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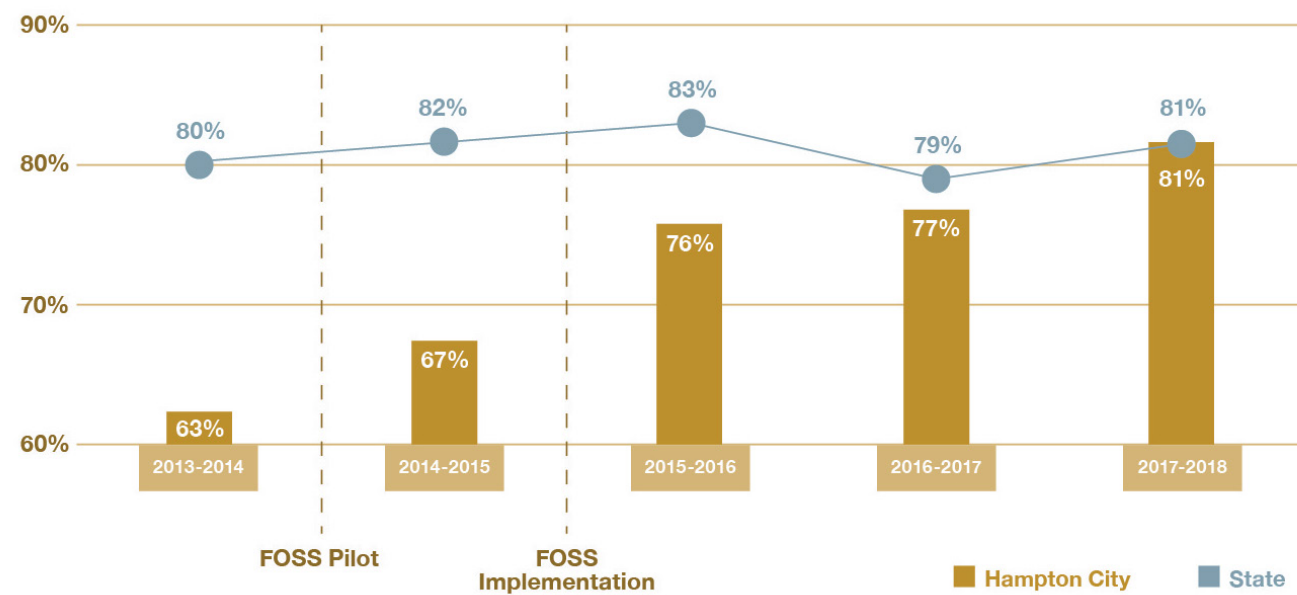
THE LAWRENCE
HALL OF SCIENCE™
UNIVERSITY OF CALIFORNIA, BERKELEY

**Virginia students have
put FOSS to the test.**

Virginia test scores confirm: FOSS promotes success.

For over a quarter century, the Full Option Science System™ (FOSS®) curriculum has engaged students of all backgrounds and abilities by making them active investigators of scientific phenomena, not just passive spectators. Developed at UC Berkeley’s Lawrence Hall of Science and classroom tested to meet the evolving needs of classroom educators and diverse students, the FOSS program has proven its worth in Virginia schools by exciting students, supporting educators—and dramatically lifting Standards of Learning (SOL) test scores.

Test scores from Hampton City, VA



Hampton City fourth and fifth graders were performing 17% below state norms (the blue line) in VA Standards of Learning (SOL) testing. Then came FOSS, backed by a comprehensive support team working in partnership with the district. In just four years, the achievement gap was completely closed—vividly demonstrating the power of FOSS to engage students of all backgrounds, languages, and income levels.

“FOSS further enhances and opens the world to families with online support and hands-on home connections. FOSS is ahead of the curve, allowing our students to also be ahead of the curve.”

Susan B., Teacher
Hampton City, VA

Designed for Virginia students and teachers.

FOSS for Virginia is the science curriculum developed specifically for the state to align with the VA SOLs—the Virginia Standards of Learning.

Activities for Virginia (AVAs): FOSS has created a series of activities specifically designed and developed for Virginia. FOSS AVAs help ensure student attainment of state SOL criteria.

FOSS Pacing Guides: These essential teacher tools provide a session-by-session plan for FOSS investigations and their integral AVAs, clearly spelling out how each lesson connects to Virginia SOLs.

Engineering design: The active use of science and engineering practices is fundamental to FOSS. Students step into the roles of scientists and engineers themselves, design solutions to real-world challenges—and discover the power to engineer change.

Science and literacy: Each FOSS investigation advances cross-curricular literacy learning. FOSS science notebooks promote strategies for writing. Informational text supports vocabulary and comprehension. Sense-making discussions encourage oral language development.

Environmental literacy: The Chesapeake Bay Watershed Agreement commits Virginia to educate all students in how to protect and restore their local watershed. FOSS for Virginia supports meaningful watershed educational experiences (MWEE). The program extends classroom learning into the schoolyard and beyond, and provides extensions for specific projects to further this goal.

The Profile of a Virginia Graduate: FOSS for Virginia helps students acquire the knowledge and thinking capacity appropriate for world citizens. FOSS aligns with the goals of the Science Standards of Learning (SOL) for Virginia Public Schools and supports the Profile of a Virginia Graduate.

Environments Module—Activities for VA Grade 4

INTRODUCTION
The **Environments Module** is one of three **FOSS Next Generation™ Program** modules for grade 4. To enhance this module and provide state-specific experiences for Virginia students, we have created **Activities for Virginia (AVAs)**. These activities and resources are described in detail in this document and are to be used during specific parts of the module as indicated.

For this module, new multimedia activities and videos are available on FOSSweb for teachers from the module detail page, and for students from their student page.

These AVAs are listed in the **Environments Module Pacing Guide** and given a session number. They will be identified as an AVA. Consider this document a companion to the **Environments Module Investigations Guide**. It includes:

- AVA: Virginia Land Resources and Uses**
Use after Investigation 1 and before Investigation 2
See Environments Module Pacing Guide.
- AVA: Watersheds in Virginia**
Use after Investigation 2, Part 1, Step 25
See Environments Module Pacing Guide.
- AVA: Virginia Plants and Animals**
Use during Investigation 2, Part 2, Step 24
See Environments Module Pacing Guide.
- AVA: Protecting Natural Resources in Virginia**
Use during Investigation 2, Part 3, Step 24
See Environments Module Pacing Guide.
- AVA: Watershed Restoration Projects**
Use during Investigation 3, Part 3, Step 14
See Environments Module Pacing Guide.
- AVA: Flowers and Pollinators**
Use after Investigation 4, Part 1, Step 52
See Environments Module Pacing Guide.

To download a Grade 4 Planning Guide for Virginia, a detailed Environments Module Pacing Guide, and the AVA resources, navigate to **FOSSweb, Teacher Resources, Planning Guide and Other State Resources** from the module detail page.

NOTE
The latest printings of the FOSS Next Generation *Investigation Guides* and *Teacher Resources* are available on FOSSweb.

For VA State Resources on **FOSSweb**, select a module from your grade and navigate to **Teacher Resources, Planning Guide and Other State Resources**.

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FOSS Activities for Virginia (AVAs) provide students with state-specific experiences throughout each module, highlighted in the teacher’s Pacing Guide.

FOSS supports equity— and always has.

Every student deserves the benefits of science education—not just exposure to scientific phenomena, but the opportunity to understand and explain them. From its origins three decades ago, the FOSS program was built to afford that opportunity to all, regardless of background, culture, language, or ability.

Lawrence Hall of Science curriculum developers designed FOSS to engage all students through collaborative, active investigation, a teaching philosophy in harmony with the Virginia Standards of Learning (SOLs). For 3.5 million students and 100,000 teachers, this inclusive philosophy has helped make science education equitable for every student in every classroom.

Learn more.

Go to **FOSSNextGeneration.com** or contact your local FOSS representatives:

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