**CCRPI Subgroup Achievement**

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| **Elementary School – Subgroup: Black**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **English Language Arts** | **Math** | **Science** | **Social Studies** | | **2015** |  |  |  |  | | **2016** | | **2017** | | **2018** | | **Elementary School – Subgroup: Economically Disadvantaged**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **English Language Arts** | **Math** | **Science** | **Social Studies** | | **2015** |  |  |  |  | | **2016** | | **2017** | | **2018** | |
| **Middle School – Subgroup: Black**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **English Language Arts** | **Math** | **Science** | **Social Studies** | | **2015** |  |  |  |  | | **2016** | | **2017** | | **2018** | | **Middle** **School – Subgroup: Economically Disadvantaged**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **English Language Arts** | **Math** | **Science** | **Social Studies** | | **2015** |  |  |  |  | | **2016** | | **2017** | | **2018** | |

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| **2015-2017 Flag Legend:** | **2018-2019 Flag Legend:** |

Performance of subgroups on the state mandatory assignment in math and science, particularly the Economically Disadvantaged, is of particular concern since the deficiencies are identified at both elementary and middle school and have persisted over time (2015-2017). As a result, how to address the deficiencies has taken “center stage” in the development of LPA’s school-wide improvement plan.

A review of CCRPI data for the period 2015-2017 shows that Economically Disadvantaged students in both elementary and middle school have consistently experienced challenges with math. In an effort to improve academic outcomes for this subgroup, LPA is making innovative changes to classroom instruction. That includes bringing support personnel into the classroom, rather than taking children out of class. The framework calls for explicit instruction by knowledgeable teachers to teach new numeracy skills and grade‐appropriate mathematics concepts. This requires teachers to shift learning mathematics from the process of absorbing facts and practicing procedures to the process of developing one's knowledge of facts and procedures in relation to a set of important, underlying mathematical ideas.

This framework for working with disadvantaged students in math is threefold: (a) rapidly improve students’ foundational skills, procedural fluency, and conceptual understanding; (b) provide access to grade‐appropriate mathematics concepts and domains (e.g., algebra, geometry); and (c) instill mathematics competence and confidence in students who have likely experienced major gaps in instruction and previous failure in mathematics.

Additionally, LPA is scaling up a daily, individualized tutorial program that would allow students who have fallen behind grade level in math to reengage with regular classroom instruction. Students are assigned to participate in a tutorial session as part of their regular class schedule, focusing on remediating students’ skill deficits. Tutors tailor instruction to students’ current skill level, and as they progress, they work on more-advanced coursework. The bulk of each session is also tethered to what students are working on in their math classrooms or what they will face on the state Milestones’ math exam at the end of the year.

**Science**

LPA’s approach to address the deficiencies presented for CCRPI (2015-2017) Subgroup Economically Disadvantaged’s achievement in science for elementary and middle school students is four-fold: (1)adjust instructional strategies to better meet these students' needs, (2) use project-based science learning centered on authentic questions and activities that matter to students, (3) provide instruction that fosters higher- level thinking while taking into account different learning styles; and (4) use assessments to monitor progress and modify program as indicated.

Because the learning environment is an essential element of effective science lessons, LPA has adopted a policy of maintaining a culture of self-belief in students, which is critical to the success of disadvantaged students in all subjects, and involves all stakeholders - students, parents, and teachers. Confidence increases productivity and causes students to attempt more challenging tasks.

LPA also believes that the quality of teaching makes the biggest difference to learning outcomes. Pedagogy matters. With that in mind, emphasis is on coaching teachers in new teaching strategies for science instruction. The strategy calls for promoting effective science instruction that focuses on important content, engaging students in science inquiry, promoting student sense-making using science discourse, and involving students in formative assessments and student self-assessments so that both students and teachers will know if learning is taking place.

The plan for addressing deficiencies in science for elementary and middle school students involves strategies that impact the classroom: (1) Teachers show through their actions that they believe that all students have the ability to learn and (2) Teach students to think scientifically.