



DISCOVERING FLIGHT

with the National Aviation Hall of Fame

Early exposure to aviation is the key to recruiting the large and diverse aviation workforce the industry needs. So, the National Aviation Hall of Fame created "Discovering Flight with the NAHF," an education and outreach program to inspire youth to become future aerospace leaders. "Discovering Flight" has two main components: "Problem Solving with Wilbur and Orville," an elementary school curriculum created in collaboration with Think TV in Dayton, Ohio, and the Heritage Hall and Education Center, a cutting-edge learning facility.



**FUTURE
FORWARD
OHIO**



"Problem Solving with Wilbur and Orville"

This three-part, 15-unit standards-aligned STEM curriculum for grades pre-K through 6

- has reached 200,000+ students in 6,000+ classrooms, mostly in under-resourced schools;
- comes with everything a teacher needs to teach the lessons, no extra preparation or materials required; and
- has received overwhelmingly positive feedback from teachers, with 92% saying that the material builds knowledge of aviation and 83% saying they could see teaching it to future classes.



Heritage Hall and Education Center

This facility includes a multipurpose immersive theater and the Joe Clark Innovation Lab, where students can

- touch and experiment with pieces of aviation technology;
- use cutting-edge equipment like scanners and 3D printers;
- brainstorm and problem solve; and
- participate in a standards-aligned multimedia curriculum that takes them on fun interactive "missions."



For more information about Discovering Flight with the NAHF and "Problem Solving with Wilbur and Orville," visit us online at nationalaviation.org/learning, email info@nationalaviation.org, or call 937-256-0944.

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A Teacher's Story

"Oh! THIS is why measurement is important!" exclaimed a student in Megan Tucker's "Flight Funday" class for fifth graders. The student and their classmates had just made paper airplanes and were about to compete to see whose craft would fly the farthest. "It's very high stakes for a kid to win a paper airplane distance contest," says Mrs. Tucker, a STEAM (science, technology, engineering, arts, and math) specialist in Hillsboro, Virginia. "So all of a sudden, math skills matter to them because they see how those skills will help them in the real world."

The contest Mrs. Tucker's students were having is just one of many lessons in **"Problem Solving with Wilbur and Orville,"** the science, technology, engineering, and math curriculum launched in 2022 by the National Aviation Hall of Fame and ThinkTV, in Dayton, Ohio. The curriculum is part of "Discovering Flight," an initiative to inspire youth to imagine careers in aviation—a field struggling to fill jobs and attract a diverse workforce.

Mrs. Tucker loves "Problem Solving" for many reasons, including the fact that she doesn't have to buy, download, or create anything to supplement it: "This is among the most comprehensive pre-packaged curricula I've taught." She also says that "Problem Solving" engages all of her students, not just those who have shown aptitude for science and math. One of the best airplane engineers in that contest was a student for whom academics don't come as naturally and who has to work to understand content. "That student was going to every table helping the other kids make their planes," she says. "Kids who are used to trying to overcome obstacles and have that growth mindset are the ones who excel in these lessons."

Beyond its ease of use and the way it reaches students, this content appeals to Mrs. Tucker because it's standards-aligned and complements existing lesson plans. "It helps me teach what I already have to teach. It's fantastic."



DIVERSITY DEFICIT

34,000 (8% of workforce)

women employed
as pilots, aviation mechanics

85,500 (19% of workforce)

minorities employed
as pilots, aviation mechanics

Source: Bureau of Labor Statistics, 2023

LABOR SHORTFALL

17,000 (15% of workforce)

pilot shortage by 2032

40,000+

aviation mechanic shortage
by 2027

Source: Oliver Wyman, global
management consultancy