

The STEM Academy at Booker T. Washington: *Old Dominion University & Suffolk Public Schools Lab School*

College Partnership Lab Schools
Virginia Department of Education Meeting

May 21, 2024



SABTW Mission & Vision

Our Mission supports Excellence in Education:

- Broaden student horizons and inspire them with an instilled sense of responsibility and ambition; promoting student agency and voice in their learning
- Address the needs of low socioeconomic populations, enhancing academic proficiency, while infusing and exposing STEM and its overarching impact in every aspect of life
- Provide an innovative, hands-on, experiential dynamic teaching and learning laboratory for students to explore the world of STEM
- Collaborate on the integration of research and teaching to build and share knowledge of transformative practices and pedagogy

Vision:

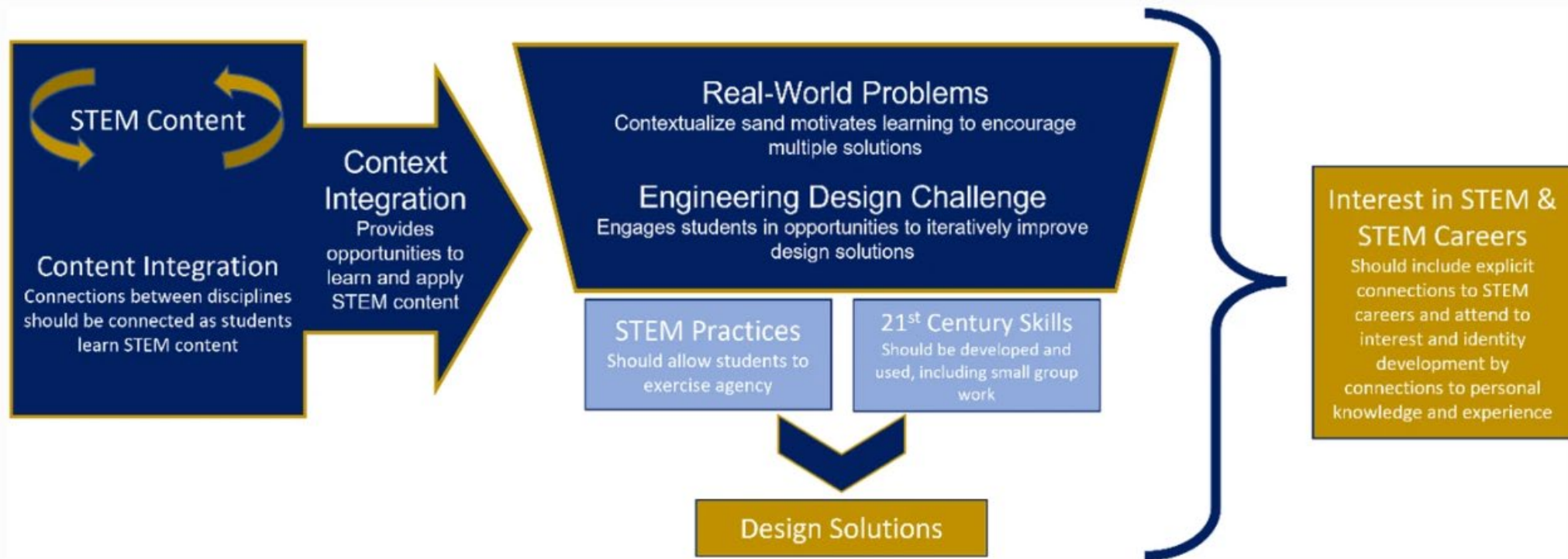
- To cultivate a generation of productive young citizens who are prepared for the world with awareness, creative capacity, understanding, skills, and knowledge needed for success throughout their educational experiences, college and STEM careers, contributing to societal advancement and to the narrowing of educational disparities



SABTW Instructional Model

Fig. 1

From: [Beyond the basics: a detailed conceptual framework of integrated STEM](#)



Interactions between critical characteristics of integrated STEM



Support & Partnerships



Budget Summary & Sustainability

\$ in 000's	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
Lab School Operating Costs							
Personnel	545	545	579	587	596	330	3,182
Non-personnel Expenses	175	338	338	338	338	221	1,748
Staff development	50	55	55	55	55	24	294
Equip/Tech/Furniture	180	110	212	248	238	200	1,188
Admin Fee	50	-					50
Total Lab School Operating Costs	1,000	1,048	1,184	1,228	1,227	775	6,462

Braided Sustainability Approach: *Leveraging our STEM Regional Ecosystem*

- *Grants*
- *Development*
- *Fundraising*
- *Partnership position base funding*
- *Institutional commitment*



Outcomes

- A hands-on, practical STEM curriculum, building student skills from elementary age
- Enhanced student academic proficiency
- A deeper understanding for students of core STEM subjects to prepare them with critical thinking and problem-solving skills to address real-world challenges
- A robust teacher educator pipeline
- Research focused on areas such as inter-organizational collaboration, effectiveness of lab schools, teacher and professional learning for lab school success, student learning and engagement



Outcome Metrics

SABTW students will work towards achieving the following measurable goals:

Students will meet state expectation for SOL's

- Metric 1: By the end of each lab school year (2025-2029), STEM Academy Lab School students, in testing grades 3-5, will successfully meet the minimum pass score on all Standards of Learning assessments.
- Metric 2: By the end of each lab school year (2025-2029), STEM Academy Lab School students will successfully meet the minimum pass score on all division-generated, VDOE required, and other common assessments.
- Metric 3: 100% of the STEM Academy Lab School teachers and staff will practice and implement the professional development strategies in which they were trained and are embedded in the STEM Academy Lab School.

