

## **PART I: PREFACE**

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In 2002, the Virginia Mathematics and Science Coalition (VMSC) Board directed that a task force be established to prepare a case and write a report to present to Local Education Agencies (LEA), the Virginia Department of Education (VDOE), the Virginia Board of Education, and policy makers as to how a Teacher Specialist might improve student learning. Consideration was to be given to Mathematics Specialists at both the elementary and middle school levels. This report was to discuss job descriptions, competencies, preparation, and licensure.

Here, we include the report, the executive summary, and a definition that was developed by the National Science Foundation–supported Mathematics Specialists School and University Partners after the report was completed. We also include a history of the Mathematics Specialists movement as an introduction to the articles in this issue.

## **MATHEMATICS SPECIALISTS DEFINITION**

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### MATHEMATICS SPECIALISTS SCHOOL AND UNIVERSITY PARTNERS

Mathematics Specialists are teacher leaders with strong preparation and background in mathematics content, instructional strategies, and school leadership. Based in elementary and middle schools, Mathematics Specialists are excellent teachers who are released from full-time classroom responsibilities so that they can support the professional growth of their colleagues, promoting enhanced mathematics instruction and student learning throughout their schools. They are responsible for strengthening classroom teachers' understanding of mathematics content, and helping teachers develop more effective mathematics teaching practices that allow all students to reach high standards, as well as sharing research addressing how students learn mathematics.

The overarching purpose for Mathematics Specialists is to increase the mathematics achievement of all the students in their schools. To do so, they:

- Collaborate with individual teachers through co-planning, co-teaching, and coaching;
- Assist administrative and instructional staff in interpreting data and designing approaches to improve student achievement and instruction;

- Ensure that the school curriculum is aligned with state and national standards, as well as their school division's mathematics curriculum;
- Promote teachers' delivery and understanding of the school curriculum through collaborative long-range and short-range planning;
- Facilitate teachers' use of successful, research-based instructional strategies, including differentiated instruction for diverse learners such as those with limited English proficiency or disabilities;
- Work with parents/guardians and community leaders to foster continuing home/school /community partnerships focused on students' learning of mathematics; and,
- Collaborate with administrators to provide leadership and vision for a schoolwide mathematics program.