

Maryland School Review Expert Review Team Mathematics Report

Pointers Run Elementary School

Maryland State Department of Education

Office of Teaching and Learning

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MARYLAND STATE DEPARTMENT OF EDUCATION

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Overview of Maryland School Site Reviews

PURPOSE

The Maryland State Department of Education (MSDE) is committed to supporting school systems in improving student outcomes. MSDE conducts comprehensive school reviews to identify promising practices and opportunities for growth in curriculum, instruction, interventions, socio-emotional and mental health services, educator support, and school management. School reviews are a collaborative process among local education agencies (LEAs), schools, and MSDE aimed at accelerating student learning, supporting the whole child, and enhancing educator practice.

SCHOOL REVIEW PROCESS AND METHODOLOGY

All school reviews are facilitated by an Expert Review Team (ERT) led by MSDE. ERT members consist of trained teachers, school leaders, and education experts with experience in improving student outcomes. Members participate in extensive training led by MSDE to calibrate the review process to ensure a consistent approach to school reviews. To identify effective practices and opportunities for growth in a school, the ERT analyzes school data, reviews documents submitted by the school and conducts a two or three-day site visit that includes classroom observations, focus groups, and a principal interview.

The Expert Review Team forms a consensus based on student data, documents, observations, focus groups, and a principal interview. The rubric consists of two domains:

- **Domain 1: Instruction and Student Support** High-quality curriculum, instructional materials, teaching practices, and assessments are implemented to support student learning. Schools use multiple sources of data (qualitative, quantitative, and perceptual) to identify students and implement a multi-tiered approach to support all student groups. Progress monitoring systems are clearly defined and integrated into daily practice.
- **Domain 2: Professional Learning and Educator Support** Educators at all levels are provided with support to improve results and shift instructional practice. Professional learning goals for educators are clearly aligned to school and LEA overarching student achievement goals.

STRUCTURE OF THIS REPORT

The following report is organized into three different sections.

Executive Summary: In this section, you will find a summary of the school's review. This includes:

• Information about the school, with more detailed information, is available online in the <u>Maryland School Report Card</u>.

Findings and Recommendations by Domain: Each domain contains a section that outlines ERT findings, including strengths and areas for growth. For each domain, targeted recommendations are provided with evidence and action steps to address the recommendation.

Appendix: The appendix expands on information provided in the body of this report and it provides detailed information on the specific methods used by the ERT during the site visit.

Executive Summary

ABOUT POINTER'S RUN ELEMENTARY SCHOOL

Pointer's Run Elementary School, located in Howard County, serves a total of 830 students in grades K-5th grade. The enrolled population is made up of less than 34.6% Asian American, 12.9% African American, 6.1% Hispanic American, 8.1% two or more races, and 37.8% white. The school's population includes approximately 10.9% of students that receive free or reduced meals and 15.6% or less of the population includes either students with disabilities or students with 504 plans. More detailed information, including enrollment, attendance, demographics, and student outcome data, can be found in the <u>Maryland School Report Card</u>.

OVERALL RECOMMENDATIONS

The following actions are recommended to support in the areas identified as needing improvement through the School Review process. More detailed information about these recommendations, linking them to specific findings in each domain and providing action steps and resources to implement them, can be found in the subsequent sections.

- Provide structured lessons for students with rich high-demand mathematical tasks that require them to make sense of the problem and encourage perseverance and productive struggle in problem-solving.
- Explore opportunities to create structures for an integrated schoolwide collaborative process to examine curriculum-embedded assessments and determine pathways for differentiating instruction according to student readiness. Assist teachers in fine-tuning instructional practices to meet the needs of each student.
- Interrogate the existing structures that are used to provide feedback and consider restructuring processes to include peer visits across grade-levels to classrooms with successful implementation of productive struggle practices. Collaborate with the district to develop parent/teacher-friendly resources and restructure the communication for this initiative and share with all stakeholders.

Domain 1: Instruction and Student Support

Instruction and Student Support

High-quality curriculum, instructional materials, teaching practices, and assessments are implemented to support student learning. Schools use multiple sources of data (qualitative, quantitative, and perceptual) to identify students and implement a multi-tiered approach to support all student groups. Progress monitoring systems are clearly defined and integrated into daily practice.

FINDINGS AND RECOMMENDATIONS

STRENGTHS

The evidence of mathematics instruction in the school was captured in a multiple review process component. Specifically, one hundred percent of the classrooms visited demonstrated evidence of both content knowledge and delivery from teachers along with the evidence of a positive mathematics culture for learning.

- During the review, all twelve classrooms visited demonstrated evidence of students engaged in lessons that were appropriately aligned to grade-level standards. Also, eleven of those classrooms incorporated tasks that reflected high expectations.
- Eight of the classrooms demonstrated evidence of collaborative learning with students in groups or pairs, providing opportunities for students to think mathematically and compare abstract models to real-life contexts. However, evidence of students presenting, sharing, or leading math discussions with the class was only in three of the eight classrooms.
- Approximately half of the classrooms visited provided evidence of structures in place to support students with processes to help students discuss the thinking model being used to understand a problem.
- The principal interview provided evidence that demonstrated teachers' use of small group structures within the classrooms is used to support underserved groups that need intervention and acceleration.

Focus group participants provided insight into structures and systems of support that are leveraged in developing lessons.

- Seven out of seven teachers expressed that quarterly data discussions serve as a strong measure to support data analysis and planning for intervention and acceleration; however, only four of those participants offered a connection to valuing the planning and data documents to list student groups and aligned mathematics tasks.
- Three of the seven participants expressed statements regarding the local education agency (LEA) adopting new instructional materials in mathematics to support planning and implementing curriculum for a multi-tiered system of supports (MTSS).
- During the interview, the principal shared, "Our math blocks are 75 minutes and there are various structures that teachers can utilize and implement during instruction (whole group

cooperative model, scope and sequence) where they work in small groups, rotation model to focus on content and standards." Further sharing, "Our math groups are very flexible, and fluid based on the student needs. We do have special education teachers that provide specialized instruction with either pull-in or pull-out services based on the IEP of students."

AREAS FOR GROWTH

While the evidence of the review components remained strong, there remains an opportunity for growth in providing students with rich mathematical tasks that require them to make sense of the problem and encourage perseverance and productive struggle in problem-solving.

- Three out of eleven classes demonstrated evidence of students making sense of the problems or identifying and discussing entry points for solving problems in math discourse.
- Eight of the twelve classrooms visited highlighted students' need for support structures for connecting procedural fluency on conceptual understanding through productive struggle.
- Less than half of the classrooms provided evidence of students clearly articulating their thought processes to peers, translating real-world scenarios into mathematical models, or selecting the appropriate mathematical tool to solve the task.
- Three of the seven participants expressed statements regarding the need for the LEA to adopt a new mathematics curriculum to support planning and implementing the curriculum for the MTSS system.
- During focus group discussions, school leaders stated, "At present, based on what county identifies Tier 2 or 3, we do not provide interventions. Everything is self-generated; we do not have the county-provided interventions."

RECOMMENDATIONS

The following recommendations are meant to support school leadership in improving in the areas that were identified as needing growth. Each is closely connected to the evidence presented above under "Areas for Growth," and includes specific action steps and resources to support the implementation of these improvements.

Focus Area 1

Provide structured lessons for students with rich high demand mathematical tasks that require them to make sense of the problem and encourage perseverance and productive struggle in problem solving.

ACTION STEPS:

As a result of this school review:

- Provide professional development and collaborative opportunities for teachers to develop rich tasks and learn best practices in encouraging productive struggle.
- Leverage the current walkthrough system to restructure the participants to include peerto-peer learning and monitoring systems to further support strengthening professional development and extend double-loop learning.

Focus Area 2

Explore opportunities to create structures for an integrated schoolwide collaborative process to examine curriculum embedded assessments and determine pathways for differentiating instruction according to student readiness. Assist teachers in fine tuning instructional practices to meet the needs of each student.

ACTION STEPS:

As a result of this school review:

- Design a unified process for examining data and creating multiple pathways (MTSS) for student learning.
- Provide professional learning opportunities to support teachers in designing structured collaborative learning that is student-driven and incorporates current teacher practices that have been modeled for students.

Domain 2: Professional Learning and Educator Support

Professional Learning and Educator Support Educators at all levels are provided with support to improve results and shift instructional practice. Professional learning goals for educators are clearly aligned with school and LEA overarching student achievement goals.

FINDING and RECOMMENDATIONS

STRENGTHS

There was consistent evidence of teacher use of curriculum instructional materials, from multiple pieces of data represented in both classroom visits and in focus group stakeholder statements.

- In all classrooms visited, students were actively engaged with adopted curriculum materials and teachers were involved in problem-solving tasks.
- During the school leaders focus group discussions, one of the seven school leaders shared there is an optional county-based math leadership cohort for teachers to sign-up which gives teachers an opportunity to provide presentations.
- Five out of seven school leaders agreed that the county has professional development for mathematics instruction; however, six of the school leaders shared the offering was not frequent and teachers must enroll during their own time or conduct research on best practices on their own.
- When students in the focus group were asked to describe how they get help, one of the nine students shared that they use math strategies they've learned in school to solve problems. However, other related questions that were posed to students regarding "how they get help" were consistently focused on receiving help from classmates or the teacher providing a hint.

AREAS FOR GROWTH

The LEA has begun successfully implementing the curriculum with fidelity. During school leader, teacher, and student focus group discussions and class visits there was a consistent message of a need for job-embedded time and structures to support continuous growth in use of these materials should be a focus area for professional learning during the workday.

- All seven participants in the parent focus group shared there is a need for feedback for how intermediate students are performing in mathematics citing more feedback is provided from teachers at the primary grades. Also needed a calendar to inform parents about what is coming up for assignments and tests.
- Only two of the six parents knew the term, "productive struggle." One parent offered hearing the term used in the gifted and talented (GT) program.

RECOMMENDATIONS

The following recommendations are meant to support school leadership in improving in the areas that were identified as needing growth. Each is closely connected to the evidence presented above under "Areas for Growth," and includes specific action steps and resources to support the implementation of these improvements.

Focus Area 1

Interrogate the existing structures that are used to provide feedback and consider restructuring processes to include peer visits across grade levels to classrooms with successful implementation of productive struggle practices. Collaborate with the district to develop parent/teacher friendly resources and restructure the communication for this initiative and share with all stakeholders.

ACTION STEPS:

As a result of this school review:

- Survey teachers to determine their current understanding and use of differentiation strategies.
- Leverage the current walkthrough learning structure to include peer visits to classrooms which are implementing the productive struggle processes in the most student-friendly manner.
- Leverage the PTO to provide communication with parents outlining the process with the practice and ensure there is common language for all stakeholders.
- Update the current monitoring system to include this initiative to determine successful areas of improvement and those with areas of need.

Appendix A

SUMMARY OF EXPERT REVIEW TEAM ACTIVITIES

Expert Review Team Members

- 1. John Halmi, Academic Specialist, Anne Arundel Public Schools
- 2. Rob Limpert, CTE Supervisor, Harford County Public Schools (Retired)
- 3. Megan Stein, Elementary Principal, Frederick County Public Schools
- 4. Rima Garg, Induction Coach, Prince George's County Public Schools
- 5. Shawanda Spivey, Home and Hospital Teaching Case Manager, Prince George's County Public Schools
- 6. Elaine Gorman, Retired Administrator, Maryland and NY

Site Visit Day 1

Wednesday, October 23, 2024

Site Visit Day 2

Thursday, October 24, 2024

Site Visit Day 3

N/A

Number of Classroom Reviewed

Twelve

Description of Classrooms Visited

Wednesday, October 23, 2024

- Math 3
- Math 5 GT
- (2) Math 5
- Math 4
- Math 4 Advanced
- Math Kindergarten
- Math Kindergarten ELD
- Math 2
- Math 2 Advanced
- Math 1 SPED
- Math PreK-Kindergarten RECC

Number of Interviews

One

• Principal

Number of Focus Groups

Four

- 9 students
- 7 school leaders
- 7 teachers
- 6 parents

Documents Analyzed

• Site visit documentation submitted by the school.