



ADOPTING AN ENTREPRENEURIAL MINDSET – USING CENSUS DATA FOR BUSINESS TEACHER VERSION

Subject Level:

High School Social Studies

Grade Level:

9-10

Approx. Time Required:

90 minutes

Learning Objectives:

- Students will be able to explore and understand how to use data access tools — such as the Census Business Builder — to gather information.
- Students will be able to use census data to support their ideas and answers.

Activity Description

Students will use the Census Business Builder: Small Business Edition data access tool to gather and analyze information that entrepreneurs may consider when opening a business. This introductory activity assumes that students have limited experience using data access tools.

Suggested Grade Level:
9-10

Approximate Time Required:
90 minutes

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Topics:

- Data collection
- Entrepreneurship

Skills Taught:

- Comparing data
 - Using online databases to find information
 - Understanding how data are used
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Materials Required

- The student version of this activity, 4 pages
- Teacher computer with Internet access and a projector to display web sites

A computer with Internet access for each student is optional.

Activity Item

This activity uses the following online tool:

- Census Business Builder: Small Business Edition
cbb.census.gov/sbe

For more information about the Census Business Builder and similar resources, read "[Teachers' Guide to Data Access Tools for Students.](#)"

For more information to help you introduce your students to the Census Bureau, read "[Census Bureau 101 for Students.](#)" This information sheet can be printed and passed out to your students as well.

Standards Addressed

See chart below. For more information, read

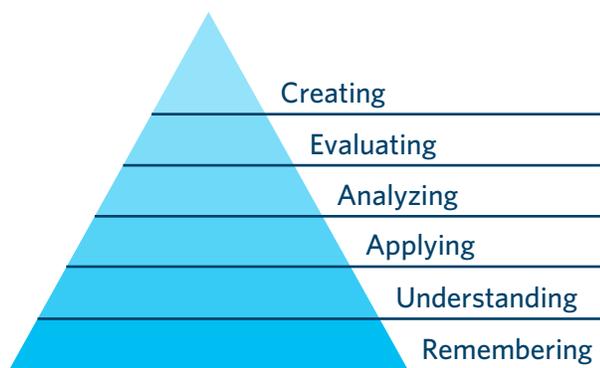
"[Overview of Education Standards and Guidelines Addressed in Statistics in Schools Activities.](#)"

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Standard	Strand	Cluster
CCSS.ELA-LITERACY.RH.9-10.7 Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	RH 9-10 - History/Social Studies	Integration of Knowledge and Ideas

Bloom's Taxonomy

Students will **evaluate** data to support a position.



Teacher Notes

Before the Activity

Students must understand the following key term:

- **Median household income** – the middle income when the incomes distribution of households is divided into two equal parts: one-half below and one-half above (The incomes are first ordered; then we get the middle income, which is the median.)

Teachers should ask questions to get students thinking about unsuccessful and successful businesses they have seen in the city or town where the school is located, with the aim of getting students to understand that demographics, population, and other factors play a role in a business' survival:

- What are some businesses that used to exist in this city/town? Why do you think they went out of business?
- How much of a business' survival depends on the quality of the business, and how much depends on other factors? What might some of those other factors be? Why might a high-quality business with great service and great products be forced to close its doors?
- What are some businesses that this city/town does not have but should? Why do you think that type of business might do well in this city/town?
- Compare these unsuccessful businesses to successful businesses. Do you think a business that is always packed and busy can still be unsuccessful?

Teachers will ask students to spend five minutes completing a Quickwrite — a literacy strategy that encourages students to reflect as part of a learning experience — during which they will imagine owning a specific type of business (e.g., clothing store, restaurant) and write freely about what they think they should consider before deciding where to open their business. Teachers should then have students share their answers with the class and ask questions like:

- What would be the age of most of your customers?
- How much money would your customers need to make for your business to be successful?
- Will your business be affected by the levels of education of your potential customers?
- How many other similar businesses are in the area?
- Do businesses like the one you want to open make a lot of money?
- Do employees at similar businesses make much money?

For more information about Census Business Builder data access tools, teachers should go here (www.census.gov/data/data-tools/cbb.html).

Teachers should take about 10 minutes to show students five short tutorial videos for the *Census Business Builder: Small Business Edition data access tool*:

- [Overview](#)
- [Navigation](#)
- [Filter Feature](#)
- [Profile Report](#)
- [Tips and Tricks](#)

Because the activity uses data from the New York area (including parts of New Jersey), teachers should ask questions to get students thinking about what they already know about that area (e.g., Have you ever visited or lived in New York?) If students are not familiar with the New York area, teachers may need to show them this area on a map.

During the Activity

Teachers will complete this activity with students, modeling the steps on the screen and helping students understand the meanings of the categories in part 2. (Their definitions appear when you hover your cursor over each map variable in the tool.) If students have access to computers, they should follow along using the tool.

After the Activity

Teachers should ask students to consider how the Census Business Builder data access tool might be useful for prospective entrepreneurs who wish to open a virtual business. For example, teachers could ask: How could this tool have been useful for someone like Amazon founder Jeff Bezos, whose customer base is online and whose business doesn't require a physical location?

Students may complete an exit slip with their answers, which should look something like this: "Although Bezos' business is online, he still needs to build a warehouse for Amazon products. He could use the Census Business Builder data access tool to determine the best location for that warehouse. He could also use census data to help him understand where he should focus his advertisements to reach the right customers."

Extension Ideas

- Teachers could ask students to complete the activity with a business type and location of their choice. Teachers should keep in mind that the variables students will examine might differ depending on their selection. For example, if a student chooses to analyze “Daycare” information (in the “Personal Services” section), that student should examine the data for “Other Businesses Like Mine” on both “Nonemployers” and “Employers” to distinguish between home-based day cares and chain day cares like KinderCare.
- Teachers could ask students to use the tool to examine data for their businesses beyond the county level, perhaps at the ZIP code or census tract (neighborhood) levels. (At the ZIP code and tract levels, only “My Potential Customers” data are available in the tool.)
- Teachers could have students write a case study of interesting, lesser-known entrepreneurs, directing students to read an article or book about an entrepreneur such as Tom Kartsois, who founded Shinola Detroit (www.shinola.com). An article about Kartsois’ luxury store opening up in a struggling Detroit is available here (www.businessoffashion.com/articles/global-currents/made-in-america-from-detroits-urban-decay-shinola-rises). Teachers could ask students to address specific questions in their case study, such as “Do data from the Census Business Builder indicate that Shinola Detroit would succeed?” or “What obstacles did Kartsois face, and how did he work around them?”

Student Activity

Click [here](#) to download a printable version for students.

Activity Item

This activity uses the following online tool:

- Census Business Builder: Small Business Edition
cbb.census.gov/sbe

Student Learning Objectives

- I will be able to explore and understand how to use data access tools — such as the Census Business Builder — to gather information.
- I will be able to use census data to support my ideas and answers.

Part 1 - Conduct Research

Imagine you own gas stations across the country and want to open another — but you don't know where. In this activity, you will use data from the Census Business Builder: Small Business Edition to determine whether New York County, New York, or a neighboring county is the best area to open your gas station.

1. After navigating to the online tool, click on the blue “retail” button.
2. From the buttons that appear, select “gas stations.”
3. In the next box, to the right, type “New York County, New York” and select this option when it appears in the drop-down menu. Then click “Go to Map.”

Let's focus on data about your potential customers. Where indicated in the following steps, record your answers in the graphic organizer at the end of this activity.

4. Keeping all variables as they appear for now (i.e., the “My Potential Customers” primary category, “Demographic Characteristics (2014)” secondary category, and “Total population” map variables), click on the blue button that says “Select Variable.” The total population will appear in the lower-left corner of the screen. Record the total population for New York County in your graphic organizer. Now click on five neighboring counties on the map, recording the population data for each one (which appear in the same box in the lower-left corner).
5. Select New York County on the map again; then go back to the “Select Map Variable” tab at the top of the screen. Change the secondary category to “Socioeconomic Characteristics (2014).” For the map variable, select “Median household income (\$).” Now click “Select Variable.” The median household income for New York County will appear in the lower-left corner. Record this number in your graphic organizer.

Now we are going to look at some other gas stations in the area.

6. Go back to the “Select Map Variable” tab at the top of the screen. Change the primary category to “Other Businesses Like Mine.” For the secondary category, select “Employers.” For the map variable, select “Employer establishments.” Now click “Select Variable.” Record the number of employer establishments in New York County in your graphic organizer.
7. Go back to “Other Businesses Like Mine.” For the secondary category, select “Key Ratios,” and for the map variable, select “Average revenue per employer establishment (\$1,000).” Now click “Select Variable.” Note that the number is expressed in thousands of dollars, so an amount like \$1,500, for example, is really \$1,500,000 (or \$1.5 million). Record the average revenue per employer establishment for New York County (in the format it appears in the tool) in your graphic organizer.
8. Go back to “Other Businesses Like Mine.” For the secondary category, select “Key Ratios,” and for the map variable, select “Average payroll per employee (of employer establishments) (\$1,000).” Now click “Select Variable.” As you did in step 7, note that the number here is also expressed in thousands of dollars. Record the average payroll value (in the format it appears in the tool) in your graphic organizer.
9. In the bottom left corner of the screen, click “Create Report” and review the data. This is an example of a research report that you could show to a potential investor in your gas station.

Part 2 - Analyze Data

Answer the two questions for each category in your graphic organizer. Answering these questions will help you decide whether New York County, New York, is the best area for your new gas station.

Part 3 - Make a Decision

1. Based on the data, is New York County, New York, the best area for your new gas station? Explain your answer using information from each category of your graphic organizer. If you find that New York County is not the best area for your new gas station, write which county you think would be better and why.

Student answers will vary but could include the following:

New York County could have some benefits for my gas station — the population is high and my potential customers have a high median household income. The county also has the fewest number of similar businesses compared with the other counties I examined; this could mean that there is an opportunity to open another gas station with less competition and that there could be a need for more gas stations in the county. However, similar businesses in New York County make the least amount of money in comparison. Looking at other counties, I see that businesses like mine in Hudson County, New Jersey, make the most. Similar businesses in Hudson County also pay their employees the least, which means my gas station could make more of a profit if I opened it in that county. (In comparison, businesses like mine in New York County pay their employees the most.)

I think Hudson County would be better than New York County for my gas station. In Hudson County, compared with all other counties I examined, similar businesses pay their employees the least but at the same time make the most money.

2. The Census Business Builder is a great tool for entrepreneurs conducting preliminary research about their businesses, but it does not include all the information that a person may want to consider before making a major business decision. What do you still need to know before you make a decision about where to open your gas station?

Student answers will vary but could include:

- **The cost of living in each county**
- **The number of people in each county who often use public transportation**
- **How other gas stations in each county perform**

3. How can an entrepreneur use a tool like the Census Business Builder?

Student answers will vary but could include:

- **To research a potential area for a new business**
- **To validate the entrepreneur's selection of an area for a business**
- **To incorporate the data into a report for a potential investor**

Graphic Organizer

	My Potential Customers		Other Businesses Like Mine		
	Total population	Median household income	Employer establishments	Average revenue per employer establishment*	Average payroll per employee*
New York County, NY	1,618,398	\$71,656	81	\$2,213 (1,000)	\$30.82 (1,000)
Kings County, NY	2,570,801	\$46,958	231	\$4,418 (1,000)	\$23.28 (1,000)
Bronx County, NY	1,413,566	\$34,284	119	\$3,975 (1,000)	\$21.89 (1,000)
Queens County, NY	2,280,602	\$57,210	260	\$3,781 (1,000)	\$21.925 (1,000)
Hudson County, NJ	654,878	\$58,973	106	\$6,606 (1,000)	\$17.892 (1,000)
Bergen County, NJ	920,456	\$83,686	310	\$5,563 (1,000)	\$21.227 (1,000)
What does this category mean?	Total population is the number of people who live in a particular area.	Median household income is the middle household income out of all households in a particular area.	The number of employer establishments is how many businesses there are in a particular area.	The ratio of the revenue and the number of employer establishments in the industry.	The ratio of the total annual payroll of establishments in the industry and the number of employers in the industry.
What will this category tell you as an entrepreneur?	It will help me determine which county has the most potential customers for my gas station.	It gives me an idea of how many of my potential customers in each county can afford to purchase gas and other products at my gas station.	It tells me which counties likely have the most gas stations, which means more competition with my gas station. It also suggests which counties might need more gas stations, if they don't have many.	It helps me understand about how much money I could expect to make with my gas station in each county.	It tells me how much I might have to pay the employees of my gas station in each county to be competitive with other employers.

*Write the number in the format it appears in the tool, but remember that it is expressed in thousands of dollars (so the amount is really larger than it appears).