

DataSetGo

Career Exploration

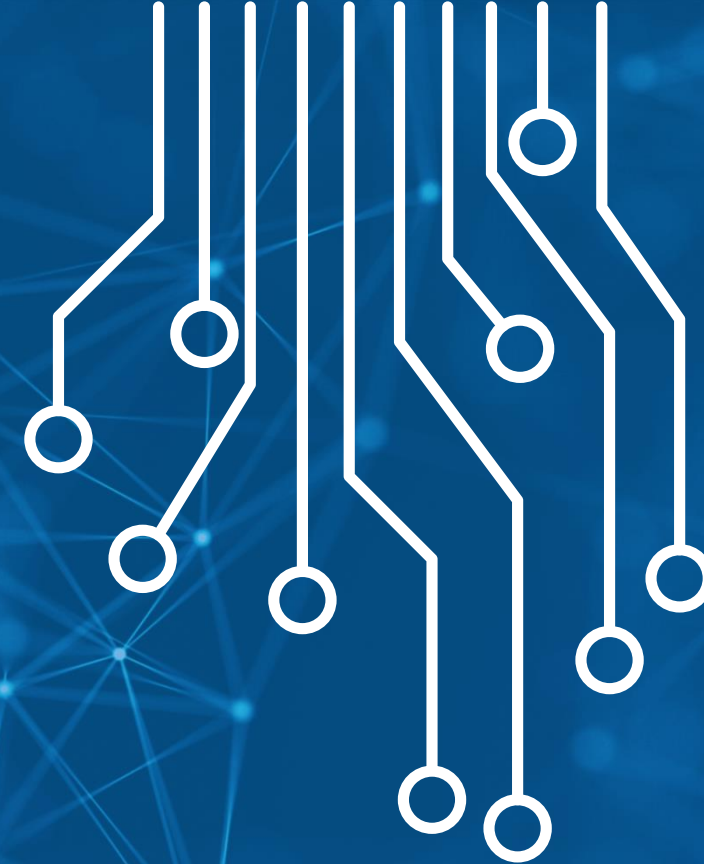
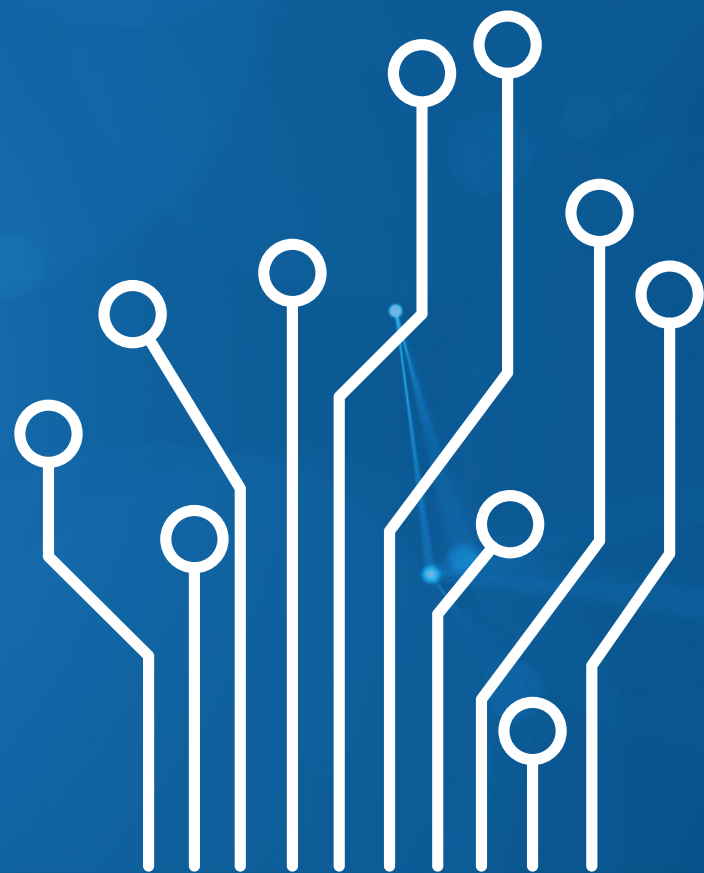




Table Of Contents

Overview & Introduction 01

04 Virtual Event Run of Show

Teacher Resources 02

05 Lesson Plan & Student-Facing Slides

Timeline & Preparation 03

06 Project Rubric

About DataSetGo

DataSetGo is a first-of-its-kind, **free** digital education program designed to empower youth with the knowledge of data science fundamentals and its value in the job market. Scholars will learn how to apply data science concepts in the finance industry and to build their personal financial literacy and wellness. This program consists of two digital courses designed for high school students, *Data Science Foundations* and *Data Science Exploration: Financial Wellness*.

Principal® Foundation launched this program in 2021 in collaboration with EVERFI, the leading Impact-as-a-Service™ education innovator, and reached over 5,500 students during the 2021-22 school year. Since 2010, they have provided almost 75,000+ K-12 students with foundational financial education.



Teacher Resources

Data Science Foundations Course	These three free digital courses introduce students to what data science is and why it matters. Through interactive exercises, students explore foundational data science knowledge, including collecting, visualizing, and understanding data. Data Science Foundations is the 101-course with two extension opportunities in the form of a Financial Wellness and Banking Fraud simulation. At-A-Glance: - Grade Level: 9-12 - Languages: English & Spanish - Length: 3 digital courses with a total of 7 lessons, 15-30 minutes each - Curriculum Fit: Economics, Math, Statistics, and College & Career Prep - Standards: Common Core Standards in Statistics & Probability, International Standards for Technology in Education (ISTE) Standards	<u>Accessible here</u>
Scholarship Opportunity <i>Confirmed class winner if selected for local contest</i>	Give your students the opportunity to win one of ten \$5,000 scholarships made possible by Principal Foundation! If your class is selected to participate, a scholarship will be reserved for your student applicants, ensuring a much smaller scholarship “pool” and securing an academic gift for one of your students. Students are eligible to apply with a 300-500 word essay after completing one module of the Data Science Foundation course.	<u>Accessible here</u>
Data Visualization: Lesson Plan	After completing the Data Science Foundation course, administer the “Data Visualization” activity to your students in groups using a provided lesson plan and rubric. Students will have the opportunity to present their projects on the virtual webinar for data science professionals.	<i>Download to add</i>
Data Science Virtual Webinar	Students will have the opportunity to hear from a data scientist in a variety of industries such as sports, music, or social media, engage in discussion with a career panel of data science professionals, and ask questions.	<i>Register to add</i>
Additional Resources	Teacher will have access to the recorded webinar with an optional Kahoot quiz.	<i>Emailed to registrants</i>

Timeline & Preparation

Week 1	Introduce: Have students complete modules 1 – 4 of Data Science Foundations.
Week 2	Discuss: As a group or with partners, have students consider the following questions: - How would you define data science in your own words? - How does data science relate to everyday life? - Can you think of an example of data science in you daily routine? (Example: Do Instagram or social media likes impact what you post?) - If you were to become a data scientist, which industry would you most prefer to work in? Why?
Week 2	Write: Have students apply to the <u><i>Distinguished Scholar Award</i></u> for a chance to win \$5,000 in educational funding by writing a 300-500 word essay in response to the following question: What was the most memorable or surprising thing that you learned about data science and how will you use this new knowledge in your career, to advance your personal financial goals, or in other parts of your life?
Week 3	Skill Application: In groups, have students complete the “data visualization” project using data provided below or live-time data gathered in class among peers.
Week 4	Career Exploration: Have students attend or watch the DataSetGo Virtual Webinar featuring data scientist professionals in a variety of industries.

Virtual Event

Run of Show (Overview), 60-Minute Run Time

Discover Data Science	What is Data Science?	Start / End Time
	Introductions of participants and general overview of the diverse field of data science.	
Demystifying Data Science	A Conversation with a Guest Data Scientist	Start / End Time
	Hear directly from a data scientist in a variety of industries such as the sports, television, science, energy, or more.	
Data Demonstrations & Dialogue	Student Present Data Visualization Project	Start / End Time
	Introduce panel of Principal Financial Group who will offer feedback and discuss student projects. Students will present their data visualization representations and describe their design choices, processes, and any insights gathered throughout creation.	
“Distinguished Data Scientist” Scholarship Delivery	Scholarship Delivery and Winner Celebration	Start / End Time
	Principal Foundation awards an essay-based scholarship winner a \$5,000 academic scholarship and celebrates them in live time.	

Post Course Completion Discussion Questions



How would you define data science in your own words?

How does data science relate to everyday life?

Can you think of an example of data science in your daily routine? (*Example: Do Instagram or social media likes impact what you post?*)

If you were to become a data scientist, which industry would you most prefer to work in? Why?

Scholarship

Have students apply to the *Distinguished Scholar Award* for a chance to win \$5,000 in educational funding by writing a 300-500 word essay in response to the following question:

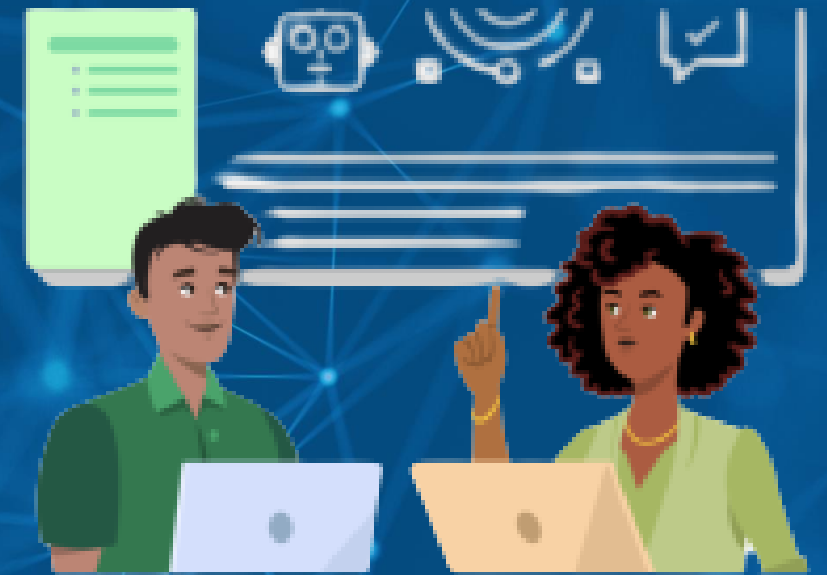
What was the most memorable or surprising thing that you learned about data science and how will you use this new knowledge in your career, to advance your personal financial goals, or in other parts of your life?

In your browser, type in principal.everfi.com

LEARN

01

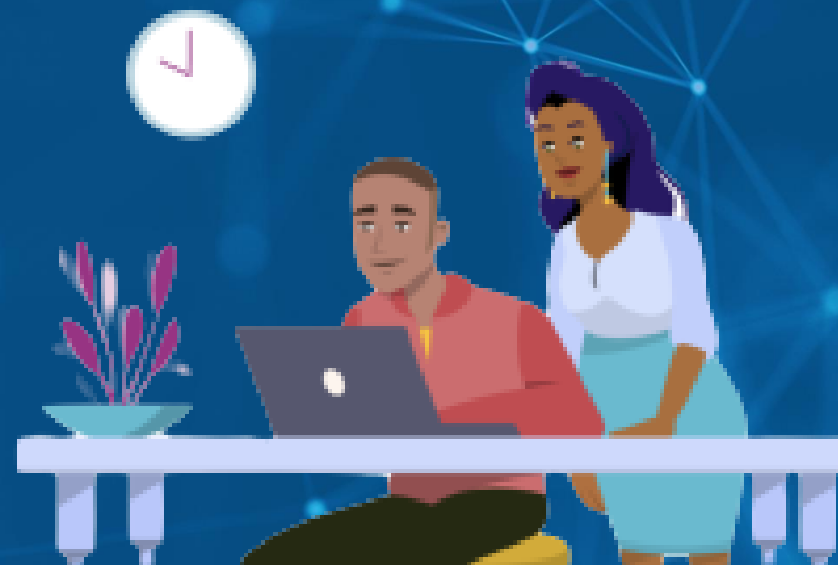
Complete at least one *Data Science Foundations* or *Data Science Exploration: Financial Wellness* module



WRITE

02

Write a 300-500 word essay in response to this question:



What was the most memorable or surprising thing that you learned about data science and how will you use this new knowledge in your career, to advance your personal financial goals, or in other parts of your life?

SUBMIT

03

Complete the entry form below and click submit.



Essay Writing Tips

Make it personal! Add your own experiences and stories to help you stand out.

Address the course by stating the course, what you learned from the course, and why it resonated with you.

Use an outline to organize your thoughts and goals before starting the essay.

Follow a few writing tips: 1) **utilize transitional phrases** like additionally, furthermore, etc., 2) **avoid repetition**, and 3) try to be as **clear and concise** as possible.

Always proofread for grammar to help with effective story telling.



Time to Work Through Data Yourself

01

Pre-Discussion

- What do you wonder?

02

Data Collection

- What information do we have?

03

Data Analysis

- What notices can we make?

04

Data Visualization

- How can we show this clearly?

Pre-Discussion

Can you recall a time when you visited someone else in another city? Maybe you visited another family member, or a friend.

What was different about that city compared to yours? Was it larger? Smaller?

Was it easier or harder to walk around? Did people live in apartments? Houses?

Would you have liked to live there? What do you think people from that city would have thought about living in your city?

We will use a data set that includes information about different US cities, including: where they are located, how their population is changing, and what access they offer to parks, healthy food, breathable air, and other factors.

Group Discussion

Data Questions

(What do you wonder?)

- What are the city types in each of the regions?
- What do you notice about the population in the cities in each region?
- What city types are found in each region?
- Does park access vary for city types?
- Does the walkability score vary for city types?
- Do center cities tend to have lower walkability scores than suburban cities?

Data Collection

(What can we answer?)

- What is the average unemployment rate for each city type?
- What is the average physical inactivity score for each city type?
- Which region or city type has higher home ownership?
- Is there a relationship between life expectancy and walkability, air pollution, or limited access to healthy food?
- How does the average travel time to work vary for different races?
- How does the average unemployment rate vary for different races?

Project Data On Board

Data Collection

(What can we NOT answer?)

- What is causing certain population trends for each city type?
- Why do some city types have higher or lower park access, walkability score, or air pollution?
- What other factors could contribute to higher cardiovascular deaths for certain cities?
- What makes a city have a higher walkability score or lower air pollution?
- Do you think people consistently characterize their race in the data?
- The unemployment rate only captures people who are not working and are looking for work; it does not include people who have decided not to look for work at all. How might this affect your interpretation of unemployment rate data?

Data Analysis

Time to analyze the data! Follow these steps:

1. Sort, filter, and aggregate the data.
2. Report & note how you altered the data.
3. Compare states above and below the national average.

Students join small groups

Data Visualization

DISCUSS WITH YOUR GROUP:

- How would you tell this data story?
- What would the title be?
- What information would you include?
- What type of graph would you choose to represent this data?

Project Rubric on Board

Project Rubric

Data Visualization Rubric

	Accuracy of Data	Visual Communication of Topic	Insightfulness	Presentation of Material	<i>Teacher Input</i>
4	Data is accurate and complete.	Information is presented clearly and effectively with relevance to the topic.	Deep insights with strong analysis.	Clear and engaging delivery.	Description
3	Minor inaccuracies, mostly accurate.	Information is clear, but could be improved, with limited relevance to the topic.	Some meaningful insights and analysis.	Adequate delivery.	Description
2	Some inaccuracies or missing data.	Information is somewhat unclear and irrelevant to the topic.	Limited insights with weak analysis.	Weak delivery.	Description
1	Data is inaccurate or missing entirely.	Information is unclear and irrelevant to the topic.	No insights drawn from data.	Poor delivery.	Description

Total: X/20