GRADE 10
UNIT 6
SECTION A
LESSON 3

INTRODUCTION TO FLIGHT
CAREER SKILLS
CAREER PREPARATION

v1.0

YOU CAN FLY
AOPA FOUNDATION
HIGH SCHOOLS

# Building/Revising Your Career Portfolio

🕐 **Session Time:** Two, 50-minute sessions

## DESIRED RESULTS

### ESSENTIAL UNDERSTANDINGS

The aviation industry provides a multitude of pathways to pursue a career as a pilot. (EU 6)

### ESSENTIAL QUESTIONS

1. Why is maintaining a career portfolio an important part of getting the aviation job I want?

### LEARNING GOALS

| Students Will Know | Students Will Be Able To |
|---|---|
| • How to monitor and manage educational progress and career planning activities to successfully navigate a path toward a career in aviation or aerospace. | • *Create* or *revise* your career portfolio. (DOK-L4; DOK-L3) |

## ASSESSMENT EVIDENCE

**Warm-up**
Students brainstorm two important aviation-related experiences they had this year and think about what evidence they can use to document these experiences. They will use these experiences as they develop their career portfolio.

**Formative Assessment**
After preparing a draft of their career portfolio, students will peer review each other's portfolios and provide feedback. Based on this feedback, students revise their career portfolio.

**Summative Assessment**
Students submit their career portfolio to the instructor along with any peer review forms that they have collected. These career portfolios should reflect their current perspective on their career in aviation and will be revised in the future as they advance in their career.

## LESSON PREPARATION

### MATERIALS/RESOURCES

- [Building Your Career Portfolio Presentation](#)
- [Building Your Career Portfolio Student Activity 1](#)

**Portfolio Materials (each student)**

- Three-ring binder
- Tabs (as needed per student based on table of contents)
- Plastic or vinyl sheet protectors

## LESSON SUMMARY

Lesson 1 - Job Application Practice
Lesson 2 - Resume Development
**Lesson 3 - Revising Your Career Portfolio**

In this lesson, students will learn what a career portfolio is, how it can be used to develop their career, and prepare or revise a personalized career portfolio. First, students reflect on their careers so far and brainstorm two important aviation-related experiences they had this year and think about what evidence they can use to document these experiences. They will use these experiences as they develop their career portfolio.

Then, they review what a career portfolio is, why they should create one, and what documents to include in their career portfolio, especially work samples that demonstrate their writing and communication skills. They will complete a project to revise or create a career portfolio. After preparing a draft of their career portfolio, students will peer review each other's portfolios and provide feedback. Based on this feedback, students revise their career portfolio.

Finally, students submit their career portfolio to the instructor along with any peer review forms they have collected.

## BACKGROUND

This end-of-semester project, "Building Your Career Portfolio," produces a personal document that should reflect each student's goals and individual personality. Some students will have already completed a Career Portfolio project last year. For these students, they should revise and update their portfolio so it reflects their current career goals and accomplishments, particularly any work samples they have completed this semester. Other students will need to develop a new Career Portfolio. In both cases, make sure students have adequate time to reflect and think through their career progress and collect writing samples.

For portfolio development to succeed, students must take personal responsibility for developing the portfolio, realizing some work will need to be completed outside the classroom. Students also must realize that the portfolio development will not end when this lesson ends. Their portfolios will be works in progress as they grow in skills and experiences throughout their aviation careers.

Students will complete a range of assessments, timelines, and reflections in this lesson. Each activity is designed to help the students sharpen their thinking about their current skills and future needs as they grow toward their chosen aviation /aerospace careers. Encourage students to take the necessary time to provide thoughtful responses about themselves and as part of the peer review process. Some students may have already completed some of these activities when they built a career portfolio in the past. Encourage these students to revisit their responses and think carefully if those responses still apply. Have them revise their responses based on their current goals. Students may need additional time outside class to collect all items for this project. Make sure they have revised and proofread any work samples before inserting them into their portfolios.

## DIFFERENTIATION

Building a career portfolio is a very personal activity as students make important decisions about career goals that can affect their entire lives. Give students adequate space and time to work at their own pace and reflect on the possibilities available to them. Some students may come into this lesson with a career portfolio that requires very little revision as their goals may not have advanced much since the last time they visited their portfolio. Other students may have not ever developed a portfolio or even considered a career in aviation. Prepare enrichment activities for students who complete their portfolio early (such as extra time on a flight simulator) to give students who need more time adequate space to complete their portfolios.

To support goal setting in this lesson, have students set overall goals, as well as smaller goals as steps to reaching them, to encourage consistent, achievable progress, and help students feel confident in their skills and abilities. When learners create their own goals and make a plan to achieve them, they build their capacity to tackle challenges and be successful.

## LEARNING PLAN

### ENGAGE

**Teacher Material:** Building Your Career Portfolio Presentation

**Slides 1-3:** Introduce the topic and learning objectives of the lesson.

**Slide 4:** Conduct the **Warm-Up**.

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**Warm-Up**

Have students think about what they have achieved so far this year in aviation. They have learned a lot. They should identify at least two important experiences that they had. Examples might include the first time they crashed a quadcopter, a breakthrough they had in understanding the forces of flight, or a conversation they had with a pilot. Then, ask them to think about what documentary evidence they have of these experiences. They will use these when creating or revising their career portfolio.

Give students a few minutes to discuss their experiences and evidence with a partner. Then, ask a few pairs to share what they discussed. Emphasize that the evidence of their experiences will be an important part of completing this lesson's project. In this lesson, they will need go through the activities and projects they completed and collect work samples that best show the abilities related to their chosen career path.

[DOK L3; *cite evidence*]

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### EXPLORE

**Teacher Material:** Building Your Career Portfolio Presentation

**Slide 5:** Introduce students to the concept of a career portfolio. Tell them that a career portfolio is a collection of their accomplishments and goals to help guide them as they advance in their career. This collection of accomplishments should include documentation of their strengths, abilities, and achievements that they can provide to employers in the future. Providing this documentation will show employers that they are qualified for a particular job and will make their job application process easier. The portfolio should also include examples of work that they have completed over their careers. These work samples should demonstrate their writing and communication skills to an employer. Remind

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students that they have written several essays and created several presentations over the course of this semester. These essays and presentations would be best to include in their career portfolios, rather than their data results from hands-on activities or calculations on a worksheet. . Most importantly, because they will acquire more accomplishments and writing samples over time, students need to plan to update the portfolio regularly.

Emphasize to students that the career portfolio is an exercise to help guide their future careers. They should think carefully about their career goals and which documents show progress toward these goals in order to select the best materials to include in their portfolios. In this lesson, students will use the gather important career-related documents from this semester. These will help them consider their future careers and prepare for next steps.

**Slide 6:** A career portfolio will be useful to students throughout all phases of their careers. While assembling the portfolio, the process will help students set goals and help with career planning. Students will also review the career portfolio when preparing for interviews. During interviews, candidates are expected to tell compelling stories about their experiences. The portfolio will be a source of those stories. In addition, the career portfolio will be an organized collection of the evidence of the claims made on a student's resume. During job or internship applications, employers may ask for evidence of the items listed on a student's resume. Having everything in one place will expedite that process.

**Slide 7:** To reflect student's strengths, abilities, and accomplishments, the career portfolio should document important milestones in the student's career. This documentation can include transcripts, test scores, certifications, licenses, awards, and honors. Also, the student should keep track of any "soft" skills that are not easily documented. Soft skills are the traits of a productive worker, such as clear communication, integrity, responsibility, the ability to collaborate, and a strong work ethic.

**Slide 8:** Their career portfolio will be divided into several sections. These sections include how their career has developed, documentation of their employment and educational skills, and any other achievements.

Most importantly, this documentation should include work samples that students have completed, both within this course and outside of school. Review what students have accomplished this semester and which activities they completed that could be included in their portfolios. The following activities from this semester are recommended.

- **Unit 1, Section A, Lesson 1:** At the beginning of this semester, students created an aviation plan with action items and a timeline for achieving their goals. This plan should be included to show evidence that the student has a clear plan and what progress has been made toward their goals.

- **Unit 2, Section B, Lesson 1:** In this lesson, students designed and sketched an airplane for personal use, including a list of materials used in construction, justification for each material, and the implications of the chosen materials. They also presented their designs. Students pursuing a career flying airplanes or in aircraft engineering would most benefit from including their design, justifications, and any materials they created for the presentation in their portfolios; however, all students would benefit from including these materials because they show an understanding of why aircraft are designed with certain materials.

- **Unit 3, Section B, Lesson 1:** Students provided a written explanation for why pilots must consider performance calculations in order to fly safely as part of this lesson on density altitude. This writing sample demonstrates an understanding of the effects of variations in elevation and temperature on aircraft performance, which would show an employer that the student understands the mathematical principles behind safe flight.

- **Unit 4, Section A, Lesson 3:** In this lesson, students wrote an explanation to an audience that is not familiar with aviation how the vertical component of thrust contributes to lift. This writing sample should be included because it shows that the student understands the relationship between the forces of flight.

- **Unit 4, Section B, Lesson 1:** In this lesson, students created a presentation for new pilots about the incorrect theories of lift. This work sample should be included to demonstrate that the student accurately understands lift and the communication skills necessary to explain it to a new student pilot.

- **Unit 5, Section A, Lesson 1:** During this lesson, students completed an activity in which they assessed a variety of design features, chose certain features for a specific mission, and explained the tradeoffs necessary to achieve the

desired result. This group work shows the ability to collaborate as well as an understanding of how aircraft stability is achieved through certain design features. Students pursuing an engineer-related career would benefit from this including their work from this activity.

- **Unit 5, Section A, Lesson 2:** At the end of this lesson, students were presented with a scenario in which they had to teach a group of new aeronautical engineers about the flight controls of a helicopter, its aerodynamic challenges, and how these problems are solved. All students would benefit from including their presentation because it shows an understanding how design challenges are solved. Students pursuing a career flying helicopters or in engineering should definitely include this work sample.

## EXPLAIN

Teacher Material: [Building Your Career Portfolio Presentation](#)
Student Materials: [Building Your Career Portfolio Student Activity 1](#), [Building Your Career Portfolio Student Activity 2](#), [Building Your Career Portfolio Student Activity 3](#), [Building Your Career Portfolio Student Activity 4](#), [Building Your Career Portfolio Student Activity 5](#), [Building Your Career Portfolio Student Activity 6](#)

**Slide 9:** Provide students with the **Building Your Career Portfolio Student Activity 1** which includes overall instructions for the portfolio assignment. This assignment is written from the perspective of a student who is creating a new career portfolio. For students who have completed a career portfolio previously, they should review all components of their portfolio and ensure that all components of their portfolio are up to date. They need to add their elevator pitch and resume (from the previous lessons) to their portfolio, along with 23 additional work samples they created/completed during this semester. (See suggested list above.) They should also revisit their career goals and timeline from their previous portfolio: Are these goals still accurate, or should they be modified to account for new learnings and understandings from this semester? Make sure students reflect on their rationale for each goal that appears in their portfolio.

**Building Your Career Portfolio Student Activity 2** provides a checklist of both required and suggested materials that should be used to construct the career portfolio. Have students begin to collect new items or revising existing items in their portfolio in class. Some students may need to continue working on this project at home. In particular, students who need documentation for "educational skills" and "additional achievements" likely will have to look up information at home, such as grades, transcripts, and photographs or scan other materials such as awards, certifications and licenses. To help prevent accidental loss and ensure that important documents are kept safe, encourage students to provide copies or printouts of all evidentiary materials (rather than originals).

**Slide 10:** Prior to the next session, all students need a complete draft portfolio that they can present to peers for peer assessment. Items required in all student portfolios include:

- Elevator Pitch (from previous lesson)

- Resume (from previous lesson)

- Mission Statement (**Building Your Career Portfolio Student Activity 3**)

- Career Development Goals and Timeline (**Building Your Career Portfolio Student Activity 4**)

- Professional Skills Assessment (**Building Your Career Portfolio Student Activity 5**)

- Student Reflections (**Building Your Career Portfolio Student Activity 6**)

- Additional Coursework Specific to Aviation/Aerospace

- Sample Student Work (all students should have at least 2 pieces from this year)

- Transcripts or Report Cards

Depending on time and students' experience, the OPTIONAL items in the checklist can be included in a student portfolio.

## EXTEND

**Teacher Material:** [Building Your Career Portfolio Presentation](#)
**Student Material:** [Building Your Career Portfolio Student Activity 7](#)

**Slide 11:** During the second session, have students finish assembling their portfolios. Remind them that their portfolios should be creative, professional, and organized. Portfolios can reflect each student's personality and qualities through aspects like choices of background colors, page layout, font, and evidence selected. The portfolio's primary purpose is to serve as a resource during the application and interview processes.

Students should review all of the materials they gathered for their portfolios, revisit the checklist to ensure completeness, and carefully proofread their work.

Then, complete the **Formative Assessment**.

> **Formative Assessment**
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> After students complete their portfolios, have students seek at least two peers to review their products using the **Student Portfolio Peer Review** form in **Building Your Career Portfolio Student Activity 7**. Reviewers should provide thoughtful, constructive feedback.
>
> [DOK L3; *critique*]

## EVALUATE

**Teacher Materials:** [Building Your Career Portfolio Presentation](#), [Building Your Career Portfolio Teaching Aid](#)
**Student Material:** [Building Your Career Portfolio Student Activity 7](#)

**Slide 12:** Portfolio owners should respond to each peer review using the second part of the **Student Portfolio Peer Review** form in **Building Your Career Portfolio Student Activity 7**. Students should change their portfolios as appropriate to address peer feedback. Make sure students understand that they do not need to make every change suggested by their peer reviewers, but they should have clear reasons for rejecting proposed changes.

Have students proofread their portfolios one last time before submitting them.

Then, conduct the **Summative Assessment**.

> **Summative Assessment**
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> At the end of the session, students will submit their revised portfolios along with their **Student Portfolio Peer Review** forms. Evaluate students on the quality and completeness of their portfolios, the thoughtfulness and insightfulness of their responses to assessments, and their responses to and delivery of peer reviews. Use the rubric in **Building Your Career Portfolio Teaching Aid** to assist in the evaluation process.
>
> [DOK-L4; *create*]

## GOING FURTHER

Students can invite parents, school administration, or other notable academic or aviation personnel to a formal presentation or to a "job fair" simulation so each student can discuss their aviation education and career goals.

## STANDARDS ALIGNMENT

### COMMON CORE STATE STANDARDS

- **RST.9-10.2** - Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
- **SL.9-10.1.C** - Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.
- **SL.9-10.1.D** - Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding, and make new connections in light of the evidence and reasoning presented.
- **WHST.9-10.1D** - Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- **WHST.9-10.2** - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
- **WHST.9-10.2A** - Introduce a topic; organize complex ideas, concepts and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
- **WHST.9-10.2C** - Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among the complex ideas and concepts.
- **WHST.9-10.2D** - Use precise language and domain-specific vocabulary to manage the complexity of the topic.
- **WHST.9-10.4** - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **WHST.9-10.5** - Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- **WHST.9-10.6** - Use technology, including the Internet to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link other information and to display information flexibly and dynamically.
- **WHST.9-10.7** - Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **WHST.9-10.8** - Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
- **WHST.9-10.9** - Draw evidence from informational texts to support analysis, reflection, and research.

## REFERENCES

American Psychological Association, Coalition for Psychology in Schools and Education. (2015). Top 20 principles from psychology for preK-12 teaching and learning. Retrieved from http://www.apa.org/ed/schools/cpse/top-twenty-principles.pdf

Dawson, P., & Guare, R. (2009). Smart but scattered: The revolutionary" executive skills" approach to helping kids reach their potential. Guilford Press.