>
</tr>
<tr>
<td>2017</td>
<td>85.4</td>
</tr>
<tr>
<td>2018</td>
<td>86.2</td>
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</tbody>
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Georgia middle schools holding GaDOE school-wide STEM or STEAM certification show positive gains in mathematics achievement with an increase in the percentage of developing learners and above over a three-year trend.
STEM/ STEAM School Characteristics

• Vision and Culture
• STEM/STEAM Students
• Non-traditional Student Participation
• Characteristics of the Curriculum
• Teacher Content Knowledge
• Teacher Professional Learning
• Teacher Collaboration
• Math, Science, and Fine Arts Instruction
• STEM/STEAM Competitions

• Project/Problem Based Learnings
• Business, Community and Post Sec Partnerships
• STEM/STEAM Integration
• STEM/STEAM Labs
• Technology Integration
• Student Rigor & Instructional Quality
• Investigative Research
• Accountability
STEM/ STEAM Georgia Teachers Academy

June 6- Valdosta
June 11- Milledgeville
Georgia STEM/ STEAM Forum

OCTOBER 20-22, 2019
ATHENS, GEORGIA: CLASSIC CENTER

Designed to support K-12 efforts to include STEM and STEAM education in the school curriculum.
STEM/ STEAM Georgia Online:  
http://stemgeorgia.org

Enables users to find STEM/ STEAM resources, materials, links to STEM/ STEAM schools, grants, competitions, lesson plans, and more.

Follow us on Twitter:  
http://twitter.com/stemgeorgia

@stemgeorgia enables users to receive tweets about STEM/ STEAM updates, grants, scholarships, workshops, information, articles, resources, and more.
Join our STEM/ STEAM Georgia Listserv

To join our listserv to receive email notices and updates from the GADOE STEM/STEAM program, please send an email with no message to the email address listed below.

join-STEM-Georgia@list.doe.k12.ga.us
Contact information:

Felicia Cullars
fcullars@doe.k12.ga.us
404.516.1535

Meghan McFerrin
mmcferrin@doe.k12.ga.us
470.755.9197
ACTIVITY: Overcoming Barriers to Scale

Goal: Harness Wisdom of Group

- Rotate between two groups

- Purpose is to:
  1. Address the problem of practice
  2. Learn from each other
  3. Take learnings back to your org
Report Release Event, May 6, 2019

2019 Objectives
1. Generate awareness of L4L process
2. Call to Action support bright spots
3. Release State of Education in Metro Atlanta 2019
Network Next Steps

Survey – please complete now

Upcoming meetings:
Thursday, May 16
Thursday, August 1
Tuesday, October 1

Save the date – L4L’s annual event: May 6, 8am-10am