EVERFI

Endeavor: STEM Career Exploration



FREE DIGITAL LESSONS

Inspire and Excite With STEM Activities

The U.S. Department of Education states that "If we want a nation where our future leaders, neighbors, and workers can understand and solve some of the complex challenges of today and tomorrow, and to meet the demands of the dynamic and evolving workforce, building students' skills, **content knowledge, and literacy in STEM fields is essential**." ¹From the data-driven decisions of the business world to the automation of manufacturing to the predictive algorithms that mold to our digital footprint, STEM is all around us. That's why it's important to build the first fully STEM literate generation, and empower these learners with the knowledge they need to form and fuel their future career endeavors.

Endeavor: STEM Career Exploration is a digital platform where learners engage with content that reinforces key STEM skills and mindsets while enjoying the freedom and motivation of self-exploration and an interactive learning experience. Source¹

THE LEARNING EXPERIENCE

- EVERFI's self-guided, interactive lessons help students develop simple, actionable strategies.
- Real-world scenarios prime students for long-term behavioral change using problem-solving and self-reflection activities.
- Detailed score reports and offline extension activities help teachers maximize their impact across all students.



Total Lessons: 7 digital lessons (approximately 20-25 minutes each) with optional accompanying offline resources available

Curriculum Fit: Technology, Digital Media, Research, Health, Computer Science

Standards Alignment: Common Career Technical Core (CCTC), Next Generation Science Standards (NGSS), Common Core State Standards (CCSS)



Endeavor: STEM Career and Exploration for Middle School



"I liked that students were able to see not only the design process but also how technology enhances our everyday lives."

-Teacher, Texas

LESSON SCOPE AND SEQUENCE

Lesson 1: Designing the Ultimate Prototype Students will be able to...

- Solve a virtual engineering problem from a set of constraints
- Explain the basic process for additive 3D printing
- Identify the steps of the design process and explain how it is utilized by designers and engineers

Lesson 2: Connecting the Home to the Future

Students will be able to ...

- Define the Internet of Things and describe its potential impact on day-to-day lives
- Identify appropriate visual data formats (scatter plot, line graph, bar graph, etc.) for specific data sets
- Understand the steps necessary to create a secure password

Lesson 3: Building the Perfect Playlist

Students will be able to ...

- Explain how recommendation engines utilize different types of data to predict user preferences
- Distinguish between content and collaborative filtering
- Identify how data might be utilized for recommendation engines

Lesson 4: Medical Machines

Students will be able to ...

- Explain the process by which a physician gathers and uses data to treat a patient
- Understand how aspects of a physical exam contribute to accurate assessment of patient's condition
- Identify three types of imaging, how they work, and their purposes

Lesson 5: Data Champions

Students will be able to ...

- Define dependent and independent variables
- Using historical data, predict sales based on data
- Observe patterns and associations in bivariate data to evaluate player performance

Lesson 6: Game Development Studio

Students will be able to ...

- Demonstrate the effective use of software development tools to develop software applications.
- Program a computer application using the appropriate programming language.

Lesson 7: Transportation Central

Students will be able to ...

- Understand STEM concepts though simulated experience of modern manufacturing with an focus on transportation, distribution & logistics
- Relate basic STEM concepts to manufacturing and determine what careers in that field may be of interest

LESSON ACTIVITIES:

Practicing and Using Different STEM Skills



Identifying the Steps to Build a Game



Analyzing Data



Ready to Start? Register now at EVERFI.COM/Create

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EVERFI, Inc. empowers educators to bring real-world learning into the classroom and equip students with the skills they need for success now and in the future. 3 of 5 U.S. school districts use EVERFI's digital resources to teach topics like financial literacy, social-emotional learning, career readiness, and prevention education.

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