

Aerospace Engineer Career

Estimated Day(s): 2 - 45 minute classes

Resources:

- Lesson plan
- Materials for activities

TEKS Student Expectation(s):

§127.2. Career and College Exploration.
 (B) explore and describe the CTE career clusters
 (C) identify various career opportunities within one or more career clusters

Learning Goals:

- Explore a new career, aerospace engineering, through experiential learning.
- Describe the new career, and discuss the profession.
- Identify career opportunities related to the new career.

Vocabulary:

career	aspirations	pilot
resume	technical skills	drag
goal setting	soft skills	lift

Essential Understanding(s):

- Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here? What am I meant to do with my life? Will my desired career path provide a self-sufficient wage? What occupations are in the highest demand that align to my values and interests?
- The career development process is unique to every person and evolves throughout one's life.
- Education and career planning is a critical step and is essential to success.

Essential Question(s):

- What does a professional do in this career field?
- What do you think a typical workday would look like for this career?
- What type of skills can you learn in this profession? How can those skills transfer to other career fields?
- What kind of career are you interested in?

5E Instructional Model

Engage Activity

Engage: (5-10 minutes)

Students will complete the [Career Awareness Engage Activity](#) in small groups. Encourage students to turn and talk about the videos and their career fields.

Student Engagement Strategy / Resource:

The Career Advocate will create a KWL chart - What you know, what you want to know, and what you've learned. During the engagement section, the Career Advocate will fill out the first two columns using the questioning technique below.

The Career Advocate will lead a Think & Throw (aka Snowballing) to evaluate student knowledge. Students will answer an engagement question on a piece of paper, crinkle the paper into a ball, and throw it towards the center of the room. The Career Advocate will choose at least 3-5 responses to share with the group.

Question Stems:

- **Engagement Question 1: What do you know about this Career Field?**
- **Engagement Question 2: What do you want to know about this Career Field?**

Explore Activity

Explore: (20-30 Minutes)

Students will explore a hands-on activity in small groups.

Student Engagement Strategy / Resource:

Students will demonstrate their understanding through provided activity sheets.

[Design Your X-Plane](#)

[Teacher Guide](#)

Question Stems:

- **What parts of your design could hinder your prototype?**
- **Why does aircraft design affect pilots?**
- **How do aerospace engineers help the community?**

Explain Activity

Explain: (10-15 Minutes)

Career Advocate will explain the Career using the interactive lesson and video below.

When done with the activity the Career Advocate will complete the KWL chart, 'What did you Learn?' Section.

Student Engagement Strategy / Resource:

Students will use a KWL Chart to summarize their learning.

[Video about Career](#)

[Career Lesson](#)

Question Stems:

- **What are some professional and technical skills for this career?**
- **How likely are you to pursue this career?**

Extend Activity

Extend: (20-30 Minutes)

Students will complete the My 1st Resume (All About Me) activity template. The Career Advocate should discuss the importance of writing a resume, setting career goals, and the difference between technical skills and soft skills.

Reference Websites:

[Soft Skills for Elementary Students](#)

[Tech Skills for Every Student](#)

The Career Advocate should use the posters to discuss Career Fields and Career Opportunities in their communities.

Student Engagement Strategy / Resource:

[My 1st Resume \(All About Me\)](#)

[So You Want to Be Posters](#)

Question Stems:

- **What are some things you have done in school, or outside of school, that you are proud of?**
- **Are you part of any clubs? What are your jobs in that club?**
- **Have you won any awards? Awards can include attendance, grades, and/or achievement certificates.**

Evaluate Activity

Evaluate: (5-10 Minutes)

Have students complete the [Elementary School Career Awareness Survey](#).

<http://tiny.cc/escastudentform>