FLINN SCIENTIFIC

WHITEBOX LEARNING
A Flinn Scientific Company

Empower Students to Work Like Real Engineers!

WhiteBox Learning is a web-based standards-aligned STEM learning system for grades 6-12 that brings real-world design to the classroom. With twelve applications using **CAD-inspired** engineering software, students design and analyze a 3D model, learning through simulations and **unlimited design iterations**. They then build the physical model to complete the learning experience.

Exposing ALL Students to Real-world Engineering

WhiteBox Learning teaches the engineering design process in the most real world way - with **3D models, unlimited design iterations, and a challenging competition**. The system addresses various learning styles, providing ALL students with an engaging way to gain exposure to engineering design and the **STEM career cluster for Career and Technical Education (CTE)**.

Powerful Analytical Tools for Teachers

The Teacher Control Center (TCC) provides management and monitoring tools to set up classes, assign applications, and adjust content based on student need. The TCC tracks metrics that include time on task, quiz and worksheet scores, and overall class and student progress and performance.

> "I have never had any other curriculum that was as complete a package as the WhiteBox System... It is by far the best thing I have ever put in my classroom. Plus, the kids absolutely love it!"
>
> **ROCKY SHEPHERD**
> **MIDDLE SCHOOL STEM TEACHER**
> **WEATHERFORD, OK**

FUNDING OPTIONS

WhiteBox Learning can be funded by:

- **Perkins Grant** that is provided to states to improve secondary and post-secondary CTE programs

- **STEM federal funding sources**, including:
  - 21st Century Community Learning Center Grants
  - Title I - College and Career Readiness
  - Title IV-A Student Support and Academic Enrichment Grants
  - Title V - Gifted Programs

Explore Our 12 STEM Applications:


SOLAR 2.0 · KIDWIND 2.0 · SURVIVAL SHELTER 2.0
ROVER 2.0 · GLIDERS 2.0 · DRAGSTER 2.0
STRUCTURES 2.0 · GREEN CAR 2.0 · ROCKETS 2.0
MOUSETRAP CAR 2.0 · PROSTHETICS 2.0 · DRONE
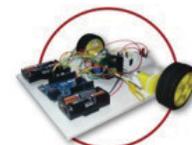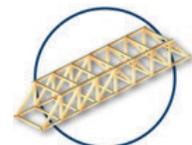
Learn more at www.flinnsci.com/whiteboxlearning

How it Works

Integrating 3D design and analysis tools, game-like simulation, and all the custom plans and materials necessary to build a physical model, WhiteBox Learning promotes critical and higher order thinking. Students are empowered with the tools and information necessary to ask and answer their own questions about their designs in a unique and effective cycle called "informed iteration." A familiar interface guides students through the phases of engineering design and scientific inquiry:

INFORMED ITERATION PROCESS
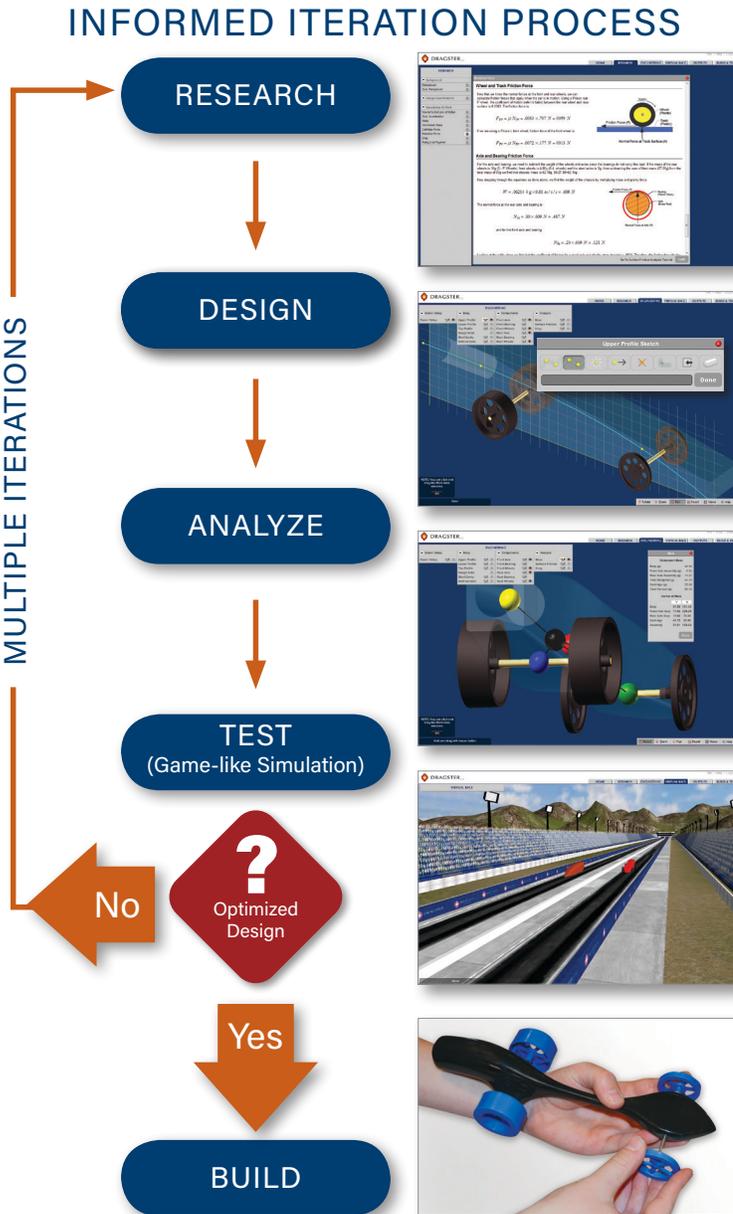
Research—Study the principles of engineering design and problem solving, theory-based content, quizzes, worksheets, and tutorials.

Design—Engage in virtual design through teacher-assigned design specifications, background, rules of the challenge and knowledge at work.

Analyze—Students focus on the task at hand and increase their knowledge in STEM through a unique online design tool.

Test—Analysis through game-like simulation is used for classroom or districtwide competition.

Build—Students construct physical models from the results of their data about the optimized virtual design.

WhiteBox Nationals is a competition students encounter during the test phase where they move through five increasingly challenging levels as they test their 3-D model designs. To move up in level, students must meet or exceed required level scores based on quiz and worksheet results, number of design iterations, and design performance. WhiteBox Nationals has proven to be a motivator for students to research and learn the science and math behind optimizing their designs to improve their chances in the competition. Students compete across school, district, and state, nationally and globally.

@ **Get a FREE Demo, Trial, or Custom Proposal**

Our account representatives are ready to answer your questions and give you a FREE demo, trial or custom district proposal. Email **myaccountrep@flinnsci.com**, and a regional account representative will follow up with you.

Talk to an Expert

Have a question on how to implement WhiteBox Learning? Our scientists are available to help! Call **800-452-1261** to set up a 1-on-1 training session.