

Florida Standards and Technology Integration

Our Approach

Curriculum Department:
Technology

Equity of Infrastructure

Curriculum Maps

Single-Sign On for
Instructional Resources



Title I Laptop Initiative 1:1

Project Impact SY 2015-16

525 students, 35 teachers

5 Elementary Schools



Language Arts Florida Standards

LAFS.4.W.1.2

Write informative/explanatory texts

LAFS.4.W.2.6

Use technology to produce and publish writing; interact and collaborate with others; demonstrate command of keyboarding skills

LAFS.4.W.3.7

Conduct short research projects that build knowledge through investigation of different aspects of a topic.

Classroom Activity

Online Research through the Resource Portal:

Achieve3000

BrainPop (BrainPop Jr.)

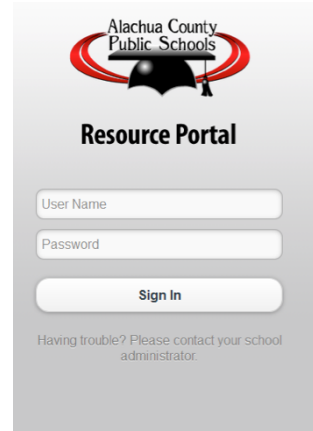
Discovery Education

Gale-Cengage

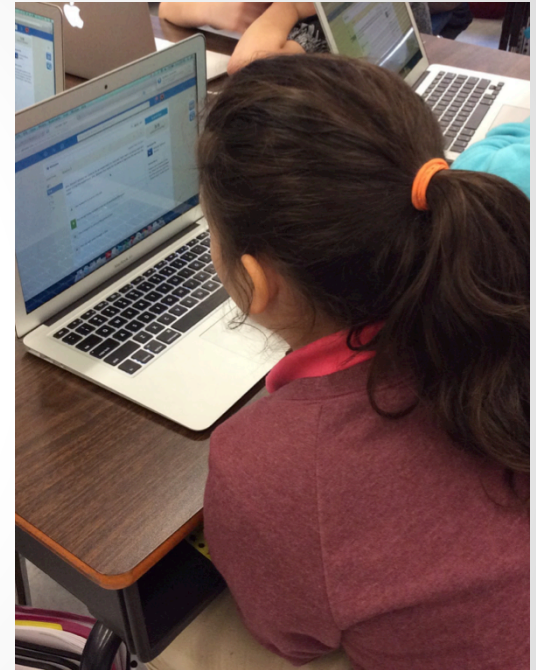
PBS Learning Media

WorldBook

Microsoft Word: composed, revised, and published student essays



The image shows a login page for the Alachua County Public Schools Resource Portal. At the top, there is a logo for Alachua County Public Schools featuring a graduation cap. Below the logo, the text "Resource Portal" is displayed. There are two input fields: "User Name" and "Password". Below these fields is a "Sign In" button. At the bottom, there is a link that says "Having trouble? Please contact your school administrator."



Outcome: Student Projects

- researched
- wrote an informative text
- produced and published writing
- demonstrated keyboarding skills

ACPS STEM Initiative

Project Impact SY 2015-16

1000 students, 25 teachers

8 Elementary Schools, 9 Middle Schools



THE FIVE PHASES OF STEM

PHASE ONE

2015 - 2016

Implement Vex IQ Robotics Program:

8 elementary schools (grade 5)

4 middle schools classroom curriculum (grade 8)

5 middle schools after-school robotics clubs (grade 8)

Introduce Code HS pilot program in Computer Programming/ Coding at 1 ACPS high school.

PHASE TWO

2016 - 2017

Implement Vex IQ Robotics at the remaining elementary schools.

Implement Vex IQ Robotics in remaining 5 middle schools as grade 8 classroom curriculum.

Implement Vex EDR program at all High Schools

Open a CTE Robotics program at the Professional Academies Magnet at Lofton High School.

Integrate 3D printing into the Science curriculum in Grades 4 and 7.

Expand Computer Programming and Coding in ACPS high schools.

PHASE THREE

2017 - 2018

Integrate Bio-Tech Education into grades 3 and 6 curriculum.

PHASE FOUR

2018 - 2019

Integrate additional engineering fields of study into Grades K-2

PHASE FIVE

2019 - 2020

FULL STEM Integration in all grades, at all schools.

STEM Supports Standards-Based Instruction

2015-2016 ACPS C

Big Idea 13:
Forces and
Changes in
Motion

MAFS.K12.MP.5.1

Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

le Physical Science

[Motion Simulations](#)

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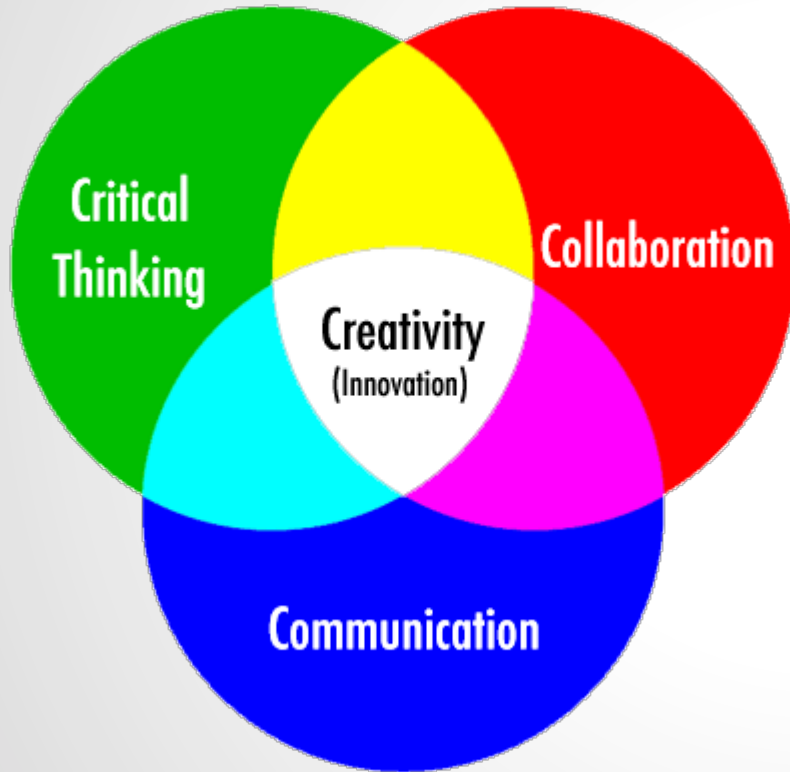
: Bubblelogy

inch Lab p.45 “Can
ke a ball move without
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[t Forces Review](#)

Outcomes of the ACPS STEM Initiative



Project-Based Learning

21st Century Skills

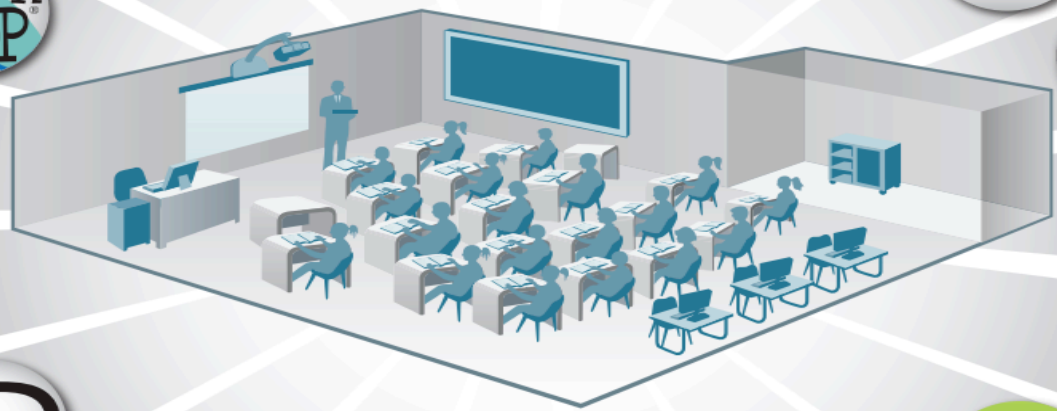
Motivation for Excellence

Career and College
Readiness for STEM
Fields

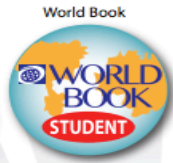
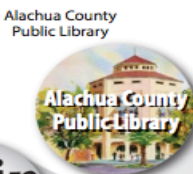
ELEMENTARY CLASSROOM

Increased Student Engagement

Informed Data-Driven Instruction



Increased Student Engagement



Reflex Math



Microsoft Office



Media Resources Online Catalog



BrightLink Projector/SMART Board



Digital Textbooks



Discovery Ed



Earobics



Edmodo



EduTone



Edu Typing



Google Apps




Infinite Campus



Kids InfoBits

Integration of 21st Century Skills

Increased Student Achievement



Alachua County Public Schools

We are committed to the success of every student!