Experimenters. Circuits

Build practical applied electronics skills through interactive simulation.

A 3D virtual laboratory for electrical engineering education.

The project provides a cross-platform (browser, mobile, PC) 3D simulator that reproduces real laboratory equipment and physical processes in real time. Students, teachers, tutors, and educational institutions can conduct full-scale electrical experiments without physical hardware, safety risks, or time limitations.

We enable hands-on practice in electricity and circuit analysis from any device, support both classroom and remote learning, and help modernize STEM education by making laboratory work accessible, repeatable, and scalable.

Your Laboratory for a Better Tomorrow

Find our project here

https://experimenters.app/

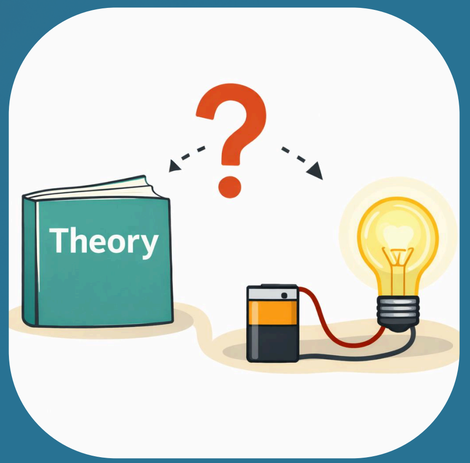
Private tutors problems

Accessibility
Private tutors and small educational providers often do not have consistent access to specialized laboratory equipment, which restricts their ability to offer structured experimental practice.

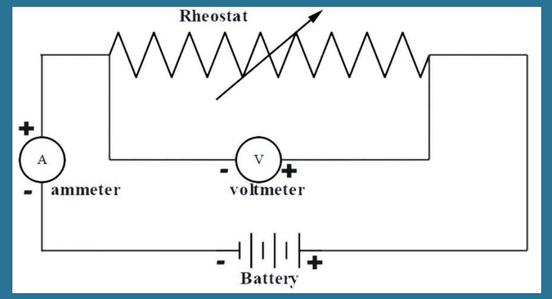
Safety
Many electrical and physics experiments cannot be safely conducted outside controlled laboratory environments, limiting what can be demonstrated in home-based or online learning settings.

Cost
Acquiring, maintaining, and storing laboratory equipment requires significant financial and organizational resources, making it inefficient for individual instructors and small-scale instruction.

Learning Effectiveness
When learning relies primarily on theory, students struggle to build intuition and applied skills. In addition, many physical processes are not directly observable in real laboratories; virtual environments can visualize these processes and accelerate understanding.



Education Challenge

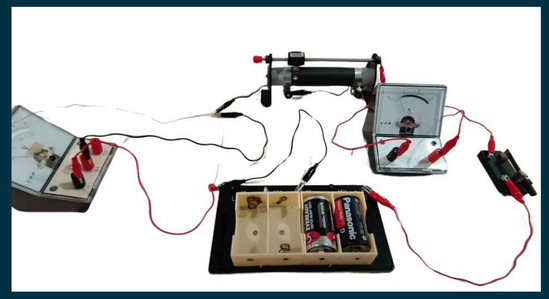


THEORY

Theory builds conceptual understanding of electrical laws, formulas, and circuit behavior. Students learn how components should work, but knowledge often remains abstract and detached from real systems.

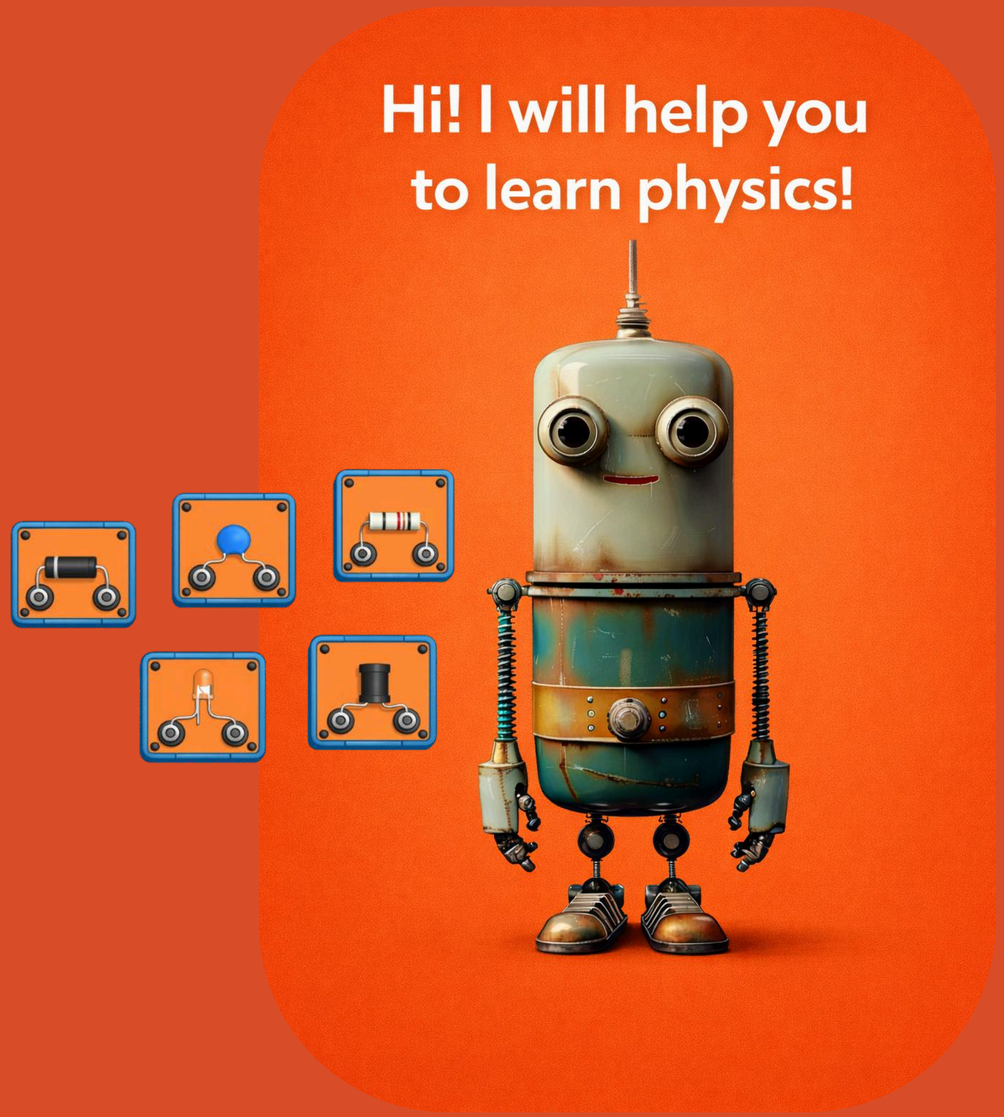
TRANSITION GAP

Real circuits with wires, connections, and measurement points often look very different from simplified diagrams, and many electrical processes are not directly visible. Without an intermediate, safe, and repeatable environment, students struggle to relate theoretical representations to practical results.



PRACTICE

Practice transforms theory into skills through assembling circuits, measuring values, and observing real behavior. This step is often limited by equipment cost, safety constraints, and access to laboratories.



Our **Mission**

Making high-quality STEM laboratory practice accessible from anywhere, especially where physical equipment is unavailable or unaffordable.

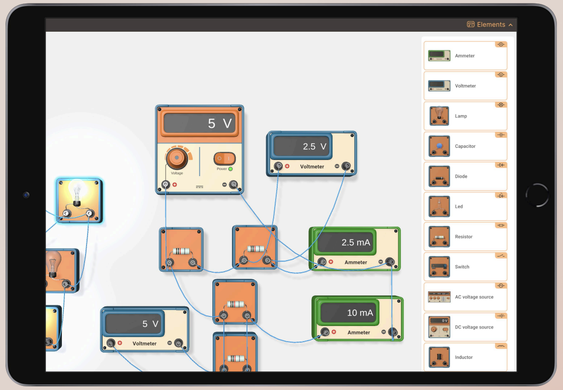
We improve the quality of digital education to meet its rapidly growing demand.

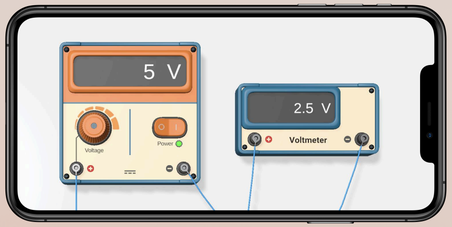
Experimenters makes real electrical processes visible, helping students understand how theory turns into practice.

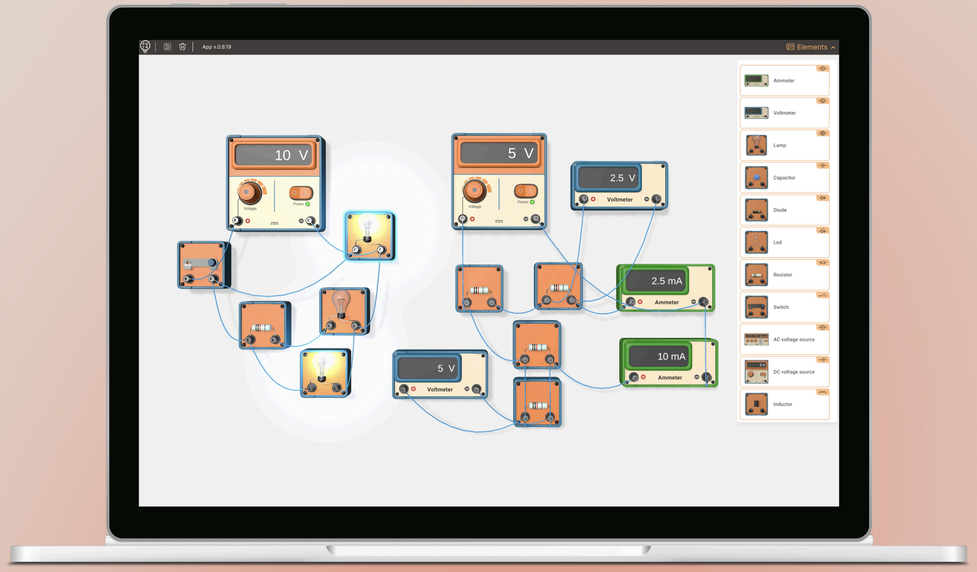
Effective STEM education requires the application of scientific knowledge in real-life contexts; theoretical knowledge alone is insufficient for developing scientific literacy.
Source: OECD, PISA 2015 Assessment and Analytical Framework, p. 21.
https://www.oecd.org/content/dam/oecd/en/publications/reports/2016/04/pisa-2015-assessment-and-analytical-framework_g1g66e6f/9789264255425-en.pdf

Understanding science and engineering develops through active engagement in scientific practices, including investigation, modelling and explanation, rather than through passive acquisition of content knowledge.
Source: National Academies of Sciences, Engineering, and Medicine, A Framework for K-12 Science Education, p. 42 ("Why Practices?").
https://www.nationalacademies.org/read/13165/chapter/7

Our Solution







Cross-platform virtual electrical engineering laboratory available from any device

Real-time simulation of circuits and physical processes with realistic behavior

Sandbox environment for building, testing, and modifying circuits

Visual lessons and shared experiments for effective self learn, 1-to-1 and remote tutoring

Press to watch on youtube

Press to try demo

Where we are now

Electricity!

Core set of electrical components and basic laboratory experiments already implemented

Cross-platform MVP

Working MVP available online (tested with several teachers)

Bird Incubator

Completed startup pre-incubation program
https://bird-incubator.com/startup/experimenters/

Product Hunt

Ranked #2 Project of the Week (Education)
https://www.producthunt.com/products/experimenters-circuit

2026 Roadmap

More elements!

Expand the core library of electrical components and experiments

Save

Build a simple sharing system for circuits, experiments, and lessons

Share

Enable tutors to create and reuse structured visual lessons

Validate

Validate the product with active tutors and iterate based on real usage

SaaS Freemium

Free (for everyone)

Full access to the core simulator, basic electrical components, and public experiments

Pro (commercial tutoring)

Unlimited saves, private project library, advanced sharing (private links / folders) lesson builder

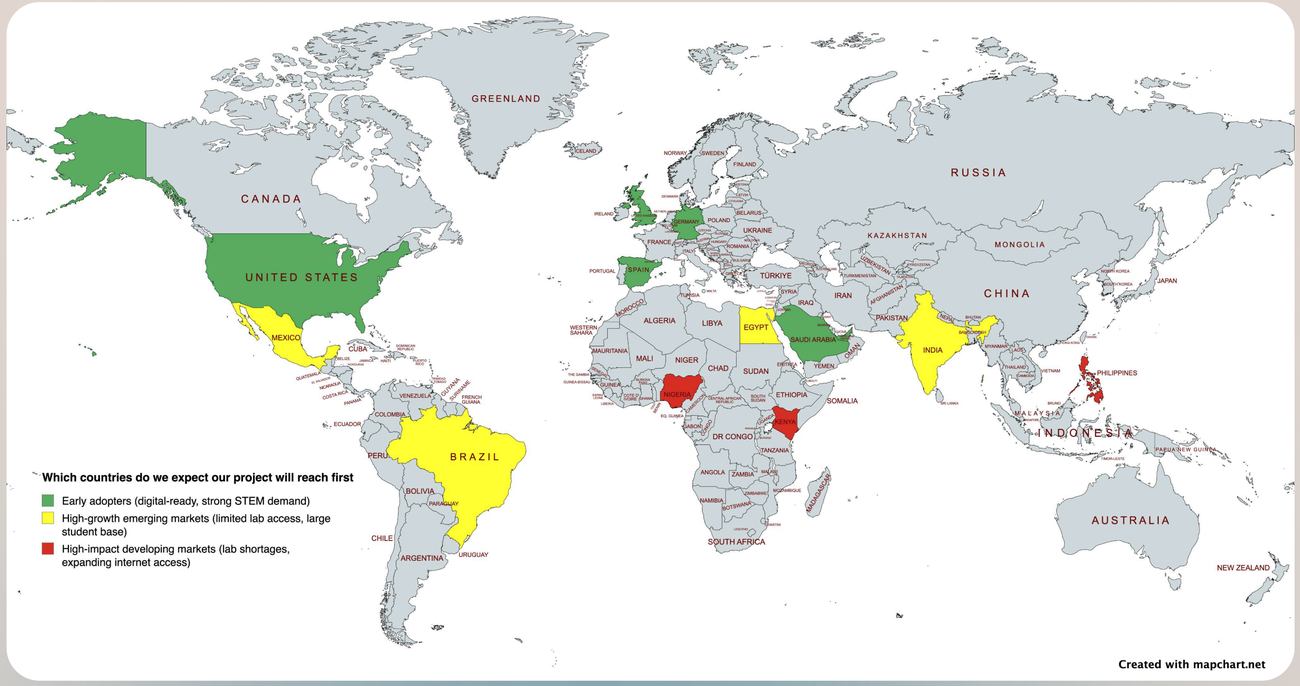
The core functionality will remain free and accessible to everyone

Market Research

Private Tutoring (2025)

- Market size (2025): Global private tutoring market estimated at $130B+.
- Growth rate: ~7–10% CAGR, sustained through the late 2020s.
- Key drivers: Growth of online and hybrid tutoring, demand for personalized learning, strong STEM and test-prep focus.
- Outlook: Market projected to exceed $200B by 2030, with online tutoring growing faster than the overall market.

Sources: The Business Research Company; Fortune Business Insights; Grand View Research; Global Industry Analysts (MarketResearch.com).



Our Initial focus: English-speaking and digitally mature markets, followed by scalable expansion into high-demand emerging economies.

Team

Viktor

Founder with 10+ years in physics simulation development and 5+ years in EdTech. Holds an engineering degree in programming and physics. Led R&D projects as a named patent author, building interactive educational products based on original physical models.

https://vij.app/portfolio/
https://www.linkedin.com/in/grigorev-viktor/

Polina

3+ years in EdTech. Background as Analyst and Product Manager, focused on data-driven product decisions and content creation. Holds a degree in Management and Informatics in Technical Systems.

Advisors

Oleg

Engineer physicist
Physics simulations
Software Architector
Design and Technology of Radio Electronic Systems

Kirill

2x B2B SaaS founder
20 years in tech

Tutor Community

Structured surveys with STEM tutors and educators. Feedback directly informs feature prioritization and lab design.

Your laboratory for better tomorrow

Try Now

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