

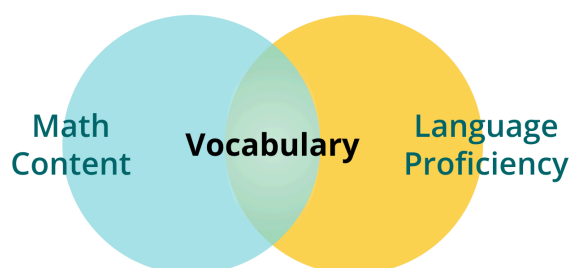
Partner Spotlight: Prince George's County Public Schools

PGCPS Achieves Transformative Results in Middle Grades Math



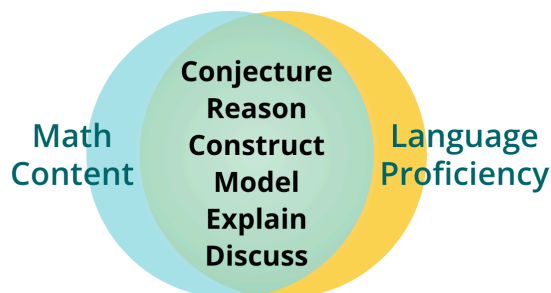
Dr. Michelle Dyson, PGCPS Mathematics Instructional Supervisor for Grades 6-8, had a mission: get students to use mathematical language in classroom discourse. Her instruction-first focus would lead to significant gains in learning outcomes. First, however, she needed to shift her district's thinking about math literacy...

The Old Model



Under the old model, there was only a slight overlap between math content and language proficiency. Nearly everyone viewed this overlap as mainly math vocabulary. Then Dr. Dyson began to collaborate with Dr. Melissa Kanney, ELD Supervisor. They learned that the [research](#) pointed to a new way forward.

The New Model



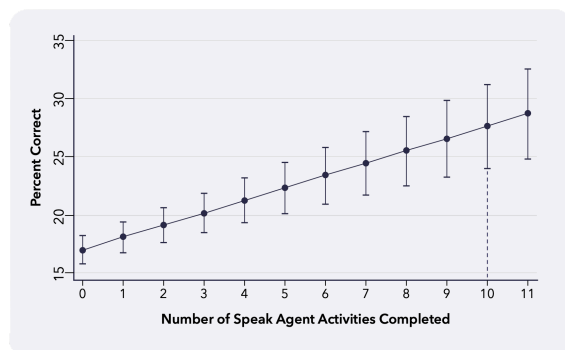
The research showed that the overlap between content and language was greater than anyone had realized. It went far beyond vocabulary. Language underpinned every one of the mathematical practices, from making conjectures to constructing arguments.

Dr. Dyson had found a path to achieving her math literacy mission. But how would it work for middle school math students at PGCPS?

The Impact of Math Literacy

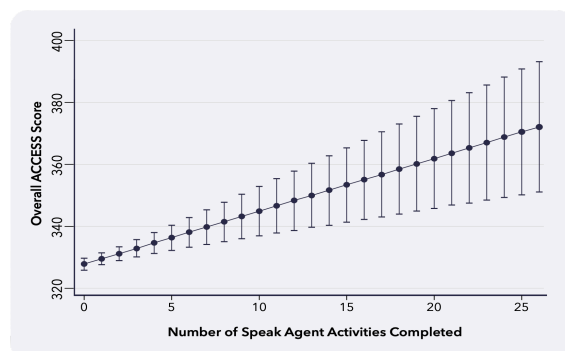
In 2019, PGCPS partnered with Speak Agent to implement its math literacy program. In 2022, PGCPS launched a large-scale study. It found that students who used the program outperformed their peers who did not use it. Students who completed 10 math literacy activity modules experienced a **10.3% higher mean score** than their peers on the PGCPS Math Benchmark test, raising the mean score for these students from **17/100** to **27/100**.

Predicted Math Benchmark Scores (N=46,929):



Huebert, E. (2022). [Effect of Speak Agent on Math and English language proficiency scores at middle grades in Prince George's County Public Schools](#). Leanlab Education.

Similarly, multilingual learners experienced a **17-point** mean gain on ACCESS for ELLs:



How Did PGCPS Do It?

The journey began with a collaboration between Mathematics and ELD departments. First, they developed new resources for their growing population of multilingual learners. Then they found opportunities to expand.

“Our Math and ELD departments had developed an academic language toolkit that offered specific strategies, but we were looking for a program to further support our teachers and students in developing those math literacy skills. We came across Speak Agent and presented it to our mathematics supervisor. It was a match made in heaven.”

Dr. Melissa Kanney, Supervisor, ELD Office

Dr. Melissa Kanney recommended Speak Agent to Dr. Dyson because it built upon the district’s toolkit by converting math literacy strategies into curriculum-aligned, interactive activities. PGCPS initially implemented it with multilingual learners, but soon expanded to include all middle school students. “As we looked at the way Speak Agent aligned with our curriculum, it proved beneficial for **all** of our students,” says Dr. Kanney.

A Beautiful Match

When Dr. Dyson evaluated Speak Agent, she saw immediately how it could support **all** middle graders. She decided to pilot at four middle schools and, based on the data, expanded in 2020 to 40 Title I schools. Dr. Dyson appreciated how the program was not “cookie-cutter” and how it seamlessly fit the PGCPS curriculum framework:

“The beauty of Speak Agent is that students can manipulate the program and use it to build their academic knowledge, and teachers who are using the toolkit to plan lessons can find the same strategies they’re using in the classroom within the program. It’s a beautiful match.”

Dr. Michelle Dyson, Supervisor, Math 6-8

Supporting Teachers

When teachers look at PGCPS’ instructional guidance, they find Speak Agent is deeply embedded in the curriculum. Dr. Dyson and Dr. Kanney agree that a key benefit of the platform is its high degree of customization. This was critical for implementation because it meant that teachers had the on-demand resources they needed at their fingertips.

“We integrated Speak Agent right into our curriculum so that when you visit classrooms or look at the data, you see the connection between what the teachers are teaching and how the program is being used,” Dr. Kanney says. “From the district perspective, we have it **everywhere** in our curriculum.” She also values how teachers are able to schedule unlimited on-demand coaching. “Having that kind of access to support is very important for implementation. In fact, it’s critical.”

The Journey Continues

After achieving success with middle grades, in 2024, PGCPS expanded to high school. The district offers math literacy programs for Geometry, Algebra I, Algebra II, and a course for newcomer multilingual learners.

