WHAT'S SO BAD ABOUT A WHITE HAIRED GERMANY?

Objectives:

*Students will interpret population pyramids and make predictions about societies based on that information.

*Students will identify causes and challenges of an ageing society.

*Student will recognize that there are always trade-offs to government policy

*Students will evaluate possible solutions to cultural, political, and economic challenges, and make recommendations based on those evaluations.

Age and discipline:

High School Economics

Time Required:

One or two class periods

Materials:

Internet access

One copy of Student Handout 1 for every student

Procedures:

- 1. Divide students into small groups (2-3) and have them access the following web site: (http://www.nationmaster.com/country/gm/Age_distribution). Have them complete Section A on student handout 1.
- 2. Discuss Section A
- 3. Have students work in their small groups to answer the questions in Section B.
- $4. \ \ Discuss the students' ideas about the causes and challenges of the population trends.$
- 5. After the full class discussion of causes and challenges, allow the small groups to brainstorm their own "solutions" to Germany's demographic problems and complete Section C.
- 6. Conduct a full class discussion and allow the students to evaluate each other's possible solutions.
- 7. Individual students should then draft the policy memo in order demonstrate a grasp of the problems faced by Germany, causes of these challenges, and possible solutions and their costs.

Assessment:

Have the individual students create a formal memo to the Chancellor of Germany describing the population trend, giving 3 policy recommendations along with a description of challenges those recommendations will cause to elected officials, and a concluding with a paragraph urging the Chancellor to act now before the problem gets worse.

WHAT'S SO BAD ABOUT A WHITE HAIRED GERMANY? STUDENT HANDOUT 1

Population Pyramids are bar graphs that demonstrate the distribution of a group of people by age and gender. Access the following website http://www.nationmaster.com/country/gm/Age_distribution and answer the questions in SECTION A.

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| Look at population pyramid for Germany in the year 2010. |
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| 1. How many female Germans will be between the ages of 10 and 14? |
| 2. How many male Germans will be between the ages of 30-34? |
| 3. What age groups are the largest in the German population? |
| 4. Compare the male pyramid to the female pyramid. What differences do you find? Why do you think these differences exist? |
| 5. Describe the overall shape the pyramids. |
| Now look at the pyramid for Germany in 2050. |
| 6. How many female Germans are predicted between 10-14? |
| 7. How many males between 30-34? |
| 8. Describe the overall shape of the population pyramids for the year 2050. |
| 9. Describe three differences between the population of Germany in 2010 and Germany in 2050? |

| SECTION | | -1 | -:1-4: | | |
|-------------|-----------------|------------------|---------------|--------|--|
| 10. Identii | ry three possit | ole causes of th | ns population | trena. | |
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11. Identify three challenges (cultural, economic, political, etc...) that Germany may face because of these population changes.

SECTION C

12. Identify 3 solutions to these challenges. Discuss the benefits (cultural, economic, political, etc...) and costs of each of your solutions.

| Solution | Benefits of solution | Costs of the solution |
|----------|----------------------|-----------------------|
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SECTION D

You work for the German government and have been charged with making recommendations to the Chancellor about the upcoming demographic challenge. You will write a 5 paragraph memo to the Chancellor

- A. describing the demographic challenges ahead for the German People;
- B. recommending the three "best" solutions to take on the problems, as well as describing possible problems these recommendations may cause;
- C. and ending with a final paragraph urging the Chancellor to enact reforms as soon as possible.

WHAT'S SO BAD ABOUT A WHITE HAIRED GERMANY? ANSWER SHEET

Population Pyramids are bar graphs that demonstrate the distribution of a group of people by age and gender. Access the following website http://www.nationmaster.com/country/gm/Age distribution and answer the questions in SECTION A.

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| Look at popu | ılation pyran | id for Germa | any in the | year 2010. |
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|--------------|---------------|--------------|------------|------------|

- 1. How many female Germans will be between the ages of 10 and 14? (2 million)
- 2. How many male Germans will be between the ages of 30-34? *(2.5 million)*
- 3. What age groups are the largest in the German population?

(45-49)

4. Compare the male pyramid to the female pyramid. What differences do you find? Why do you think these differences exist?

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(possible answers—many more 80+ women than men)
(Wars in 20<sup>th</sup> century killed many men, life expectancy of women is longer than men)
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5. Describe the overall shape the pyramids.

(age cohorts get larger until peak 35-39 to 55-59, then begins to decline)

Now look at the pyramid for Germany in 2050.

6. How many female Germans are predicted between 10-14?

(1.5 million)

7. How many males between 30-34?

(2 million)

8. Describe the overall shape of the population pyramids for the year 2050.

(age cohorts are much more equal until 80+)

9. Describe three differences between the population of Germany in 2010 and Germany in 2050?

(Smaller total population-German population in 2009 is 82 million; in 2050 it is estimated to be less than 75 million)

(more equal distribution of age cohorts, larger share of population will be elderly)

SECTION B

10. Identify three possible causes of this population trend.

Answers will vary in discussion but be sure to stress some

- --Women are having fewer children—need 2.1 children per woman, now German women average 1.3
- --People living longer-- 2009 life expectancy 79, 2050—84
- --immigration
- 11. Identify three challenges (cultural, economic, political, etc...) that Germany may face because of these population changes.

Answers will vary but stress some of the problems

- --less workers to produce goods and services—risk of the economy shrinking
- --older workers tend to be less productive
- --larger % of population on state pensions will fewer workers are contributing
- --businesses will have to offer different products that aging population will desire
- --older people vote in greater numbers than others. Politicians will have to adjust

SECTION C

- 12. Identify 3 solutions to these challenges. Discuss the benefits (cultural, economic, political, etc...) and costs of each of your solutions.

 Answers will vary, but stress than no decision is free
 - --Immigration—immigrants bring new culture that natives may not like
 - --Raise retirement age—people will have to work longer than people before them
 - --Government incentives to have more kids—expensive and mixed results in world
 - --Borrow money to fund pensions—increases national debt and possibly raises interest rates
 - --Reduce pension benefits—older voters tend to punish politicians who reduce their benefits
 - --Devote a larger share of government budget to pensions—less resources for education, defense, infrastructure, etc
 - --Raise taxes on those still working—reduces incentives to work when Germany needs as many workers as possible

SECTION D

You work for the German government and have been charged with making recommendations to the Chancellor about the upcoming demographic challenge. You will write a 5 paragraph memo to the Chancellor

- A. describing the demographic challenges ahead for the German People;
- B. recommending the three "best" solutions to take on the problems, as well as describing possible problems these recommendations may cause;
- C. and ending with a final paragraph urging the Chancellor to enact reforms as soon as possible.