

Breakout Sessions: Topics and Descriptions

Ask Me Anything: Q&A with AOPA Curriculum Teachers [NEW]

You've had a wonderful time at the Symposium and learned a lot, but you still have questions. This session is your chance to get answers from the experts who live the program every day—AOPA Foundation staff and veteran AOPA Foundation Curriculum teachers and administrators.

Aviation 101 Boot Camp [NEW]

Are you new to teaching aviation? This nearly three-hour seminar will help you jump-start your understanding of aviation fundamentals. The session covers essential concepts such as aerodynamics, aircraft components, and systems. You'll also get an introduction to FAA regulations, the air traffic control system, and the National Airspace System (NAS). Additionally, you'll learn about the steps to becoming a pilot and discover free and low-cost resources to further build your aviation knowledge.

Aviation Advanced Boot Camp [NEW]

This three-hour seminar is designed to equip educators with the essential information and resources to begin their journey toward earning an FAA ground instructor certificate. Participants will learn about the different types of ground instructor certificates, eligibility requirements, and the steps involved in certification. The session will also cover available study resources and strategies for preparing for the FAA Knowledge Tests. Please note that this seminar is an introduction; additional preparation will be required to fully prepare for the FAA Ground Instructor Knowledge Tests.

Aviation Competitions: Engaging Students and Promoting Networking [NEW]

Aviation competitions are a great way to engage students, extend learning, help them showcase their aviation knowledge and build critical teamwork and competitive skills. A panel of experts, including AOPA Foundation teachers who have founded competitions and representatives of organizations that sponsor competitions, will share details of state, regional, and national competitions and discuss how you can prepare your students to participate or to build your own competition.

Aviation Maintenance in High School and Beyond

America needs as many new aviation maintenance technicians as new pilots. Learn how to add a maintenance pathway to your high school aviation program and discover career and training opportunities for graduates.

Aviators Wanted: The United States Air Force

Where can the United States Air Force take your students? Air Force representatives will discuss how the

Air Force can help students discover their strengths, learn new skills, earn a degree, and make their aviation careers take flight.

Before You Buy: Simulator Options, Types, and What's Coming with Al and VR?

Flight simulators are a great way to enhance your aviation curriculum and motivate your students, but it can be hard to know where to start. Learn about some of the most popular flight simulators on the market today, emerging technologies, and how you can put them to work in your classroom and bring aviation concepts to life.

Beyond the Classroom: How Do You Convince Your District to Engage in Crewed and Unmanned Flight? [NEW]

Districts cite cost, risk, liability, and regulatory concerns as the most common obstacles to considering options for students flying airplanes and drones. This session will explore the facts and myths surrounding high school flight and drone training and discuss strategies for overcoming concerns and getting students in the air.

Beyond the Flight Deck: Non-Pilot Careers in Aviation [NEW]

The aviation ecosystem needs professionals from all disciplines, including but not limited to maintenance, manufacturing, medical, legal, computer science, engineering, and business. This session will introduce participants to the entire spectrum of aviation-related careers, proving the adage that if you can think of a job, it probably exists in the aviation field.

Deep Dive: Work Through an AOPA Foundation High School Aviation STEM Curriculum Lesson

You've seen it on paper, but what does a high school aviation lesson look like in practice? Find out by observing an entire lesson from start to finish. We'll highlight the balance of rigor and fun in a typical class session and offer tips for pacing, management, and adapting to the realities of your classroom and students.

Drones in the Classroom

Flying drones in class is a lot of fun, but these machines are more tools than toys. Like any tool, the mission should drive which tool to buy. Learn strategies for getting the most from your drones, with a focus on drone selection, maintenance, management, and accessories worth having.

Financing Flight Training [NEW]

Flight training is expensive, but nearly 4,000 AOPA Foundation Curriculum students have started flight training in the past two years. Learn how to subsidize the cost of flight training and put students on a fast track to careers as pilots. This session will explore multiple options: scholarships, CTE funding, grants, financing, and airline cadet flight training programs.

From Great Idea to Day One of Instruction: Guide to Starting a New High School Aviation Program

You want to start an aviation program that prepares students for STEM career success, but how do you turn that idea into reality? AOPA Foundation team members have helped hundreds of programs get off the ground. We'll answer your questions and share strategies for pitching, planning, and launching high school aviation programs.

Hands-On Learning: Curriculum Activities Lab

Engaging activities and problem-based learning are at the core of the AOPA Foundation High School Aviation STEM Curriculum. Try a selection of the fun and informative student activities found in our lessons with experienced teachers who can share their tips for classroom success.

How to Get the Most from the Grade 12 Capstone Experience [NEW]

The grade 12 capstone experience is the ultimate self-directed learning experience and a platform for students to showcase their knowledge and satisfy CTE capstone requirements. However, managing the capstone process at the classroom level can be challenging and requires unique pedagogical and classroom management skills. This session will discuss best practices for capstone project management and tips for guiding students to maximize the capstone experience.

How to Find and Cultivate Financial Support for Your Program: Fundraising and Grants 101 [NEW]

Need money to start or expand your school's aviation program? Many sources, such as federal and state grants and CTE funding, could be available each year. Learn how to tap into these sources to make your aviation program soar!

Implementing Career and Technical Education Programs of Study: A Regulatory and Practical Guide [NEW]

Creating an approved aviation Career and Technical Education program is a great way to formalize career preparation programs and tap into extensive state and Federal CTE funding. But the pathway to program approval can be daunting, and approval processes vary widely by state. This session will introduce the aviation CTE landscape, attempt to de-mystify the process, and discuss how the AOPA Foundation can support schools on their journey to CTE program approval.

Introducing the ACE Middle School Aviation STEM Curriculum [NEW]

The Aerospace Center For Excellence (ACE) on the campus of SUN 'n FUN at the Lakeland International Airport has created a free, world-class aviation curriculum designed explicitly for middle-grade-level students. Designed to excite and educate students about aviation, the course is also constructed to integrate seamlessly into AOPA Foundation High School Aviation STEM Curriculum. Here's your chance to meet the curriculum development team and get a look "under the cowling" of this exciting middle school course offering.

Introducing the AOPA Foundation High School Aviation STEM Curriculum [Sunday & Monday]

Transform your classroom with the AOPA Foundation's High School Aviation STEM Curriculum. In this high-level overview, learn about the breadth, rigor, and fun of the FREE curriculum. Discover the engaging activities, comprehensive teaching materials, and extensive teacher support available to curriculum users, and learn how to get started.

Join the Club! Aviation Interest, Drone, Aircraft Maintenance, and Flying Clubs

Creating a high school aviation club is not only feasible but can also be a great way to drive student engagement and achievement. The size and purpose of aviation clubs can be as diverse as your student population—with the sky truly being the limit! We will provide examples of different types of aviation clubs and steps you can take to get your club off the ground.

Let's Build an Airplane: How to Engage Students in Aircraft Construction [NEW]

Building an airplane is a time-honored tradition in the US and a great way to learn airplane components

and design and important aircraft manufacturing skills. In this session, we'll explore the many options for engaging students in aircraft builds, from volunteering on existing builds at the local airport to building an airplane as part of a formal aircraft manufacturing curriculum.

Medical Update - The Changing Landscape and What It Could Mean for You and Your Students [NEW]

Recent changes to FAA medical certificate policies and procedures, particularly in the areas of mental health, cardiac, and vision, have made becoming a pilot more accessible. Our FAA medical policy experts will discuss the nature of the changes and outline the implications for anyone, including high school students and teachers, who intend to pursue an FAA pilot certification.

Soft Skills for Aviation Students - The NEW Career Preparation Course [NEW]

Here's your chance to delve deep into the AOPA Foundation's newest course offering: The Career Preparation Course (CPC). The one-semester CPC gives students the knowledge and skills they need to succeed in today's aviation workforce. Including "soft" and technical skills will make them competitive in the job market. Learn how to add the grade 12 capstone semester to create a full-year course where students prepare for and document their internships, externships, and apprenticeship experiences.

Something for Everyone: Free and Low-cost PK-12 Resources to Help Your Program Soar

Round out your aviation program with free and low-cost materials and flight opportunities from prestigious aerospace organizations. Discover the wealth of content available to you and your students.

The Aviation Job Outlook: Reading the Tea Leaves [NEW]

Industry reports continue to indicate an unprecedented demand for pilots, mechanics, and other aerospace STEM professionals. At the same time, recent hiring trends in some market segments have not aligned with these indicators. So, what's the real story? Our panel of aviation industry experts will separate fact from fiction and provide a clearer picture of the future of aviation hiring.

The Future of Aviation Technologies: Crewed and Autonomous Aircraft [NEW]

Recent innovations in crewed and autonomous flight are transforming the future of aviation. Peek into the future as we explore emerging technologies such as electric and hydrogen-fueled, supersonic, flight deck automation, industry-specific drones, advanced air mobility, and virtual reality training.

What's New in Drones: Industry-specific Applications, Emerging Technologies, and Job Opportunities [NEW]

The commercial drone industry is experiencing tremendous growth due to unprecedented and accelerating innovation. A team of experts from across the drone industry will dive deep into the technological innovations, new industry-specific applications, and job opportunities beyond the visual line of sight.

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