

Empowering Students with STEM Skills + Free Drone Curriculum

Through Take Flight, teachers of middle school students will acquire all the necessary tools and resources to integrate drones into their STEM curriculum to help their students develop STEM skills and identity, with the goal of increasing interest and motivation toward STEM careers. The Take Flight curriculum is designed for classrooms with boys and girls, but it includes particular design features to:

- Foster girls' confidence & skills to address stereotype threat
- Encourage engagement and persistence
- Bridge the gender gap in STEM



What Teachers Get

- ✓ Lesson Plans and Materials
- ✓ Targeted PD for each "Mission"
- ✓ Fully Stocked drone kit for 20-25 students



What Teachers Say

"Girls really didn't do this in our generation. And, I was unsure how to make this fit in math. I feel more confident now because of all the support materials on the website."

- Math Teacher

"At first I really didn't want to break it [the drone]. Now [after completing the PD] I feel better. More empowered and I want to empower our kids. They need this."

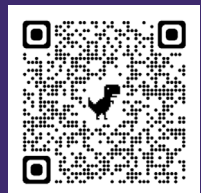
- Science Teacher

"The curriculum has been the most important thing, we've had drones forever here but we've never had a curriculum to move sensibly through using them."

- Technology Integrator

Learn More

Want to learn more about Take Flight? [Visit our project page](#) at CAST.org.





Take Flight is Closing the Digital Divide

The 2024 National Educational Technology Plan (NETP): [A Call to Action for Closing the Digital Access, Design and Use Divides](#) frames three key divides limiting the transformational potential of educational technology to support teaching and learning.



The Digital Use Divide stands between those students who are asked to use technology for creation, exploration, and critical analysis and those who are not.

Using a research-based design process, Take Flight

- builds awareness of those traditionally excluded from STEM careers: girls and rural youth
- provides models of diverse STEM careers, skills, and participants
- supports mindset shift for teachers and learners



The Digital Design Divide is between and within those systems that provide every educator the time and support they need to build their capacities to design learning experiences with digital tools, and those that do not.

Using a co-design process, Take Flight offers

- an openly available curriculum that promotes STEM engagement, belonging, and skills through innovative drone technology
- self-paced PD sessions to support and build educator skills and confidence with drone technology and the importance of promoting STEM careers for all students, particularly girls in rural settings



The Digital Access Divide stands between those students and educators who have equitable, sustainable access to connectivity, devices, and digital content and those who do not. This also includes accessibility and digital health, safety, and citizenship.

Using UDL Design Principles, Take Flight

- provides curriculum materials in flexible formats
- provides flexible tasks relevant to contexts with varied technology access
- co-designs with rural districts to remove access and implementation barriers