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The Population is Aging!
A Policy Simulation focusing on the Country of Japan

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Overview:
The population is aging! Help students develop critical thinking and research skills as they become policy analysts in this classroom simulation examining the aging population in Japan.

Rationale:
Japan's data are used for several reasons. First, the presenter had an opportunity to travel to Japan and received the data first-hand during several presentations about the myriad of issues soon facing this nation. Second, the United States has a similar issue with the pending retirement of the "Baby Boomer" generation. The situation in the United States is slightly different, however, as it took the U.S. 69 years to increase the population of 65-year-olds from 7% to 14% (1944-2013), Japan has reached that milestone in just 26 years (1970-1996). This necessitates quick action from governmental officials in Japan. How the nation responds may indirectly impact the United States as a close ally in Asia.

Suggested Time Frame:
3-4 class sessions

Vocabulary:

Population density: the number of people living in one unit of area (i.e., one square mile)
Prefectures: similar to counties, although Japan has a national, centralized government

Materials:

Maps:
National Geographic, MapMaker Interactive. Available at https://mapmaker.nationalgeographic.org/

Students may also need a map of Japan with prefectures outlined to color in population projections.

Demographic charts and graphs:
Various data charts were acquired while in Japan, but the sources are as follows:

Nakagawa, M. (2017). "Regional and national dimensions of population aging in Japan." Tokyo: National
    Institute of Population and Social Security Research.
      Web address: http://www.ipss.go.jp/index-e.asp
Brochure, "National Institute of Population and Social Security Research" Tokyo: National Institute of
    Population and Social Security Research
      Web address: http://www.ipss.go.jp/index-e.asp
Dobbs, R., Manyika, J., Woetzel, J. and Desvaux, G. (2015). *The future of Japan: Reigniting productivity and*
    growth. Tokyo: McKinsey Global Institute
    (page 105)

Readings:

Otake, T. (2017, April 10). "Japan's population projected to plunge to 88 million by 2065." *The Japan Times*
Accessed October 18, 2018 from https://www.japantimes.co.jp/news/2017/04/10/national/social-issues/japans-population-projected-plunge-88-million-2065/#.W85agmJKiu4

Population projections in Japanese Prefectures
http://www.ipss.go.jp/webj-ad/WebJournal.files/population/2011_Vol.9/Web%20Journal_Vol.9_01.pdf

Selected readings from:
The Aging Population (Margaret Haerens, Ed.). Detroit: Greenhaven Press. 2014.
ISBN: 978-0-7377-6944-9 (obtained from www.socialstudies.com)

Suggested selections:
- Robert D. Hormats, "An Aging Population Can Drive Economic Growth," pp. 38-42 (5 pages)
- Abdul El-Sayed, "An Aging Population is Bankrupting Medicare," pp. 64-68 (5 pages)
- Michael Hodin, "An Aging Population Will Save Medicare," pp. 69-72 (4 pages)
- Elizabeth Rogers, "Age Discrimination in the Workplace is a Problem," pp. 86-92 (7 pages)
- Diana Furchtgott-Roth, "Age Discrimination in the Workplace is Not a Problem," pp. 93-101 (9 pages)

Suggested Student Activity Sequence

Day 1:
- Students will visit National Geographic's MapMaker Interactive page
(https://mapmaker.nationalgeographic.org/)
    - Search for Japan
    - Click "Add Layer" and add Population Density
    - Make the make transparent to help answer part one of the student response sheet.

Day 2:
- Students will answer Parts One and Two of the Student Response sheet.
-Describe Japan physically and geographically. What physical features do you notice?
-What kinds of challenges do you think Japan's geography presents?
-What areas of the country have the highest levels of population density?
-Color the map of Japan to the same levels of population density as on the map.
- Students will then choose 10 Prefectures to focus on for this part of the study. On the map labeled "Japan with its divisions" students highlight the names and color them.
- Students then use a provided document (IPSS document listed above in the resources section) with population estimates to chart the numbers for the years 2020, 2025, 2030, and 2035.
- Students use these population numbers to color corresponding maps of the projections for 2025, 2030, and 2035. Students create a legend for the maps as well.

Days 3-4:
- Students then discuss a variety of documents about aging (assigned prior to this class to be read as homework) to begin researching their potential solutions to the aging crisis.
- Students work with their groups to complete the policy memos, having chosen, researched and described two policy solutions and selected one choice for recommendation.
- Time permitting, students present their work to the class for feedback.

Assessment:
Students will be observed throughout the lessons to ensure on-task behavior and to clarify any questions groups may have. Formal assessment will be completed using the student memos and completed work documents. Participation points may be awarded for completed assignments, with the memo formally assessed.

Opportunities for Modifications and Extensions:
These lessons may be modified given the time available for instruction. This project may be shortened to exclude the policy memo component, or may be extended to include additional countries, such as Italy, Greece, or Switzerland.

Teacher Background:

Along with an aging population, Japan faces future issues because of a declining birthrate. Utilizing real data from Japan's National Institute of Population and Social Security Research (Tokyo, Japan) students will work in small groups to analyze the statistics. After reviewing data analysis techniques and trend analysis, students are led to conclude that Japan's current population is aging rapidly (for example: By 2035, roughly 65% of one-person households will be headed by a person over the age of 75). On top of this, the national birthrate is declining (2017 saw the first year that less than 1 million babies were born, coinciding with the overall drop in population of 403,000, roughly the size of the city of Minneapolis). After situating this issue, students assume the role of policy leaders. They research challenges and policy solutions. For example, students might consider changes in tax policy, employment policy, healthcare, or immigration.

Japan is known for its incredibly rigid work ethic which often made it difficult for women to participate. While the country saw a rapid rise in the participation of women in the workforce, families have chosen to delay or forego having children, thus contributing to the decline in the birth rate. Cultural issues are also incredibly important to consider. The Japanese take very serious their responsibility to care for the elderly. As more individuals are required to continue participation in the workplace, the ability to care for aging parents places a strain on families and traditions.

Students will take these aspects into consideration and choose one to focus as a recommendation. Within the context of the simulation, they choose one factor to focus: immigration, workforce, or culture, for instance. The teacher can provide information for the students to draw from; or, students may conduct additional research to present a viable policy solution for leaders to consider. The overall end of the simulation is to produce a policy memo. The format for the memo is included in the presentation, but requires students to summarize key details and to present a researched viable choice to potentially solve an issue the Japanese are facing.

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The Aging Population of Japan
Name _____
Group Members _____

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Part One: Visit https://mapmaker.nationalgeographic.org/ and search for a map of Japan.

- Describe Japan physically and geographically. What physical features do you notice?

- What kinds of challenges do you think Japan's geography presents?

Part Two: Click "Add Layer" to add a layer of "Population Density." Click the "Legend" tab to understand exact numbers.

- What areas of the country have the highest levels of population density?

- Color the map of Japan to the same levels of population density as on the map.

Part Three: Choose 10 Prefectures that you will focus on for this study. Highlight the names and color them in on your map labeled "Japan with its divisions." Use the population document on Moodle to complete the following chart for the prefectures you have selected.

Prefecture	Predicted Population			
	2020	2025	2030	2035

Part Four: Take these population estimates and color the corresponding maps in your packet. Start with creating a legend!!

Part Five: So, what does this mean for Japan? What challenges might an aging population present? After reflecting on the task, complete the following activities.

Choose three of the following readings (found on Moodle) and write 2-3 facts that support the author's argument.

- Robert D. Hormats, "An Aging Population Can Drive Economic Growth," pp. 38-42 (5 pages)
- Abdul El-Sayed, "An Aging Population is Bankrupting Medicare," pp. 64-68 (5 pages)
- Michael Hodin, "An Aging Population Will Save Medicare," pp. 69-72 (4 pages)
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Reading	2-3 Facts that support the author's arguments
#1	
#2	
#3	

Part Six: Begin writing the policy memo. Use the resources provided for you to create your group's work. Use the following to help with the writing.

Summary of the Policy Problem: Write a 2-3 sentence summary of the trends that you noticed from the graphs.

Summary of Policy Options: Give a brief discussion of the two options you feel Japan may want to consider to solve this problem. Describe the solution, tell the costs (or give estimates), and explain the benefits.

Policy Recommendation: Explain the option you believe Japan should choose. State your reasons as to why this particular option will work best.

<div align="center">**POLICY MEMO**</div>

To: Masataka Nakagawa
             National Institute of Population and Social Security Research, Tokyo
From: (write all names of the group's members)
Date: November 2, 2018
Re: Aging Population in Japan

Summary of the Policy Problem:
         (In this space, write a 2-3 sentence summary of the trends that you noticed from the graphs.)

Summary of Policy Options:
         (In this space, give a <u>brief</u> discussion of the two options you feel Japan may want to consider to solve this problem. Describe the solution, tell the costs (or give estimates), and explain the benefits. You may need your computers for a bit of research here!)

Policy Recommendation:
         (In this space, explain the option you believe Japan should choose. State your reasons as to why this particular option will work best.)