



SAEs: Pathways to Careers

Created: 04/2024 by the National FFA Organization

Description of Lesson: Nick Wulfekuhle has used two different SAEs to continue to expand his knowledge and skills. Encourage your students to do the same with the activities in this lesson.

Student Learning Objectives:

After completing these activities, students will ...

- 1. Examine the components of outdoor recreation SAEs.
- 2. Expand upon ideas for existing SAEs.
- 3. Explain how SAEs contribute to future career goals.

Suggested Grade Level:

Grades 9 and 10 (This lesson is written so instructors can scale up or down based on class needs.)

Suggested Time: 30-40 minutes (*Time requirements may vary based upon student understanding and class schedule.)

Resources/References:

- 1. Video: "Outdoor Recreation SAE | Nick Wulfekuhle," <https://vimeo.com/901202067>

Equipment and Supplies Needed:

- 1. A copy of the "Nature's Playground" worksheet for each student
- 2. A copy of the "SAEs: Pathways to Careers" worksheet for each student
- 3. Internet access to play the video in real time or embed it in a PowerPoint ahead of time

Vocabulary:

- 1. Career Pathways
- 2. Engineer
- 3. Maintenance
- 4. Recreation

Cross-Curricular Connections:

English/Language Arts
• Take existing SAE scenarios and expand on them. • Describe related activities and a career path.

Virtual Instruction Ideas:

Instructor may post the student activity sheets to an LMS. Students may access the SAE video on their own devices to complete.

Student Activity Sheets:

Direct access to student activity sheets without lesson plan or answer key for easy upload to a learning management system or printing for classwork.

<https://ffa.box.com/s/tkro3y46z9evlj23p98cdnbjlzavq7po> (Word)

<https://ffa.box.com/s/5l074fp5x7cvbutk9b3kys8mztrztwwf> (Non-Designed Word)

<https://ffa.box.com/s/8w4bz1bf6ay25rpdbb7w3lrv5wsp9qg> (PDF)

<https://docs.google.com/document/d/1oIjjynTyeBkAAOsIC-2RQHbJUooiNGLPAUp0IBga4ek/copy> (Google)

These Activities Are Aligned to the Following Standards:

AFNR Performance Element

- CS.05: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-C.Vision: Visualize the future and how to get there.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

Common Career Technical Core

- AG5: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways

AFNR Cluster Skills

- CS.05: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

Common Core – Reading: Informational Text

- CCSS.ELA-Literacy.RI.9-10.4: Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper)

Common Core – Writing

- CCSS.ELA-Literacy.W.9-10.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- CCSS.ELA-Literacy.W.9-10.2: Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

AFNR Career Ready Practices

- CRP.02: Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04: Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.06: Demonstrate creativity and innovation. Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization.
- CRP.08: Utilize critical thinking to make sense of problems and persevere in solving them. Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem.

Partnership for 21st Century Skills

- Communication
- Critical Thinking and Problem Solving
- Information, Communications, and Technology Literacy
- Think Creatively

Lesson Plan:

1. **Bell Ringer:** What is a skill that you have that took some time to develop? What did you do to get better at it?
2. **Introduction:** *Have you ever started something brand new to you and then figured out that you liked it and wanted to get better at it? Chances are we all have at least one story about something like this. It is very natural to want to grow and gain more skills once you've gotten started with something. That is exactly the case with the student in the SAE video we're going to watch today. Let's watch.*
3. **Activity 1:** Each student needs a copy of the worksheet "Nature's Playground."
 - a. Play the video "Outdoor Recreation SAE | Nick Wulfekuhle," available at <https://vimeo.com/901202067>. Students will watch the video and answer the questions on the student worksheet as they follow along.
4. **Activity 2:** Each student needs a copy of the worksheet "SAEs: Pathways to Careers."
 - a. Students will review examples of SAEs and come up with a new SAE that builds upon the skills from the first project. Then, they will think of a career that both SAEs could lead to. Finally, they will answer the reflection questions.
5. **Follow-up:** Have students plan their own path, either with their current SAE or one they would like to begin. Have them start with a simple SAE and then add in another one they could grow into and explain how it would help them on the path toward their own career. (You may decide how much detail you would like for them to include in their plans and what format you would like for them to do it in.)
6. **Exit Ticket:** Explain why SAEs are important steppingstones on the way to your future career.

Name: _____

Aligned to the following standards:

CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.CS-M; FFA.CS-N;
CCSS.ELA-RI.9-10.4; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2; CRP.02; CRP.04;
CRP.06; CRP.08

Nature's Playground

Directions:

Answer the questions below as you watch the video "Outdoor Recreation SAE | Nick Wulfekuhle," available at <https://vimeo.com/901202067>.



1. What is Nick's SAE, and which career pathway is it in?

2. What is the "North Country Trail"?

- Where does it start and end?
- How many states does it go through?
- How many miles is the trail?

3. What sorts of tasks does Nick perform taking care of the trail?

-
-
-

4. Where does Nick work for his second SAE?

5. What are some of his daily tasks there?

-
-
-
-

6. What did Nick say is the No. 1 thing he's learned from this SAE?



7. What advice does Nick give to students who are still deciding what their SAE should be?

8. How did Nick's SAE and being an FFA member influence his career plans?

Name: _____

SAEs: Pathways to Careers

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.CS-M;
FFA.CS-N; CCSS.ELA-RI.9-10.4; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2;
CRP.02; CRP.04; CRP.06; CRP.08

Directions:

Nick has multiple SAEs and has grown through each of them, and they have led him to make decisions about his future career path. Nick’s first SAE helped him learn skills that he was able to build upon in his second SAE while continuing with his first project. Both SAEs have led him to his plan of being an agricultural engineer.

Review the SAEs below and come up with a new SAE that builds upon the skills from the first. Then, think of a career that both SAEs could lead to. See the example from Nick’s SAE in the first line.

Initial SAE	Additional SAE	Potential Career Path
Maintaining and caring for the North Country Trail	<i>Employment at Crooked Lane Farms, a local event center, caring for the grounds and setting up for events</i>	<i>Agricultural Engineer</i>
Volunteering at a local pet shelter or humane society		
Starting a small herb garden on the patio of an apartment		
Providing maintenance for school shop equipment		
Starting a weekly blog about agricultural issues on your school's website		
Cutting firewood and selling it to your friends and neighbors		
Providing water testing for local residents' ponds, pools and livestock water sources		

1. Why is it important for your SAE to grow?
2. Using the table below, brainstorm SAEs for yourself. Be sure to include an initial SAE, an additional SAE and a potential career path for yourself for each line.

Initial SAE	Additional SAE	Potential Career Path

Name: _____

Aligned to the following standards:

CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.CS-M; FFA.CS-N;
CCSS.ELA-RI.9-10.4; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2; CRP.02; CRP.04;
CRP.06; CRP.08

KEY: Nature's Playground

Directions:

Answer the questions below as you watch the video "Outdoor Recreation SAE | Nick Wulfekuhle," available at <https://vimeo.com/901202067>.



1. What is Nick's SAE, and which career pathway is it in?

outdoor recreation; Agribusiness Systems pathway

2. What is the "North Country Trail"?

It is a trail that goes across half of the country in the northern states.

a. Where does it start and end?

It starts in North Dakota and ends in Vermont.

b. How many states does it go through?

eight states

c. How many miles is the trail?

4,800 miles

3. What sorts of tasks does Nick perform taking care of the trail?

- Mowing
- Flattening out areas of the trail/potholes
- Trimming weeds and maintaining public areas

4. Where does Nick work for his second SAE?

Crooked Lane Farms, a local event center

5. What are some of his daily tasks there?

- Meeting with the event center owners
- Setting up tables
- Watering the plants
- Trimming trees



6. What did Nick say is the No. 1 thing he's learned from this SAE?

How widespread agriculture is; it showed him real-world examples of the different areas of agriculture.



7. What advice does Nick give to students who are still deciding what their SAE should be?

Ask your agriculture teacher to help you work through any questions you have.

8. How did Nick's SAE and being an FFA member influence his career plans?

He originally thought he wanted to be a mechanical engineer but now thinks he wants to be an agricultural engineer.

Name: _____

KEY: SAEs: Pathways to Careers

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I;
FFA.CS-M; FFA.CS-N; CCSS.ELA-RI.9-10.4; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2; CRP.02; CRP.04; CRP.06; CRP.08

Directions:

Nick has multiple SAEs and has grown through each of them, and they have led him to make decisions about his future career path. Nick's first SAE helped him to learn skills that he was able to build upon in his second SAE while continuing with his first project. Both SAEs have led him to his plan of being an agricultural engineer.

Review the SAEs below and come up with a new SAE that builds upon the skills from the first. Then, think of a career that both SAEs could lead to. See the example from Nick's SAE in the first line.

Initial SAE	Additional SAE	Potential Career Path
Maintaining and caring for the North Country Trail	<i>Employment at Crooked Lane Farms, a local event center, caring for the grounds and setting up for events</i>	<i>Agricultural Engineer</i>
Volunteering at a local pet shelter or humane society	Answers will vary.	Answers will vary.
Starting a small herb garden on the patio of an apartment	Answers will vary.	Answers will vary.
Providing maintenance for school shop equipment	Answers will vary.	Answers will vary.
Starting a weekly blog about agricultural issues on your school's website	Answers will vary.	Answers will vary.
Cutting firewood and selling it to your friends and neighbors	Answers will vary.	Answers will vary.
Providing water testing for local residents' ponds, pools and livestock water sources	Answers will vary.	Answers will vary.

1. Why is it important for your SAE to grow?
2. Using the table below, brainstorm SAEs for yourself. Be sure to include an initial SAE, an additional SAE and a potential career path for yourself for each line.

Initial SAE	Additional SAE	Potential Career Path
Answers will vary.	Answers will vary.	Answers will vary.
Answers will vary.	Answers will vary.	Answers will vary.