

Ms. Maria Teresa Rojas, Chair

SUBJECT: SCIENCE EDUCATION IN MIAMI-DADE COUNTY PUBLIC SCHOOLS (M-DCPS)

COMMITTEE: ACADEMICS, INNOVATION, EVALUATION & TECHNOLOGY

LINK TO STRATEGIC PLAN: RELEVANT, RIGOROUS, & INNOVATIVE ACADEMICS

The recently released results from the Florida Department of Education for the Spring 2026 statewide science assessments reflect continued academic progress across Miami-Dade County Public Schools (M-DCPS) and the state. While these gains are encouraging and demonstrate the positive impact of ongoing instructional efforts, the results also highlight that significant work remains to ensure all students achieve proficiency in science.

Miami-Dade County Public Schools (M-DCPS) students demonstrated strong performance in science, with improvements across all statewide science assessments from Spring 2025 to Spring 2026. The percentage of M-DCPS students scoring at Levels 3–5 increased on the Grade 5 Science Assessment, the Grade 8 Statewide Science Assessment, and the Biology 1 End-of-Course (EOC) Assessment, reflecting positive overall year-over-year growth.

However, while M-DCPS continues to perform well on science assessments, there is still room for improvement. The data indicate several areas that require continued attention and targeted support. The following chart illustrates these key challenges.

	BIOLOGY 1 END-OF-COURSE (EOC)				
	Levels 3-5				
District	Number Tested		2025	2026	Difference
	2025	2026			
Grade 8	6,835	7,259	93	93	0
Grade 9	6,321	6,090	84	85	1
Grade 10	11,977	10,723	62	63	1
Grade 11	2,250	2,283	51	54	3
Grade 12	174	144	35	31	-4
TOTAL	27,574	26,537			
State			2025	2026	Difference
Grade 8	20,081	23,081	92	91	-1
Grade 9	92,144	89,850	83	87	4
Grade 10	90,184	83,271	60	60	0
Grade 11	13,030	11,227	49	52	3
Grade 12	2,412	2,050	36	34	-2
TOTAL	218,146	209,625			

	SCIENCE				
	Levels 3-5				
Grade 5	Number Tested				
	2025	2026	2025	2026	Difference
District	24,120	22,735	56	59	3
State	211,638	200,167	55	60	5
Grade 8			2025	2026	Difference
District	22,676	20,343	46	49	3
State	204,011	188,060	49	52	3

STEM education has also become a powerful catalyst for improving science education by making learning more relevant, engaging, and connected to real-world applications. Through the integration of science, technology, engineering, and mathematics, students develop a deeper understanding of scientific concepts while strengthening critical thinking, collaboration, creativity, and problem-solving skills. High-quality STEM experiences encourage inquiry, engineering design, and hands-on investigations that mirror the work of scientists and engineers. When STEM learning is intentionally embedded within the science curriculum, it increases student engagement, promotes deeper conceptual understanding, and helps prepare students to succeed in college, careers, and a rapidly evolving, technology-driven workforce. As a result, expanding access to high-quality STEM education is an important strategy for strengthening science achievement and ensuring students are equipped with the knowledge and skills needed for future success.

K–12 science education is a complex system of interrelated components that work together to support student learning and achievement. These components include state standards, high-quality instructional materials, professional learning for educators, effective classroom instruction, adequate instructional time for science at the elementary level, the strategic use of assessment data to inform and improve instruction, assessment and accountability policies, and pre-service teacher preparation. Meaningful and sustained improvement in science assessment outcomes requires a comprehensive approach that considers each of these interconnected elements. By strengthening the entire system and using data to guide instructional decisions, we can better prepare students with the scientific knowledge, critical thinking, and problem-solving skills they need to thrive in an ever-changing and evolving world.

Therefore, this agenda item directs the Superintendent of Schools to prepare and submit to the School Board a comprehensive report that reviews and analyzes the key components of a high-quality K–12 science education curriculum program. The report should examine the implementation and effectiveness of state science standards, high-quality instructional materials, professional learning opportunities for educators, evidence-based classroom instructional practices, the amount and quality of instructional time dedicated to science at the elementary level, the strategic use of assessment data to inform and improve instruction, assessment and accountability policies, pre-service teacher preparation, and the role of STEM education in strengthening science teaching and learning. In addition, the report should identify current strengths, areas for improvement, evidence-based strategies, timelines, and projected budget enhancements, if necessary, that can enhance science instruction and student achievement across the District. The findings and recommendations

will provide a framework for strengthening the District's science education curriculum program, ensuring that all students have access to rigorous, engaging, and equitable science learning experiences that prepare them for postsecondary education, high-demand careers, and informed participation in an increasingly scientific and technological society.

This item has been reviewed and approved by the Office of the General Counsel as to form and legal sufficiency.

ACTION PROPOSED BY CHAIR

MS. MARIA TERESA ROJAS: That The School Board of Miami-Dade County, Florida, directs the Superintendent of Schools to:

1. prepare and submit to the School Board a comprehensive report that reviews and analyzes the key components of a high-quality K–12 science education system;
2. examine the implementation and effectiveness of state science standards, high-quality instructional materials, professional learning opportunities for educators, evidence-based classroom instructional practices, interdisciplinary teaching and learning, the amount and quality of instructional time dedicated to science at the elementary level, the strategic use of assessment data to inform and improve instruction, assessment and accountability policies, pre-service teacher preparation, and the role of STEM education in strengthening science teaching and learning;
3. identify current strengths, areas for improvement, evidence-based strategies, timelines, and projected budget enhancements, if necessary, that can enhance science instruction and student achievement across the District;
4. include the findings and recommendations which will provide a framework for strengthening the District's science education curriculum program, ensuring that all students have access to rigorous, engaging, and equitable science learning experiences that prepare them for postsecondary education, high-demand careers, and informed participation in an increasingly scientific and technological society; and
5. submit and report the comprehensive report to the School Board at the Academics, Innovation, Evaluation & Technology Committee scheduled for October 7, 2026.