



# Project Lead the Way

# Systemic Implementation



- K-12 implementation with the reconfiguration of elementary and middle schools
- All schools participating with one purposeful exclusion at Duncan Elementary School of the Arts



# PLTW Programming



- Elementary - Launch
- Middle School - Gateway to Technology
- High School - Project Lead the Way



# Elementary Schools



## Launch

- In 7 of 8 elementary schools
- Aligned with South Carolina Science Standards
- 40 - 45 minutes a week

## Units of Study

### K5

Animals and Algorithms

### 1st Grade

Light and Sound

Observing the Sun, Moon and Stars

### 2nd Grade

Properties of Matter

Living Things: Diversity of Life

### 3rd Grade

Life Cycles and Survival

Environmental Changes

### 4th Grade

Waves and Properties of Light

Human Impact and Natural Disasters

### 5th grade

Earth's Water and Interconnected Systems

Matter Properties and Reactions



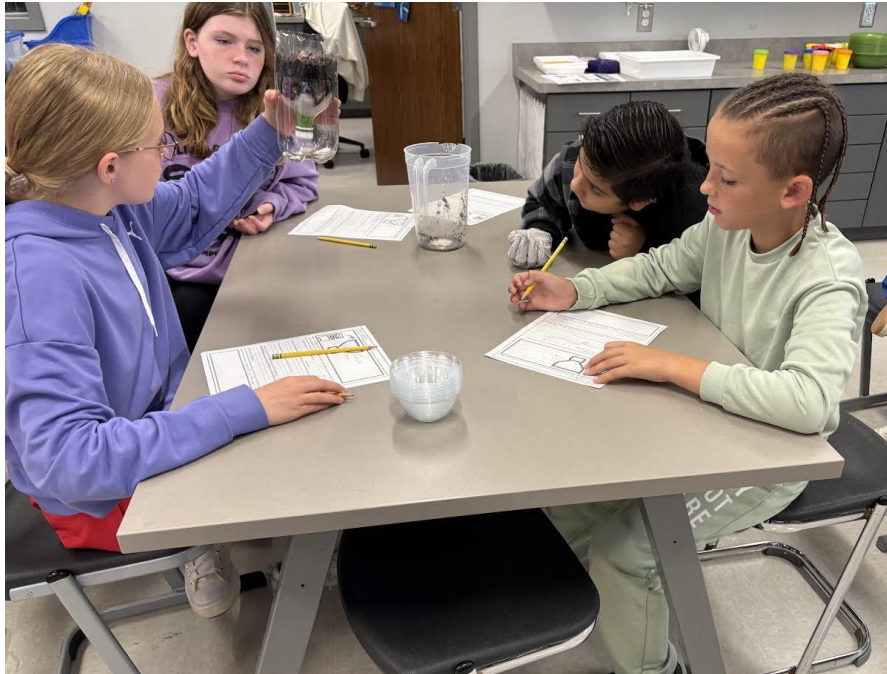
# Elementary Schools



**Third grade students at Berry Shoals work within a collaborative group to find cards to complete life cycles of various organisms that they use to draw a model of the life cycle.**



# Elementary Schools



**These fifth grade students at Reidville designed and tested water filters at the culmination of the Earth's Water and Interconnected Systems unit.**



**EVERY CHILD, EVERY DAY.**

# Elementary Schools



**Second graders at Abner Creek designing and building a device to keep a popsicle frozen under a heat lamp as a part of their Properties of Matter unit.**



**EVERY CHILD, EVERY DAY.**

# Elementary Schools



## LAUNCH

*"I am so grateful for Mrs. Salway's leadership as the Project Lead the Way teacher. Her innovative approach has helped frontload science standards we haven't yet covered in class and provided an excellent review of concepts we've already discussed. The students are thoroughly engaged, and their excitement to be creative and explore new ideas in the classroom is truly inspiring!" -Teacher Kaydee Culbertson*

*"PLTW is our favorite thing about school. We are always making fun things or working together. This week we are learning the phases of the moon, but we get to use Ozobots while we learn each phase." - 1st Grade Student at River Ridge*

*"We enjoyed the Bee Simulation, making the bee habitats, going outside to look for habitat features, finding our matches with the life cycle cards, and drawing the life cycle pictures in our notebooks." - Group of Third Grade Students at Abner Creek*

**EVERY CHILD, EVERY DAY.**





# Middle Schools



Exploration in the following pathways:

- Computer Science
- Engineering
- Biomedical Science



# Middle Schools



## Elective Courses

### 6th Grade

- Computer Science for Innovators and Makers
- Flight and Space

### 7th Grade

- Medical Detectives
- Design and Modeling

### 8th Grade

- Automation and Robotics
- App Creators





Student  
***“What I love  
most about this  
class is the  
emphasis on  
problem solving.”***

# PLTW Teacher - Middle School



*“Teaching PLTW has renewed my love of teaching. I enjoy watching the students become excited about what they are learning. Students are able to use so many skills that they will need when they are not in school from teamwork, to inquiry and collaboration, all while getting to be creative. PLTW provides an environment where students get to develop perseverance and problem solving skills and teaches students to go deeper with their thinking.”*

EVERY CHILD, EVERY DAY.

# PLTW - High School



## CTE Completer Programs

- Biomedical Sciences
- Computer Science
- Pre-Engineering



EVERY CHILD, EVERY DAY.

# PLTW Student Testimony



*“Project Lead the Way was one of the most valuable experiences of my high school career. It gave me the opportunity to participate in hands-on learning, such as working with micropipettes which are an essential skill I now use on a regular basis in college labs. I remember being the only one in my freshman Biology lab that knew how to use them! Beyond hands-on skills, PLTW helped me form deeper connections with people who shared the same passion for healthcare as I did. The program allowed me to compete at both the state and international levels alongside other friends from Byrnes, which was both challenging and rewarding. Most importantly, PLTW inspired me to strive for excellence in both high school and college. Through the program, I gained meaningful insight into real-world healthcare problems and even had the opportunity to propose innovative solutions two years in a row. These experiences gave me both the confidence and the drive to succeed.”*

Lizzie Kinard, Sophomore at Clemson, Nursing Major

**EVERY CHILD, EVERY DAY.**





**Career Readiness:** PLTW courses expose students to STEM fields such as biomedical science, computer science, and engineering, giving them awareness of possible career paths starting in middle school.

**Early Technical Skills:** Whether it is coding apps, designing prototypes, or learning medical diagnostics, students gain skills that can transfer to high school, college, or careers.

**Hands-On, Engaging Learning:** Students build, test, design, and solve real-world problems—keeping students actively engaged.

**Critical Thinking & Problem Solving:** Lessons are inquiry-based, encouraging students to ask questions, brainstorm, test, and refine their ideas.

**Collaboration & Communication Skills:** Many activities involve group work, teaching students how to share ideas, divide responsibilities, and present their results.

**EVERY CHILD, EVERY DAY.**

# Celebrations



- D5 was selected by PLTW as a training hub for their participating districts in the Southeastern Region of the US.
- PLTW has been impressed with our implementation and has selected D5 as a Showcase District.
  - On Oct 22 representatives from other PLTW school districts will visit ACA, ACM and BHS in order to observe the way D5 has implemented PLTW in all grades.

EVERY CHILD EVERY DAY.





# Questions?



EVERY CHILD, EVERY DAY.