

Vision Statement

The West Virginia Department of Education (WVDE) will: 1) ensure West Virginia educators are well-prepared to teach the West Virginia College- and Career-Readiness Standards for Mathematics for all learners; 2) improve students' mathematical learning and achievement through the use of proven educational practices; and 3) assist local county boards of education that are implementing the *math4life* Campaign.

The WVDE, along with its dedicated stakeholders, will support local county boards, schools, teachers, students, and families by delivering best practices, instructional resources/strategies, extended learning opportunities, technological supports, professional learning, and a more powerful focus to support achievement of the West Virginia College- and Career-Readiness Standards for Mathematics by all learners.

Mission Statement

The WVDE will ensure a comprehensive system of support to elevate mathematics achievement for all learners in our public school system, thus supporting the goals of the West Virginia Board of Education/WVDE Strategic Plan Goals, which:

- Encourage a lifelong pursuit of knowledge and skills;
- Promote a culture of responsibility, personal well-being, and community engagement; and
- Respond to workforce and economic demands.

Belief Statements

The WVDE believes:

- 1) West Virginia students are as capable as students anywhere in the world. Teachers, resources, and time can make all the difference.
- 2) Teachers must have strong content knowledge, engaging instructional strategies, and appropriate instructional resources. The most striking feature in countries whose math performance is very high is that of a common, coherent, and challenging curriculum through 8th grade.
- 3) Rigorous content standards and standards frameworks are but a single component of the teaching and learning equation. State content standards are what we want students to know, understand, and be able to do. The West Virginia Mathematics Standards Frameworks provide guidance on the "breadth and depth" for implementation of grade-level standards. The frameworks provide educators with examples of organizational structure for implementing applicable mathematics standards and address the distribution of standards in our public schools.
- 4) Pedagogy, the methods and practices used by the classroom teacher, is important to improving student achievement.
- 5) Instructional resources/materials are key elements in creating high-quality instruction to include best practices, instructional strategies, technology supports, etc.

The Trends in International Mathematics and Science Study (TIMSS) does not conclusively determine which of these factors – teachers, standards, or pedagogy - has the greatest impact on student learning. However, it is clear that all three are important to achieving optimal results in student learning and performance.

Goals

The WVDE will:

- 1) Develop and share exemplars, rigorous mathematics standards frameworks built around best pedagogical practices, instructional resources/strategies, extended learning opportunities, and technology supports;
- 2) Create professional learning supports for local school districts that focus on a comprehensive approach to mathematics instruction;
- 3) Provide each county and school with their mathematics performance results so they can determine strengths and weaknesses to be addressed in schools and classrooms;
- 4) Support county-level leadership teams focused on problem solving, critical thinking, and creative thinking; improving student learning and performance in mathematics; as well as expanding educator content understanding and pedagogy;
- 5) Encourage the utilization of extended learning opportunities to include blended learning through virtual schools and other types of learning beyond the classroom; and
- 6) Collaborate with Institutions of Higher Education to align and strengthen offerings and programs for pre- and in-service educators.

Executive Summary: Pre-K–Grade 12 math4life Campaign

Increasing Mathematics Achievement Through a Comprehensive Approach for All Students

Introduction:

We are pleased to announce the establishment of *math4life*: West Virginia’s Pre-K–Grade 12 Campaign for Mathematics Achievement. While there is much work to be done to support mathematics achievement in our state, the West Virginia Department of Education and collaborative partners are committed to support a comprehensive effort to elevate mathematics achievement for all students. Information is provided here detailing the state’s efforts—a true Pre-K–Grade 12 Campaign for Mathematics Achievement—to close the mathematics achievement gap. A five-year external evaluation will occur to determine the short- and long-term impacts of this initiative. The contractors for this evaluation will be selected via an RFP that will be available in the future.

Part One: Increased Mathematics Student Achievement

- a. Data will be provided to counties and schools for local decision-making to support and improve mathematics performance.
- b. The WVDE will engage county leadership (including superintendents, chief instructional leaders, principals, early/elementary/middle/high school level mathematics educators, etc.) regarding a shared understanding of mathematics achievement across programmatic levels.

Part Two: Resources and Support

- a. The WVDE will offer professional learning supports focused on mathematics achievement.
- b. The WVDE will collaborate with teacher preparation programs.
- c. The WVDE will provide extended learning opportunities to encourage learning beyond the classroom.
- d. The WVDE will consider a variety of additional supports, based on input from educators.

Part Three: Marketing Plan

The WVDE will engage in:

- a. State-Level Communication and Marketing

The County will engage in:

- b. County-Level Communication, Marketing, and Implementation

Part Four: Five-Year Study

- a. West Virginia will procure a research firm to create, develop, and implement a five-year study of math performance.
- b. The research firm will provide annual reports to WVDE and a comprehensive report will be published in Year 5 to track success.

