

**DOCUMENT RESUME**

**ED 096 142**

**SS 018 044**

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**TITLE** U.S. Population Growth.  
**INSTITUTION** Delaware State Dept. of Public Instruction, Dover.;  
Del Mod System, Dover, Del.  
**SPONS AGENCY** National Science Foundation, Washington, D.C.  
**REPORT NO** NSF-GW-6703  
**PUB DATE** 30 Jun 73  
**NOTE** 8p.

**EDRS PRICE** MF-\$0.75 HC-\$1.50 PLUS POSTAGE  
**DESCRIPTORS** \*Autoinstructional Programs; \*Environmental  
Education; Instruction; \*Instructional Materials;  
\*Middle Schools; \*Population Growth; Science  
Education; Teacher Developed Materials; Units of  
Study (Subject Fields)  
**IDENTIFIERS** \*Del Mod System

**ABSTRACT**

This autoinstructional lesson deals with the study of man and his environment. No previous experience or learning in this field is required. Emphasis is placed on analysis of population growth and the impact population growth and trends have on natural resource depletion. The behavioral objectives (five) are listed. The study guide for the student, which requires about 30 minutes of time, includes both script and worksheet. A bibliography of three references is given. (EB)

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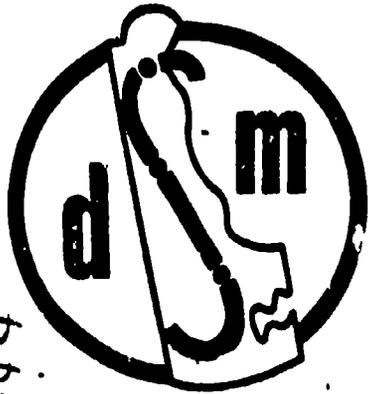
U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
1200 K STREET, N.W., WASHINGTON, D.C. 20004  
OFFICE OF EDUCATIONAL INFORMATION  
SERVICES  
U.S. GOVERNMENT PRINTING OFFICE: 1973

# U. S. POPULATION GROWTH

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June 30, 1973



Printed and disseminated through the office of the Del Mod  
Component Coordinator for the State Department of Public  
Instruction, John G. Townsend Building, Dover, Delaware 19901

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Preparation of this monograph was supported by  
the National Science Foundation Grant No. G.W.  
6703 to the Del Mod System, P. O. Box 192, Dover,  
Delaware 19901

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## **TEACHER'S GUIDE**

**PACKET NUMBER** 312.8  
DU

**SUBJECT** Man and Environment

**TITLE** U. S. Population Growth

**PREREQUISITES** None

**BEHAVIORAL OBJECTIVES**

1. To state the present size of the U. S. population and predict future populations based upon 2 and 3 child families.
2. To analyze the growth of the U. S. population between 1900 and 1970 in terms of:  
  
birth rate  
death rate  
immigration  
growth rate
3. To analyze U. S. trends in population distribution.
4. To assess the impact of population and affluence on natural resource depletion.
5. To analyze the economic impact of zero population growth.

**EQUIPMENT** Slide projector-8 slides  
Cassette player - tape  
Study guide for student  
Teacher's guide, script

**TIME** 30 minutes

**SPACE REQUIRED** Carrel or table

## **BIBLIOGRAPHY**

**The Commission on Population Growth and the American Future 1972, Population and the American Future, The New American Library, Inc.**

**Interchange, Population Education Newsletter, Vol. 1, No. 1.**

**National Wildlife Federation, 1971 EQ Index**

**SCRIPT**  
**U. S. POPULATION GROWTH**

**MUSIC**

"One of the most serious challenges to human destiny in the last third of this century will be the growth of population." This statement was made by President Nixon in setting forth the challenge of stabilizing the population. In this lesson we will examine the population of the United States to determine (1) its present size, (2) its growth rate, (3) where people are living, (4) the demands of a growing population on the environment, and (5) projections for the future.

Perhaps you have heard it said that the country's population is growing rapidly. You may have thought that this means that people are having more children these days than in the past. A close look at SLIDE #1 will help us analyze this situation. Place SLIDE #1 in the viewer and answer questions 1, 2, and 3 on your study guide. Turn the cassette player off while you do this. (PAUSE)

In answering questions 1-3 you have seen that people are having fewer children today than in the past and that the birth rate is declining. It seems that if present trends continue we are not in danger of becoming overwhelmed by people, but we do face some critical problems. Most of you listening to this tape are about 15 or 16 years old and you were probably born in 1957 or 1958. In 2 or 3 years you will be 18 and eligible to vote. After leaving high school you will seek a job or continue your education. It is likely that many of you will marry and start a family of your own within a few years after leaving high school. By the time you are about 42 years old, the 21st century will have arrived and your children will be having children. By the year 2015 you will be approaching retirement age. Many questions about your future need to be looked at now. Where will you live - in a city, suburb, or in the country? How many children are you likely to have? Will the number of children you and other people have influence the quality of your life? Place SLIDE #2 in the viewer. (PAUSE) This slide shows the differences in population growth depending on whether families have an average of 2 children or 3 children. Turn off the cassette player while you answer questions 4, 5, and 6. (PAUSE)

If families average 2 children in the future, growth rates will slow and population will reach 300 million by the year 2015.

**SCRIPT**  
**U. S. POPULATION GROWTH**  
**PAGE #2**

At the 3 child rate, the population will reach about 400 million in the year 2015. You can see that just a difference of 1 child per family can increase the population by an extra 100 million persons by the year 2015. Recently the National Commission on Population Growth and America's Future compared the outlook for 2 versus 3 child families. Now place SLIDE #3 in the viewer. (PAUSE) The Commission found that per person income may be as much as 15% higher with the slower 2 child average. The Commission feels that the slower growth rate will not cause a business slump. Sales on everything is still expected to grow. The slower growth rate should also ease the burden of finding a job. So, despite the fears of many economists that the country's businesses would suffer, it seems that a slower growth rate will really help the economy.

Now let us take a look at where the growing population is likely to live. Place SLIDE #4 in the viewer and answer questions 7 and 8. Turn the cassette player off while you do this. You can see that there has been a trend in movement from the farm to the city and recently a trend from the city to the suburb. But where are you likely to live in the future? It is hard to say for sure, but there are perhaps four alternatives:

1. the country
2. small cities
3. suburbs
4. new towns and planned communities

In our own area it is interesting to note that the area between Glasgow and Bear, Delaware is likely to increase in population 10 times by 1985. This makes this area one of the major growth areas in the United States. A lot of good planning will have to be done by local and state planners to insure quality living for future residents of this area.

Place SLIDE #5 in the viewer. (PAUSE) Anyone who has packed a tent and headed off to a national park only to find it packed solid with other campers knows how population growth affects our recreational space. Owing to population growth and increased demands the number of visitors to our national parks has more than doubled in the past ten years.

Place SLIDE #6 in the viewer. (PAUSE) Not only recreational

## **SCRIPT**

### **U. S. POPULATION GROWTH**

#### **PAGE #3**

space is becoming scarce, but other resources such as lumber, oil, water, and minerals are diminishing. This slide shows that the U.S. with only 6% of the world's population consumes 30% of the world's energy resources. We often fail to realize that our high standard of living requires a large portion of the world's resource riches. Considering the tremendous amount of resources necessary to maintain our high standard of living we can soon realize that most of the world's population can never hope to enjoy our living standard. There just aren't enough resources to go around.

Place SLIDE #7 in the viewer. (PAUSE) These Indian housewives are preparing meals in the same way their ancestors did centuries ago. This type of living standard is typical for much of the world's population. Very little of the world's natural resources such as coal, oil, and other minerals are used up by people living like this.

Place SLIDE #8 in the viewer. (PAUSE) An American housewife is surrounded by gadgets that consume a great amount of the world's resources. The American housewife consumes over 55 times as much energy as the Indian housewife.

It seems that Americans will continue to demand a higher standard of living even though the world's supply of resources is dwindling and the population is increasing. The Population Commission concluded that there is no good reason for continued population growth. In fact, solutions to the world's problems will be made more difficult by further population growth. This lesson will be completed when you have answered question 9 on your study guide. (MUSIC)

#4

**STUDY GUIDE**  
**U. S. POPULATION GROWTH**

Name \_\_\_\_\_

1. How many more people were added to the U. S. between 1900 and 1970? \_\_\_\_\_
2. How many years longer are people living today than in 1900? \_\_\_\_\_
3. What happened between 1900 and 1970 to the
  - a. number of births per 1000 population? \_\_\_\_\_
  - b. number of deaths? \_\_\_\_\_
  - c. number of immigrants? \_\_\_\_\_
  - d. annual growth? \_\_\_\_\_
  - e. growth rate? \_\_\_\_\_
4. If families average 2 children, what will the population be by the year 2015? \_\_\_\_\_
5. If families average 3 children, what will the population be by the year 2015? \_\_\_\_\_
6. What difference does a 2 child versus a 3 child family make by the year 2015? \_\_\_\_\_
7. Between 1940 and 1970 what has happened to the
  - a. number of people living on farms? \_\_\_\_\_
  - b. number of people living in cities? \_\_\_\_\_
  - c. number of people living in suburbs? \_\_\_\_\_
8. Based on this trend, where are you likely to live?  
\_\_\_\_\_  
\_\_\_\_\_
9. List several reasons why a stabilized (no growth) population would be a good thing.  
\_\_\_\_\_  
\_\_\_\_\_  
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