

# Leadership Curriculum

## Lesson 5

### Resilience

#### Lesson Overview:

Students will continue the Leadership Curriculum by completing the following steps:

- 1) exploring the skills associated with resilience
- 2) setting goals for developing some of those skills

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# Leadership

## Lesson 5 – Resilience

### Lesson Overview:

In this lesson, students will explore the importance of resilience to achieving success and set goals for developing skills and strengths that will help them persevere in their academic and professional careers.

### Time Frame:

1-2 hours, including time for students to complete independent work

### Core Concepts:

- The ability to persevere in the face of setbacks and obstacles is essential to success.
- Resilience is a quality that can be learned and developed.

### Learning Objectives:

In this lesson students will:

- Understand the concept and importance of resilience.
- Explore the skills and strengths associated with resilience.
- Set goals for developing skills and strengths that will increase their resilience.

### Materials Needed:

- [Resilience Slideshow](#)
- Worksheet 1: Learning from Role Models
- Worksheet 2: Personal Resilience Plan worksheet

### Supplemental Videos:

- [Resilience](#)

**Step 1: Introduce the Lesson**

Explain to students that in this brief lesson they will explore the concept of resilience—what it is, why it's important, and how they can develop it.

**Step 2: Activate Background Knowledge**

Ask whether anyone knows the meaning of the word *resilience*. Invite students to take out scrap paper and jot down a definition of the word. Circulate as students write and choose a few good definitions to write on the board and discuss as a class. (If no one has written an accurate definition, ask a volunteer to look up *resilience* in the dictionary.)

**Step 3: Present the Resilience Slideshow**

[Slide 1]

Resilience and Why it is Important

"I have not failed. I've just found 10,000 ways that won't work." ~ Thomas A. Edison

Call it grit, getting back up on the horse, or the ability to bounce back from failure or adversity. Resilience is often a key ingredient for those who are successful in reaching their goals, finding career satisfaction, and in life in general.

In STEM careers, resilience can be especially important. A resilient scientist will learn from "failed" experiments, develop and test new hypotheses, and will slowly, but surely, inch closer to a better understanding of the phenomena s/he studies. A resilient engineer or software developer will learn from first, second, and third prototypes to create a successful version on the fourth (or 10,000<sup>th</sup>) time. Science and engineering, the mathematics that bely them, and the technology that comes from them all have developed, and will continue to advance, thanks to people who are not afraid to take risks, learn from failure, and try again.

[Slide 2]

Skills for Cultivating Resilience

Psychologists have identified certain qualities or skills that appear to contribute to a person's resiliency. As you look over this list, notice that many of these qualities contribute to an overall resilience mindset. These are not innate qualities that are just for a few "naturally resilient" people. These skills, indeed the entire mindset, can be cultivated by anyone.

- A positive attitude (a sense of humor helps, too!)
- Optimism
- Ability to regulate emotions

- Perception: the ability to see failure as a form of helpful feedback from which to learn
- Perspective: the ability to see adversity as an opportunity to learn and grow
- Problem-solving skills
- A focus on the things that are within an individual's locus of control rather than those things that are outside of their control.
- Willingness to take action
- Relationship building – maintaining friends and relationships that can provide support
- A willingness to accept help
- Stress-management skills – finding ways to let go of stress

Pause to Ask: *What other skills do you think could contribute to resiliency?* List students' responses on the board or add good responses to the slide.

[Slide 3]

### Learning from Role Models

What should you do when you encounter a barrier or setback in a school- or work-related setting? How can you rise to leadership roles and create opportunities to use your leadership skills? Once again, learning from the experiences of STEM role models is a great way to begin.

Think back to the role models that you researched and the local STEM leader that you interviewed. What resilience skills did they demonstrate? What barriers or challenges did they have to overcome? How did they do it?

Pause to Think-Pair-Share: Ask partners to identify a time that they or their interview subjects demonstrated resilience. Which resilience skills came into play? Then invite the whole class to discuss a few example anecdotes.

### Step 4: Students Complete the Learning from Role Models Activity (30-60 minutes)

Distribute the Learning from Role Models worksheet. Remind students that in Lessons 1–3 of this module, they explored the lives and work of three teen STEM leaders, a prominent STEM professional of their choice, and a STEM role model from the community. Encourage students to review what they learned, exploring how these leaders have overcome obstacles, developed resilience, and helped others to do the same.

Ask students to complete the worksheet by listing the skills and strategies these leaders used to persevere, and noting examples of experiences that helped them overcome obstacles and develop resilience.

Encourage students to conduct additional research as needed, and if possible, to contact their interview subjects with relevant follow-up questions.

**Step 5: Students Create a Personal Resilience Plan**  
(30 minutes)

Distribute the Personal Resilience Plan worksheet. Ask students to use the worksheet to create personal plans for developing resilience and overcoming barriers in their academic and future professional careers.

Post the following list and explain that students should complete each step as they create their plans:

- Identify the resilience skills and strategies that you already have and use.
- Identify two skills and/or strategies you hope to develop or strengthen.
- Write a goal for each of the two skills that you hope to develop or strengthen.
- Identify at least one way that you can help and support peers in your current STEM classes and activities.

**Step 6: Meet with Students**

When they have completed the Role Models and Personal Resilience Plan worksheets, set aside time to meet briefly with each student. Use these points to help guide discussion:

- What feedback or questions do you have about students' worksheets?
- What challenges or barriers have you experienced in your education and/or career? How did you face them, what resilience skills did you use, and what were the outcomes? Share one or two relevant experiences with students.
- Be sure to address any concerns or questions students have.

## RESOURCES

Share these resources to help students find out more about experts' and leaders ideas and strategies for handling setbacks and overcoming barriers to success.

- [Developing Resilience](#)
- [5 Ways to Boost Your Resilience at Work](#)
- [The 5 Best Ways to Build Resiliency](#)
- [Growth Mindset](#)
- [5 Tips to Succeed in a Mostly Male Industry](#)
- [We Can STEM the Gender Gap](#)
- [3 Tips for Women to Succeed in Tech](#)
- [Failure: the Secret to Success](#) (videos)