Population Characteristics

EDUCATIONAL ATTAINMENT: MARCH 1966 AND 1965

In March 1966, 50 percent of all Americans who were 25 years old and over had completed at least 4 years of high school, and 10 percent had completed 4 years of college or more. Approximately 20 years ago, in 1947, the comparable figures were 33 percent and 5 percent. The educational level of the entire population continues to rise as may be seen from table A. At the same time the proportion of persons who have completed less than 5 years of elementary schooling continues to decline. In March 1966 such persons comprised 6 to 7 percent of the population 25 and over, as compared with 11 percent in 1947. These findings are based on national sample statistics collected by the Bureau of the Census in the March 1966 Current Population Survey.

Table A.--LEVEL OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER, AND 25 TO 29 YEARS OLD, BY COLOR, FOR THE UNITED STATES: SELECTED YEARS, 1947 TO 1966

Age and date	Total				Nonwhite			
	Percent by level of school completed			Median school years completed	Percent by level of school completed			Median school years completed
	Less than 5 years of elementary school	4 years of high school or more	4 years of college or more		Less than 5 years of elementary school	4 years of high school or more	4 years of college or more	
PERSONS 25 YEARS OLD AND OVER								
March 1966	6.5	49.9	9.8	12.0	18.0	29.5	4.7	9.2
March 1965	6.8	49.0	9.4	11.8	18.4	28.6	5.5	9.0
March 1964	7.1	48.0	9.1	11.7	18.6	27.5	4.7	8.9
March 1962	7.8	46.3	8.9	11.4	22.1	24.8	4.0	8.6
March 1957	9.1	41.6	7.6	10.6	27.7	18.4	2.9	7.7
April 1947	10.6	33.1	5.4	9.0	32.2	13.6	2.5	6.9
PERSONS 25 TO 29 YEARS OLD								
March 1966	1.6	71.0	14.0	12.5	3.3	50.4	8.3	12.0
March 1965	2.0	70.3	12.4	12.4	4.8	52.2	8.3	12.1
March 1964	2.1	69.2	12.8	12.4	5.3	48.0	7.0	11.8
March 1962	2.4	65.9	13.1	12.4	6.1	41.6	4.2	11.2
March 1957	2.7	60.2	10.4	12.3	8.7	31.6	4.1	9.9
April 1947	4.3	51.4	5.6	12.0	19.2	22.3	2.8	8.4

EDUCATIONAL ATTAINMENT BY COLOR

It is well known that surveys of educational attainment show nonwhite persons, as a group, completing fewer years of school and college than white persons, as a group. The question is--at what stages in the educational ladder do the differences originate? The answer depends on whether one is speaking of young people, whose educational attainment reflects the current state of affairs, or of older persons, whose educational attainment reflects the educational pattern of an earlier time.

Current status.--Persons aged 20 to 24 are taken to show current rates of completing education. In this age group, white and nonwhite differences originated mainly after elementary school, in the high school stage--that is, between the completion of grade 8 and the completion of high school. As shown in table B, averaged figures for the 3-year period 1964, 1965, and 1966 show that, for persons in the age group 20 to 24, 97 percent of white persons and 91 percent of nonwhite persons have completed at least 8 years of school. Up to this point, the amount of the difference between white and nonwhite attainment (6 percentage points) is far smaller than that at higher attainment levels. By contrast, in the next stage of education, 79 percent of the white persons aged 20 to 24 who have finished 8th grade have also finished high school, but only 58 percent of the corresponding nonwhite group have continued through all 4 years of high school. The difference in completion rates at this stage is 21 percentage points.

Among high school graduates aged 20 to 24, the percentage who have completed 1 or more years of college is somewhat greater for whites than nonwhites--40 percent as compared with 31 percent-- but the difference is less marked than at the high school level.

Trends.--Attainment rates of the past are reflected in the data for older age groups. High school graduates now aged 55 to 64, for example, mostly completed high school in the 1920's. Table B shows educational completion rates for various age groups. Most striking is the increase in the proportion completing 8 years of school among the nonwhite population--from 27 percent for those who are now aged 65 or more, to 91 percent for those aged 20 to 24. As a result of this trend, the great gap between white and nonwhite persons which formerly existed at the 8th grade level has been nearly wiped out.

High school retention rates have also increased steadily--from 38 percent to 79 percent for the white population, and from 32 percent to 58 percent for the nonwhite population. The substantial gap between white and nonwhite retention at the high school stage has remained relatively constant at about 20 percentage points for many

Table B.--PERCENT OF PERSONS WHO COMPLETED THE TRANSITION FROM ONE LEVEL OF EDUCATION TO A HIGHER LEVEL, BY COLOR AND AGE, FOR THE UNITED STATES: AVERAGE, MARCH 1964 TO 1966

(Figures represent averages of the percentages for the three years)

Level of school and color	Age (years)						
	20 to 24	25 to 29	30 to 34	35 to 44	45 to 54	55 to 64	65 or more
Percent of persons who completed at least 8 years of elementary school:							
White..	96.6	94.9	93.3	91.6	87.7	79.9	65.8
Nonwhite...	90.9	87.7	83.3	72.6	57.5	44.5	27.4
Difference.......................................	5.7	7.2	10.0	19.0	30.2	35.4	38.4
Percent of persons completing 8 years of elementary school who also completed at least 4 years of high school:							
White..	79.1	76.8	73.9	68.4	59.3	47.6	37.9
Nonwhite...	57.6	57.2	52.3	47.2	38.9	31.1	31.7
Difference.......................................	21.5	19.6	21.6	21.2	20.4	16.5	6.2
Percent of persons completing 4 years of high school who also completed at least 1 year of college:							
White..	40.5	36.8	37.3	35.9	35.2	42.2	44.2
Nonwhite...	31.0	30.5	36.2	33.5	38.8	41.3	38.8
Difference.......................................	9.5	6.3	1.1	2.4	-3.6	0.9	5.4
Percent of persons completing 1 year of college who also completed at least 4 years of college:							
White..	(1)	51.3	55.4	53.9	49.1	50.7	47.9
Nonwhite...	(1)	51.2	48.4	47.1	51.9	56.3	45.8
Difference.......................................	(1)	0.1	7.0	6.8	-2.8	-5.6	2.1

[1] Omitted because persons 20 to 24 are still in the process of completing college.

years. Most of this gap originated during the youth of persons now 55 years old and over, when the high school retention rates for whites increased while those for nonwhites remained static.

The pattern of completion at the college level is entirely different. The percentage of high school graduates who go on to complete 1 year of college has remained relatively stable within a range of about 15 percentage points--from 30 to 44 percent for various age and color groups (table B). Similarly, the percentage of those completing 1 year of college who go on to finish 4 years of college has remained near 50 percent for both white and nonwhite persons. There is some indication of a recent decline in the college entrance rates of nonwhite high school graduates, and a developing gap as compared with the rates of white high school graduates. A final assessment cannot yet be made for the cohort now aged 20 to 24, because some of these persons may enter or complete college later on, especially with the veterans' benefits which presumably will be available to many young men in this cohort.

VARIATION BY RESIDENCE AND SEX

Some of the differences in educational attainment associated with color and with age have been mentioned. Table C highlights some of the differences in educational attainment in March 1966 according to residence and sex. Persons now living in metropolitan areas show higher rates of high school graduation and of college attendance than do persons living in nonmetropolitan areas. This is true not only for the general population aged 25 and over but also for the younger group aged 20 to 24.

The percent of the population completing high school is about the same for boys and girls. A higher percentage of men than of women have completed at least one year of college, however.

Table C.--PERCENT OF THE POPULATION FINISHING HIGH SCHOOL, AND PERCENT COMPLETING 1 OR MORE YEARS OF COLLEGE BY AGE, SEX, AND RESIDENCE, FOR THE UNITED STATES: MARCH 1966

Residence and sex	Persons 20 to 24 years old		Persons 25 years old and over	
	4 years of high school or more	1 year of college or more	4 years of high school or more	1 year of college or more
Total............	75.0	31.1	49.9	18.7
Residence:				
Metropolitan......	77.6	33.2	53.9	21.2
Nonmetropolitan...	69.9	27.0	42.4	14.2
Difference........	7.7	6.2	11.5	6.9
Sex:				
Male..............	75.0	36.9	49.0	21.3
Female............	75.1	26.1	50.8	16.4
Difference........	-0.1	10.8	-1.8	4.9

DETAILED TABLES

Data for March 1966 are given in tables 1 to 3, which parallel the format of the March 1964 report. Data for March 1965 corresponding to tables 1 and 2 will be found in tables 4 and 5. Caution must be exercised in comparing 1965 with 1966 because the changes observed may be attributable to sampling variation rather than to actual trends. For further information on sampling variation see the section "Reliability of estimates."

The data in this report pertain to years of formal schooling completed. No account is taken of other factors affecting "education" broadly conceived, such as the quality of the individual and the schooling itself, as well as education outside the formal school setting.

RELATED REPORTS

Data on educational attainment for persons 14 years old and over in April 1947, March 1959, March 1962, and March 1964 were published in Current Population Reports, Series P-20, Nos. 15, 99, 121, and 138, respectively. Statistics on educational attainment of the Negro population in 1965 are presented in Current Population Reports, Series P-20, No. 155. Further information on educational attainment is presented in "Educational Change in a Generation: March 1962," Series P-20, No. 132. In addition, educational attainment as determined in the Current Population Survey is related to labor force characteristics in publications of the Bureau of Labor Statistics, as in "Educational Attainment of Workers in March 1965," published in the March 1966 issue of Monthly Labor Review. Statistics on educational attainment are also available in several reports of the 1960 Census of Population, the most relevant of which is PC(2)-5B, Educational Attainment. Volume I, Characteristics of the Population, chapter C, "General Social and Economic Characteristics," and chapter D, "Detailed Characteristics," also include statistics on educational attainment. Report PC(2)-1C, Nonwhite Population by Race, includes educational data for selected races.

Comparability with earlier survey and census data.--The education data presented in this report for March 1966 are comparable with data collected in 1962 and subsequently, but not strictly comparable with those for earlier survey dates, for these reasons: (1) Persons not reporting on years of school completed in 1962 and subsequent dates were assigned a value for years of school completed according to procedures described in the section on "Definitions and explanations," whereas in earlier years no assignment was made and these

persons were shown separately in the published tables. (2) Data on years of school completed for 1947 were based on responses to a single question, rather than the two questions used in subsequent years. There may have been a greater tendency toward overstatement of years of school completed in 1947 when only the single question was asked.

Apart from the different dates at which the statistics were collected, the education data from the March 1966 Current Population Survey may differ from those from the 1960 Census and from projections based on the census for the following reasons: (1) Members of the Armed Forces in the United States living off post or with their families on post are included in the survey, but all other members of the Armed Forces are excluded from it. All members of the Armed Forces in the United States are included in the census data. (2) Statistics from both the census and the CPS are subject to sampling and response errors. There are differences in coverage, enumeration techniques (self-enumeration versus direct enumeration), and the methods of allocating nonresponses.

The Content Evaluation Study of the 1960 Census is a major source of information about the accuracy of census data on educational attainment. A comparison by detailed categories of years of school reported for each level suggests a net overreporting on years of school completed for about 6 percent of the population 25 years old and over.[1] A comparison of CPS with 1960 Census figures shows that the CPS figures include more persons with 12 years or more of school completed and fewer with less than 12 years. If the Content Evaluation Study is taken as a standard, the 1960 Census figures on educational attainment show a slight upward bias. The CPS figures are still higher than the census figures and may, therefore, be more biased in the direction of high educational attainment.

Because of the differences mentioned above, particular care should be exercised in comparing the data for March 1966 with those from the 1960 Census, and with those for CPS dates of 1959 and earlier.

DEFINITIONS AND EXPLANATIONS

Population coverage.--The figures in this report for March 1966 are sample survey data and relate to the population of the 50 States and the District of Columbia. Inmates of institutions are included in the sample. Members of the Armed Forces

living off post or with their families on post are included, but all other members of the Armed Forces are excluded.

All figures for decennial census years relate to the total population of the United States, that is, to all persons (including Armed Forces and inmates) residing within the United States.

Age.--The age classification is based on the age of the person at his last birthday.

Race and color.--The term "race" in this report refers to the division of population into three groups, white, Negro, and other races. The group designated as "other races" consists of Indians, Japanese, Chinese, and other nonwhite races. The term "color" refers to the twofold classification white and nonwhite.

Years of school completed.--Data on years of school completed in this report were derived from the combination of answers to two questions: (a) "What is the highest grade of school he has ever attended?" and (b) "Did he finish this grade?"

The questions on educational attainment apply only to progress in "regular" schools. Such schools include graded public, private, and parochial elementary and high schools (both junior and senior high), colleges, universities, and professional schools, whether day schools or night schools. Thus, regular schooling is that which may advance a person toward an elementary school certificate or high school diploma, or a college, university, or professional school degree. Schooling in other than regular schools was counted only if the credits obtained were regarded as transferable to a school in the regular school system.

The median years of school completed is defined as the value which divides the population into two equal parts--one-half having completed more schooling and one-half having completed less schooling than the median. This median was computed after the statistics on years of school completed had been converted to a continuous series of numbers (e.g., completion of the first year of high school was treated as completion of the 9th year and the completion of the first year of college as completion of the 13th year). The persons completing a given school year were assumed to be distributed evenly within the interval from .0 to .9 of the year (for example, persons completing the 12th year were assumed to be distributed evenly between 12.0 and 12.9). In fact, at the time of the March survey, most of the enrolled persons had completed about three-fourths of a school year beyond the highest grade completed, whereas a large majority of persons who were not enrolled had not attended any part of a grade beyond the highest one completed. The effect of the assumption is to

[1] Evaluation and Research Program of the U.S. Censuses of Population and Housing, 1960: Accuracy of Data on Population Characteristics as Measured by Reinterviews, Series ER 60, No. 4, table 12.

lace the median for younger persons slightly be-low, and for older persons slightly above, the true median. Because of the inexact assumption as to the distribution within an interval, this median is more appropriately used for comparing groups and the same group at different dates than as an absolute measure of educational attainment.

Assignment of educational attainment for those not reporting.--When information on either the highest grade attended or completion of the grade was not reported in the 1964 survey, entries for the items were assigned using an edit in the computer. The general procedure was to assign an entry for a person that was consistent with entries for other persons with similar characteristics. The specific technique used in the March 1964 survey was as follows:

1. The computer stored reported data on highest grade attended by color and age, and on completion of the grade by age and highest grade attended, for persons 14 years old and over in the population.

2. Each stored value was retained in the computer only until a succeeding person having the same characteristics (e.g., same color and age, in the case of assignments for highest grade attended) and having the item reported, was processed through the computer. Then the reported data for the succeeding person were stored in place of the one previously stored.

3. When one or both of the education items for a person 14 years old and over was not reported, the entry assigned to this person was that stored for the last person who had the same characteristics.

Metropolitan-nonmetropolitan residence.--The population residing in standard metropolitan statistical areas (SMSA's) constitutes the metropolitan population. Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1960 Census and does not include any subsequent additions or changes.

Rounding of estimates.--The individual figures in this report are rounded to the nearest thousand without being adjusted to group totals.

SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data.--The estimates are based on data obtained monthly in the Current Population Survey of the Bureau of the Census. The sample is spread over 357 areas comprising 701 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. Approximately 35,000 occupied households are designated for interview each month. Of this number, 1,500 occupied units, on the average, are visited but interviews are not obtained because the occupants are not found at home after repeated calls or are unavailable for some other reason. In addition to the 35,000, there are also about 5,000 sample units in an average month that are visited but are found to be vacant or otherwise not to be enumerated.

The estimating procedure used in this survey involved the inflation of the weighted sample results to independent estimates of the civilian population of the United States by age, color, and sex. These independent estimates were based on statistics from the 1960 Census of Population; statistics of births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces. Inmates of institutions are included in the sample.

Reliability of the estimates.--Since the estimates are based on a sample, they may differ somewhat from the figure that would have been obtained if a complete census had been taken using the same schedules, instructions, and enumerators. As in any survey work, the results are subject to errors of response and of reporting as well as being subject to sampling variability. The standard error is primarily a measure of sampling variability, that is, of the variations that occur by chance because a sample rather than the whole of the population is surveyed. As calculated for this report, the standard error also partially measures the effect of response and enumeration errors but does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error. The figures presented in tables D and E are approximations to the standard errors of various estimates shown in this report. In order to derive standard errors that would be applicable to a wide variety of items and could be prepared at a moderate cost, a number of approximations were required. As a result, the tables of standard errors provide an indication of the order of magnitude and the standard errors rather than the precise standard error for any specific item.

Table D.--STANDARD ERROR OF ESTIMATED NUMBER
(68 chances out of 100)

Size of estimate	Standard error	Size of estimate	Standard error
25,000.............	9,000	2,500,000..........	90,000
50,000.............	13,000	5,000,000..........	120,000
100,000............	18,000	10,000,000.........	170,000
250,000............	28,000	25,000,000.........	260,000
500,000............	40,000	50,000,000.........	320,000
1,000,000..........	60,000		

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are large (50 percent or more).

Illustration: Table 1 of this report shows that 13,672,000 males age 25 and over had completed 4 years of high school. Interpolation in table D shows the standard error on 13,672,000 to be approximately 192,000. The chances are about 68 out of 100 that a complete census would have differed from the sample estimate by less than 192,000. The chances are 95 out of 100 that the difference would have been less than 384,000.

These 13,672,000 males represented 27.7 percent of the 49,410,000 males age 25 and over. Table E shows the standard error of 27.7 percent with a base of 49,000,000 to be about 0.3 percent. Consequently, the chances are 68 out of 100 that a complete census would have disclosed the figure to be between 27.4 and 28.0 percent, and 95 chances out of 100 that the figure would have been between 27.1 and 28.3 percent.

Table E.--STANDARD ERROR OF ESTIMATED PERCENTAGE
(68 chances out of 100)

Estimated percentage	Base of percentage (thousands)						
	250	500	1,000	5,000	10,000	25,000	50,000
2 or 98......	1.6	1.1	0.8	0.4	0.3	0.2	0.1
5 or 95......	2.4	1.7	1.2	0.6	0.4	0.2	0.2
10 or 90.....	3.4	2.4	1.7	0.8	0.5	0.3	0.2
25 or 75.....	4.9	3.5	2.5	1.1	0.8	0.5	0.3
50...........	5.6	4.0	2.8	1.3	0.9	0.6	0.4

DETAILED TABLES