FUTURE U.

Virtual Site Tours Guide

FUTURE U offers interactive and real-life learning experiences to help students in grades 6–12 embrace their potential, inspire them to make an impact through problem solving, and encourage them to innovate for the future.

About the Video Series

Throughout *Passport to Innovation*, a five-part Video Topic Series, students will explore five of Boeing's key sites around the world. As students travel from the United Arab Emirates to South Korea, they'll learn more about Boeing's diverse, passionate, and highly skilled employees and the different languages, cultures, customs, and traditions found in their places of work. The stand-alone episodes are connected by the theme of global innovation, as each one highlights a unique aspect of Boeing's identity—from promoting sustainability to championing community, from manufacturing to technology, all while embracing cultural inclusivity. As viewers journey from one location to the next, they will pursue answers to questions such as: How do global collaborations lead to innovative advancements? And, how can international workforces connect people around the world?

Classroom Use

Incorporate this Topic Series into your classroom with one or more of the following activities:

- *Global Collaboration Discussion:* After viewing the videos, initiate a class discussion around the work that Boeing leads in regions around the world. Encourage students to cite specific examples from the videos as they discuss how diverse cultural perspectives and expertise can lead to innovative advancements.
- *Future of Aerospace:* After watching the videos, challenge students to imagine the future of aerospace, considering sustainability, global collaboration, and technological advancements. They can create presentations, models, or written summaries showcasing their vision, inspired by Boeing's innovations.
- *Cross-Cultural Brainstorming Session:* After viewing the videos, divide the class into groups in which each student represents a different Boeing site. Challenge groups to brainstorm a new global project that incorporates elements from each site, as they analyze the core strengths and contributions of each location.





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Video Overviews

The following videos can be found online at https://www.boeingfutureu.com/video-topic-series/flight-path

South Korea

The Boeing Korea Engineering & Technology Center (BKETC) is a symbol of Boeing's growth in Korea and its commitment to incorporating the region's cutting-edge technologies. Founded in 2019, BKETC collaborates with strategic global partners to innovate in areas like avionics, data analytics, and smart factory solutions.

After watching this video, consider using one or more of the following discussion questions or activity prompts:

- 1. Discuss which aspect of Boeing's identity the BKETC site highlights. Why is this an important element to global innovation?
- 2. Invite students to <u>research careers</u> such as software and systems engineering, data analytics, and project management. Discuss the role these types of careers play in innovation and increased sustainability within the manufacturing industry.

United Arab Emirates

Boeing's UAE site leads the way in sustainable aviation, as it strives to decarbonize the industry through advanced technologies, fleet renewal, and the production of sustainable fuel derived from desert plants. The site actively explores a wide range of sustainable projects—all of which align with the goal of reducing their carbon footprint and flying with net-zero carbon emissions by 2050.

After watching this video, consider using one or more of the following discussion questions or activity prompts:

- 1. Discuss which aspect of Boeing's identity the UAE site highlights. Why is this an important element to global innovation?
- **2.** Facilitate a jigsaw activity on Boeing's Four Pillars towards decarbonization, giving students the opportunity to draw conclusions and discuss how each pillar contributes to Boeing's net-zero goal.
- **3.** Invite students to research different biofuels and their benefits and tradeoffs. How does Boeing's sustainable fuel compare as an effective solution to the issue of carbon emissions?

India

While Boeing's India site has a significant presence in both defense and commercial sectors, it also plays a key role in local communities. A cornerstone of their commitment is their partnership with Shishu Mandir school, where Boeing volunteers bring STEM concepts to life for underprivileged children. With initiatives ranging from hygiene and healthcare to education, Boeing India embodies the ethos of "being a part of the change you want to see," by giving back to their community.

After watching this video, consider using one or more of the following discussion questions or activity prompts:

1. Discuss which aspect of Boeing's identity the India site highlights. Why is this an important element to global innovation?





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- **2.** Discuss how Boeing's volunteer STEM program can lay the foundation for producing global innovation. What role do community programs play in producing innovative advancements?
- **3.** Give students the opportunity to research local community organizations that are attempting to "be a part of the change," like the volunteers at the Shishu Mandu school. What needs do your students see in their community to prepare the next generation to be global change agents?

United Kingdom

Boeing's UK site specializes in producing essential parts for Boeing 737 airplanes through subtractive manufacturing. It collaborates with the University of Sheffield's Advanced Manufacturing Research Centre as it leverages the Centre's advanced technology and offers an apprenticeship program. This partnership illustrates the UK's deep-rooted history in manufacturing and its commitment to educating the next generation.

After watching this video, consider using one or more of the following discussion questions or activity prompts:

- 1. Discuss which aspect of Boeing's identity the Sheffield site highlights. Why is this an important element to global innovation?
- **2.** Discuss the benefits of apprenticeship programs. How can these programs advance global innovation? Are there projects like Boeing's apprenticeship program available to your students?
- **3.** Invite students to research the different <u>careers</u> involved in manufacturing parts for and building Boeing's 737 airplanes or similar aircraft. Provide opportunities for students to share with the class and highlight the variety of skills and educational experiences required.

Australia

In Australia, the largest Boeing site outside the U.S., the company is committed to supporting its Indigenous employees; showcasing their contributions to projects like the Loyal Wingman and International Space Station, and fostering diversity. It also has the broadest aerospace portfolio in Australia—encompassing everything from advanced manufacturing and defense system development to research, training, and unmanned systems.

After watching this video, consider using one or both of the following discussion questions:

- 1. Discuss which aspect of Boeing's identity the UAE site highlights. Why is this an important element to global innovation?
- **2.** Discuss how Boeing Australia works to boost the education and employment prospects of Indigenous people. Why is this important?



