Megacities: A Study of São Paulo and Rio de Janeiro

Grade Level: 9-12
Subject: Geography, World History
Key Words: megacities, urban design
Time Frame: 1-2 days
Designed by: Sharlyn Scott
School District: Desert Vista High School

Summary: Using São Paulo and Rio de Janeiro as case studies to research and compare/contrast, students will gain a greater understanding of basic urban geography and the history and geography of Brazil.

Background Information:
Megacities are urban conglomerations with populations exceeding 10 million; sources vary on exactly how many global cities (and their urban sprawl) can be categorized as such. According to the United Nations, there were an estimated 37 cities with more than 10 million people in 2015, compared to just 14 in 1995, and they estimate there will be 41 (maybe as many as 43) megacities by 2030. Two of the three megacities in Latin America are in Brazil: São Paulo and Rio de Janeiro.

For more information about megacities, São Paulo, and Rio de Janeiro, see:
  • Catalytic Communities “Favela Facts”: http://catcomm.org/favela-facts/
  • "São Paulo: South America’s Megacity": https://www.youtube.com/watch?v=sNEeY_gXFBe

Student Objectives
Students will be able to
  • Consider the needs of human populations within a city (their own as an introduction) and what challenges/successes city planners and leaders, as well as the population of that city, experience.
  • Research characteristics of the physical geography and human geography of São Paulo and Rio de Janeiro in order to create together a clearer picture and understanding of these two megacities in Brazil, and the successes/challenges both have experienced.

Essential/Driving Questions
  • What are cities and how did they develop?
  • What is a megacity and how did they develop?
  • What considerations must be made in a city? In a megacity?
  • What are the unique physical and human characteristics and challenges of two specific megacities in Brazil: São Paulo and Rio de Janeiro?

Vocabulary words:
  • Megacity
  • Urban
• Suburban

Materials:
• Introductory Power Point on the Basic History of Cities
• Introductory Reading on Megacities
• Group Research Assignment on Characteristics of São Paulo and Rio de Janeiro
Learning Plan

Activity 1: Introduction to Cities
Introduction on the development of cities in human history.

Objectives:
• Learn about how cities and megacities developed in history
• Think critically about and research the different conditions and challenges that arise in megacities
• Synthesize and present research findings to the class

Procedure:
1. Begin first by showing and discussing the Introductory Power Point on the Basic History of Cities
2. Have students brainstorm ideas (as a class or in small groups) regarding what considerations have to be made by urban planners and city leaders for all cities, and what challenges urban dwellers face.
   • Examples of considerations and challenges include housing, healthcare, employment, food, water, sewage, garbage, poverty, crime, and physical geography including living space available, environmental hazards, and climate.
3. Time allowing, the class will need access to laptops or a computer lab for an introductory activity to researching São Paulo and Rio de Janeiro. Have your students research basic elements of the city in which they live (the larger city if it is a suburb or smaller town, and then students can consider the ideas of suburbs and other hinterlands). Depending on time available, and how rigorous the course is in which you are doing this, you may select from the topics below and have students research several individually or divide topics among different groups and have them report the information to the class in a short Power Point presentation or verbally.
   • Ideas for research topics related to their own applicable city:
     a) Basic physical geography and climate (any critical environmental issues facing your city?)
     b) Summary of history of city’s establishment
     c) Population Size
     d) Demographics (Race/Ethnicity, Socio-Economic divisions)
     e) Main industries (money-making activities)
     f) Successes and Challenges in Housing (types, cost, availability)
     g) Successes and Challenges in Infrastructure (Transportation and Communication networks)
     h) Success and Challenges in Clean Drinkable Water Supply and Sewage/ Waste Water Disposal
     i) Successes and Challenges in Garbage Disposal and Recycling
     j) Success and Challenges in Electrical Power Production
     k) Other topics: education, healthcare, housing, income disparity, racial/ethnic issues, crime & policing, and poverty and homelessness
4. Give students a copy of introductory reading “What is a Megacity?” and read aloud. Brainstorm and discuss unique challenges of a population over ten million. If you did the introductory activity, have them brainstorm and briefly compare/contrast a megacity with their own researched city.
   • If possible, show short videos about Megacities:
a) Megacities from A+:
   i. https://www.youtube.com/watch?v=_jnMivEZ8qc
b) “Urbanization and the Rise of the Megacity” from The Economist:
   i. https://www.youtube.com/watch?v=JDS_BqDeZ4k

5. Students are now going to examine two megacities of Latin America, both in Brazil - São Paulo and Rio de Janeiro. Using practical research guidelines students will (depending on how much time and the depth/breadth you choose for this assignment) be divided into groups and given topic(s) related to either São Paulo and Rio de Janeiro.

6. Using the research collected on those topics from reliable sources, students will produce a short power point wherein they have outlined that information into a short presentation for the class. (See list of topics under #3).

**Assessment:** Based on notes students took from each other’s presentations, students can write a short compare/contrast essay wherein they identify three characteristics / challenges /successes of both cities. For higher level critical thinking, have students identify a specific challenge for both cities (or have them choose one) and identify possible solution based on research and evidence, as well as a specific success for both cities (or just one).