

# 1940 CENSUS DATA ON NUMBER OF YEARS OF SCHOOL COMPLETED<sup>1</sup>

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UNTIL 1940 the United States had taken no comprehensive inventory of the formal educational attainment of its people. On the amount of schooling possessed by an American, we lacked quantified knowledge essential to an understanding of his functioning in his various roles of worker, consumer, voter, and member of a reading and listening public. We did not know how these attainments varied among the people of different sections of the country and among different classes. There was no way of getting a nation-wide picture of the relationship of education to fertility, to age at marriage, to occupation, or to income, or of the educational selections involved in the process of internal migration.

From tabulations of the replies to the 1940 Census inquiry on number of years of school completed, we are beginning to get information on some of these questions. The data tabulated or being tabulated provide not only distributions by educational attainment for thousands of separate areas and groups but also an extremely useful index of social-economic status, applicable to any adult, that can be used in the analysis of many other variables.

For a definition of the term "last year of school completed" as used in the Census, the reader is referred to page 384, Appendix A. (Here he will also find a discussion of the advantages and limitations of this index of educational status. Furthermore, in Appendix B, a brief outline of the materials involving "last year of school completed" is presented.) It is necessary to state in advance, however, that practically all of the statistics so far available are limited

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to the population 25 years old and over without any further classification by age. Thus they describe the existing educational level in an area or group among persons practically all of whom have completed their formal education, but in disregarding age they obscure an important causal factor in the differences observed.<sup>2</sup>

*The United States as a Whole.* We may first describe the situation in the country as a whole in 1940.<sup>3</sup> The median number of years of school completed by persons 25 years old and over was 8.4.<sup>4</sup> This is equivalent to the completion of elementary school plus the completion of part of the first year of high school. The proportion that had never completed as much as one year of formal schooling was 3.7 per cent. (If we make the extreme assumption that all persons for whom education was not reported had never completed one full year of school, then this proportion would be increased to 5.1 per cent. This percentage is certainly too high, but it indicates the possible range.) A large potential group for adult education programs would seem to be represented by the 10,104,612 persons, or 13.5 per cent, who had completed fewer than five years. Almost a quarter (24.1 per cent) of the population aged 25 years or over had finished at least high school, 10.0 per cent had completed at least one year of college, and 4.6 per cent were college graduates. (See Table 1.)

<sup>2</sup> The extent to which educational attainment has been improving during the past fifty years or so is shown in the following table, which presents figures from a 5 per cent sample tabulation of the white population:

<i>Age</i>	<i>Median School Years Completed</i>
25 to 34 years	10.5
35 to 44 years	8.7
45 to 54 years	8.2
55 to 64 years	7.9
65 years and over	7.6

<sup>3</sup> A somewhat fuller account is given in: United States Bureau of the Census: *Educational Attainment of the Population 25 Years Old and Over in the United States: 1940*, Series P-10, No. 8, April 23, 1942. Tables 1 and 2 of the present article are condensed from the tables of this release.

<sup>4</sup> Medians are expressed in terms of a continuous series of numbers representing years completed. For example, the completion of the first year of high school is indicated by 9 and of the last year of college by 16.

*Urban-Rural Differences.* The median number of school years completed was 8.7 for the urban population, 8.4 for the rural-nonfarm population, and 7.7 for the rural-farm population. These same relations existed for each sex of each race-nativity group (native white, foreign-born white, Negro, and other races) except that the medians were about the same for foreign-born whites regardless of type of residence. With the distribution of all persons 25 years of age and over as a standard, medians have been computed standardized for race-nativity and sex. The order of medians for the three areas is not changed thereby, and the crude and standardized medians never differ by more than two-tenths of a school year. It is not possible to standardize for age at this time.

If the educational level of the three residence groups is measured by computing for each the proportion (unstandardized) who have never completed as much as one full school year, the results are similar. For native whites, Negroes, and other nonwhite races, the percentage having no years of school completed was highest for the rural-farm population and lowest for urban residents. For foreign-born whites, however, the relationship is reversed, the urban areas having had the highest proportion unschooled in their population and the rural-farm areas the lowest. Urban residents ranked highest in the proportion of college graduates in their population, 5.8 per cent of those reporting, as compared with 4.3 per cent for rural-nonfarm and 1.3 per cent for rural-farm groups. The three residence groups ranked in this same order for each of the race-nativity groups.

In Figure 1, the proportion completing at least the indicated number of years of school is compared graphically among the three areas—urban, rural-nonfarm, and rural-farm. These cumulative proportions are standardized for race-nativity and sex and have as a base the number reporting education. (All differences between crude and standardized proportions are slight; the only noteworthy change being that the standardized per cent of persons completing

SEX AND YEARS OF SCHOOL COMPLETED	UNITED STATES					URBA
	All Classes	Native White	Foreign-born White	Negro	Other Races	All Classes
<i>Both Sexes</i>						
Persons 25 Years Old and Over	74,776	57,038	10,961	6,491	285	45,229
No School Years Completed	2,800	764	1,336	646	54	1,606
Grade School: 1-4 Years	7,305	3,458	1,764	2,034	49	3,472
5 and 6 Years	8,515	5,513	1,569	1,393	40	4,465
7 and 8 Years	25,898	20,559	3,988	1,287	64	15,064
High School: 1-3 Years	11,182	9,842	761	550	29	7,186
4 Years	10,552	9,448	808	268	28	7,525
College: 1-3 Years	4,075	3,737	211	118	8	2,734
4 Years or More	3,407	3,068	252	81	7	2,586
Not Reported	1,042	649	272	114	7	592
Median School Years Completed	8.4	8.8	7.3	5.7	6.8	8.7
<i>Male</i>						
Persons 25 Years Old and Over	37,463	28,327	5,787	3,162	187	21,988
No School Years Completed	1,471	432	655	353	31	784
Grade School: 1-4 Years	4,079	1,979	969	1,097	34	1,829
5 and 6 Years	4,400	2,891	834	648	26	2,231
7 and 8 Years	13,239	10,540	2,079	578	42	7,430
High School: 1-3 Years	5,333	4,700	390	224	19	3,388
4 Years	4,507	3,981	401	108	18	3,180
College: 1-3 Years	1,824	1,645	125	48	6	1,272
4 Years or More	2,021	1,789	187	41	5	1,554
Not Reported	588	370	149	65	5	319
Median School Years Completed	8.3	8.6	7.3	5.3	6.9	8.6
<i>Female</i>						
Persons 25 Years Old and Over	37,313	28,712	5,174	3,329	98	23,241
No School Years Completed	1,329	333	680	293	22	823
Grade School: 1-4 Years	3,226	1,479	796	937	14	1,643
5 and 6 Years	4,115	2,622	735	745	13	2,234
7 and 8 Years	12,659	10,018	1,909	709	22	7,634
High School: 1-3 Years	5,849	5,142	372	326	10	3,798
4 Years	6,044	5,467	407	160	10	4,344
College: 1-3 Years	2,251	2,093	86	70	2	1,461
4 Years or More	1,386	1,279	65	40	1	1,031
Not Reported	454	279	123	59	2	273
Median School Years Completed	8.5	9.0	7.3	6.1	6.7	8.8

Table 1. Persons 25 years old and over, by years of school completed, race, and sex, for the United States, urban and rural, 1940. (Population in thousands.)

at least one year of school is slightly higher for the urban than for the rural-nonfarm population, whereas on the basis of the crude percentages the reverse is true.)

*Race-Nativity Differences.* Striking differences are observable among the four race-nativity classes. The unadjusted median num-

URBAN			RURAL-NONFARM					RURAL-FARM				
	Negro	Other Races	All Classes	Native White	Foreign-born White	Negro	Other Races	All Classes	Native White	Foreign-born White	Negro	Other Races
3,622	114	14,754	12,316	1,318	1,056	64	14,793	11,985	887	1,813	107	
240	14	500	211	144	134	11	693	300	93	272	28	
859	16	1,512	899	226	375	11	2,321	1,332	168	800	21	
771	13	1,755	1,326	193	226	10	2,295	1,744	138	396	17	
900	26	5,113	4,452	471	174	15	5,721	5,114	372	212	23	
416	13	2,243	2,083	86	67	7	1,753	1,637	41	66	9	
225	17	1,909	1,789	89	26	5	1,118	1,062	32	18	6	
93	5	838	795	28	14	2	503	480	11	11	1	
66	5	625	584	31	10	1	196	184	7	5	1	
53	3	258	177	50	29	2	193	133	24	33	3	
6.8	7.9	8.4	8.6	7.3	5.0	6.7	7.7	8.0	7.2	4.1	5.4	
1,695	85	7,578	6,270	733	538	38	7,897	6,384	519	929	65	
122	10	279	119	79	74	6	408	183	54	157	15	
439	13	868	519	134	209	7	1,382	817	101	450	14	
362	11	930	708	108	109	6	1,238	970	81	178	10	
410	19	2,688	2,345	254	80	9	3,121	2,802	217	89	14	
170	10	1,093	1,016	44	28	4	852	798	23	25	5	
91	11	838	780	45	10	3	489	461	17	6	4	
39	4	355	333	15	5	1	196	186	6	4	1	
34	4	370	342	23	5	1	97	89	5	2	—	
29	2	156	107	31	17	1	113	79	14	18	2	
6.5	7.8	8.2	8.5	7.2	4.6	6.8	7.6	7.8	7.2	3.7	5.5	
1,927	29	7,175	6,047	585	518	26	6,896	5,601	368	885	43	
118	4	221	92	64	60	5	285	117	40	115	13	
420	3	644	381	92	167	4	939	515	67	350	7	
409	3	825	618	86	117	4	1,057	774	57	218	7	
490	7	2,424	2,107	217	95	6	2,600	2,312	155	124	9	
246	4	1,150	1,067	42	39	3	901	839	18	40	3	
134	6	1,071	1,010	45	15	2	629	601	15	11	2	
54	1	483	461	12	9	1	307	294	5	8	—	
33	1	255	242	8	5	—	100	95	2	3	—	
24	—	102	70	20	11	1	79	54	9	15	1	
7.0	8.3	8.5	8.8	7.4	5.5	6.5	7.9	8.2	7.2	4.7	5.2	

ber of years of school completed for each class was: native white 8.8; foreign-born white 7.3; Negro 5.7; and other races, 6.8. In the individual urban-rural-by-sex groups, these same rankings are found with one exception. In the urban population, both male and female, the median for "other races" was higher than for foreign-born whites. The reason for this is undoubtedly that the other races in urban areas are almost wholly Orientals with very few

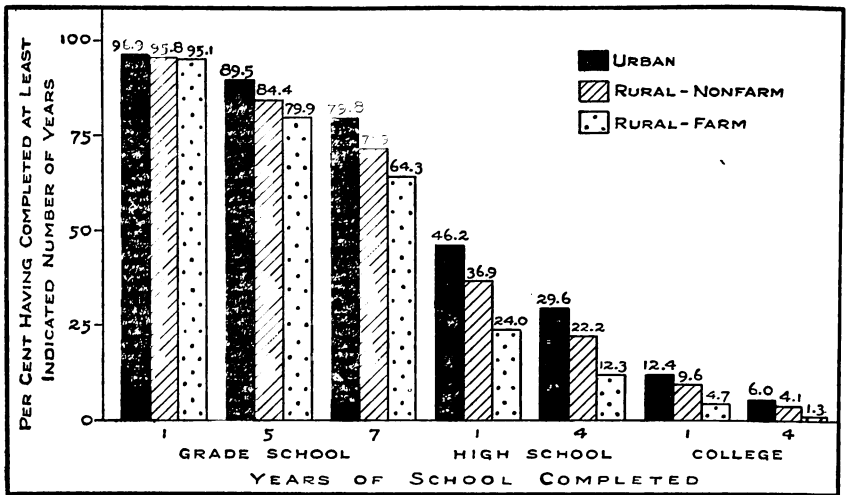


Fig. 1. Per cent of persons 25 years old and over who had completed at least the indicated number of years of school, for United States, urban and rural: 1940. (Standardized for sex and race-nativity. Base is number of persons reporting education.)

Indians. (Mexicans are classed as white.) Medians standardized for urban-rural residence and for sex are unchanged for the two white groups but are increased from 5.7 to 5.9 for Negroes and from 6.8 to 7.4 for other races. These increases reflect mainly the fact that the nonwhites are more concentrated in rural areas than the population as a whole.

Figure 2 shows the cumulative standardized per cent distribution by years of school completed for race-nativity classes. The standardization is for urban-rural residence and sex. A relatively high percentage of the urban foreign-born whites had not completed a single year of school—11.8 per cent of all males and 14.0 per cent of all females reporting education. There is some evidence, however, of possible under-reporting of the education of the foreign-born whites, perhaps of schooling received abroad.

*Sex Differences.* Sex differences were generally less than those among urban-rural areas or among race-nativity groups. They were also less consistent. For the country as a whole, the median number of years of school completed was 8.3 for males and 8.5 for

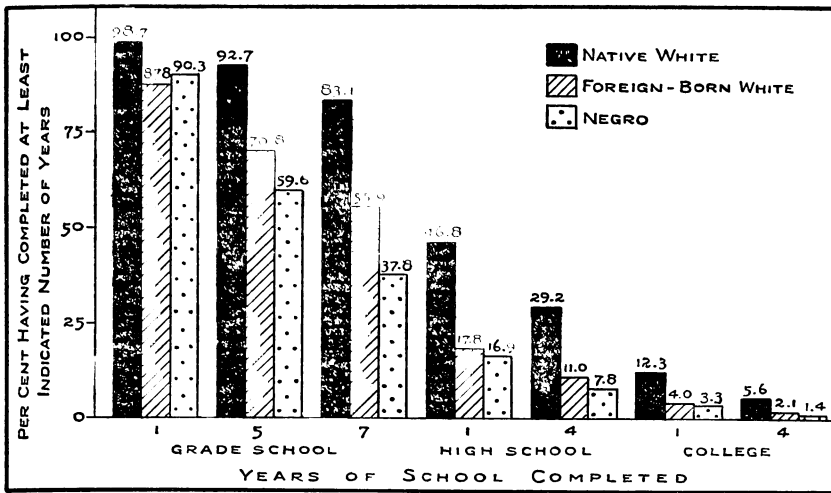


Fig. 2. Per cent of persons 25 years old and over who had completed at least the indicated number of years of school, for race-nativity classes, for the United States: 1940. (Standardized for sex and urban-rural residence. Base is number of persons reporting education.)

females. It would seem, however, that although a larger proportion of men than of women dropped out of school before completing high school, a greater proportion of men than of women who graduated from high school went on to college, and a greater proportion of men than of women who entered college completed their college training.

The median for females was higher than that for males among native whites and among Negroes, regardless of type of residence. Differences were particularly great for Negroes. Medians for foreign-born white males and females were about the same in each of three residence areas. In urban areas the average male in the "other races" group had less formal education than the average female, but in the rural-nonfarm and rural-farm areas the reverse was true.

Standardization for urban-rural residence and for race-nativity composition does not change in the first decimal place the medians for all males and all females aged 25 and over. Standardized cumulative percentage distributions are presented in Figure 3.

*Geographic Differences.* Table 2 indicates that the Pacific Divi-

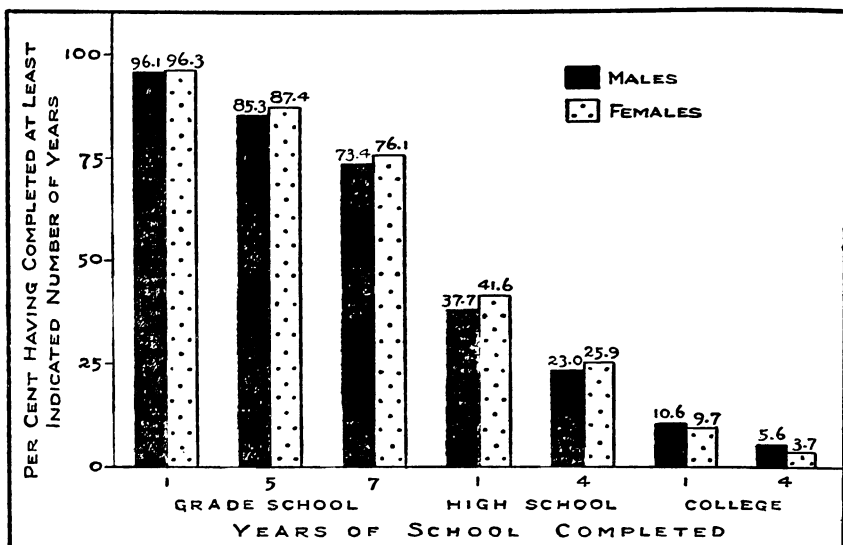


Fig. 3. Per cent of males and of females 25 years old and over who had completed at least the indicated number of years of school, for the United States: 1940. (Standardized for urban-rural residence and race-nativity. Base is number of persons reporting education.)

sion had the highest median number of years of school completed, the highest proportion of college graduates, and the lowest proportion of persons who had completed less than five years of school. On the basis of median number of years completed, the Mountain Division ranked next even though it contained one State, New Mexico, with a rather low median—probably due to its large population of Mexican stock. The four Northern Divisions ranked next and were followed by the three Southern Divisions.

To answer such questions as, "Is the South's low level of educational attainment due to its high proportion of Negroes or do Negroes rank at or near the bottom among the races because of their concentration in the South?" one must examine the educational data for geographic areas by race-nativity and urban-rural residence. Some statistics of this character are summarized in Table 3 in the form of median years of school completed. The distributions on which these medians are based are presented in the Second Series Population Bulletins.



*Urban-Rural Differences by States.* First we may see whether the urban-rural differences found in the United States as a whole existed in specific areas. Among native whites and Negroes in practically every State the urban population had received more schooling than the rural-nonfarm and the rural-nonfarm in turn more than the rural-farm. The spread between the urban and the rural-nonfarm population in education was usually greater than the spread between the rural-nonfarm and the rural-farm population. Urban native whites averaged from a fraction of a year to two years more schooling than rural-farm native whites in the Northeast and East North Central States, from about a year and a half to three years more in the West North Central States and the West, and up to four years more in the South. (Differences according to residence were less than two years in the border States but from two to four years in the deep South.) Although there is no doubt about the existence of pronounced variations in education according to residence, it is possible that for persons 25 years old and over the observed differences among urban-rural classes are exaggerated somewhat by selective migration of the better educated farm youth to cities.

Just as in the country at large, differences in education among urban-rural classes were generally small for the foreign-born white population of each of the States with appreciable numbers of foreign-born whites. Except in Arizona, New Mexico, and Texas, where the foreign born were mostly Mexicans, residence differences in median years of school completed were about a year or less. In general, the rural-nonfarm foreign-born whites ranked highest in the New England, Middle Atlantic, and East North Central States, whereas in the West North Central, Mountain, and Pacific States, the urban residents were somewhat better educated. In most of the Northern and Western States, as in the country as a whole, the foreign-born white population in rural-nonfarm areas had markedly larger proportions of Northern and Western European

Table 2. Persons 25 years old and over, by years of school completed, for the United States by divisions and States, 1940. (Population in thousands.)

DIVISION AND STATE	PERSONS 25 YEARS OLD AND OVER	NO SCHOOL YEARS COMPLETED	GRADE SCHOOL			HIGH SCHOOL		COLLEGE		NOT RE-PORTED	MEDIAN SCHOOL YEARS COMPLETED
			1 to 4 Years	5 and 6 Years	7 and 8 Years	1 to 3 Years	4 Years	1 to 3 Years	4 Years or More		
UNITED STATES	74,776	2,800	7,305	8,515	25,898	11,182	10,552	4,075	3,407	1,042	8.4
<i>New England</i>											
Maine	481	10	25	37	171	96	96	25	16	5	8.9
New Hampshire	294	7	17	24	116	48	49	16	13	4	8.7
Vermont	205	3	9	15	81	38	37	11	8	3	8.8
Massachusetts	2,621	107	157	221	802	485	524	130	143	52	9.0
Rhode Island	424	22	36	51	157	64	55	14	19	5	8.3
Connecticut	1,031	48	68	87	410	142	157	46	50	24	8.5
<i>Middle Atlantic</i>											
New York	8,431	469	551	693	3,343	1,249	1,125	342	462	198	8.4
New Jersey	2,533	110	195	269	984	351	340	102	127	56	8.4
Pennsylvania	5,638	229	467	710	2,208	763	722	224	235	81	8.2
<i>East North Central</i>											
Ohio	4,104	82	262	448	1,552	671	659	203	181	45	8.6
Indiana	2,004	26	129	198	832	306	311	103	76	23	8.5
Illinois	4,828	132	330	434	2,021	705	688	258	216	44	8.5
Michigan	3,007	72	233	296	1,082	557	456	158	121	31	8.6
Wisconsin	1,809	30	139	198	799	221	228	102	70	21	8.3
<i>West North Central</i>											
Minnesota	1,600	23	96	142	723	203	225	106	67	15	8.5
Iowa	1,471	8	52	107	643	221	258	101	61	20	8.7
Missouri	2,260	43	190	250	969	285	288	121	88	26	8.3
North Dakota	328	7	28	33	148	35	35	26	12	4	8.2

Delaware	158	5	15	21	49	27	22	7	8	4	8.5
Maryland	1,055	30	132	188	326	136	122	44	50	26	8.0
District of Columbia	431	7	28	41	108	65	87	41	47	5	10.3
Virginia	1,376	74	245	245	324	178	131	82	61	17	7.7
West Virginia	928	34	119	162	349	89	85	47	31	11	7.8
North Carolina	1,650	95	338	309	345	226	133	89	67	27	7.4
South Carolina	841	66	226	147	121	118	73	40	39	11	6.7
Georgia	1,533	100	362	280	300	211	141	73	51	17	7.1
Florida	1,082	43	158	151	270	159	164	66	53	19	8.3
<i>East South Central</i>											
Kentucky	1,441	59	232	229	541	140	120	60	42	17	7.7
Tennessee	1,498	62	262	269	434	183	151	72	46	19	7.7
Alabama	1,355	91	300	263	292	177	118	56	39	19	7.1
Mississippi	1,044	69	246	184	230	132	89	45	31	17	7.1
<i>West South Central</i>											
Arkansas	968	37	187	178	287	123	84	39	22	12	7.5
Louisiana	1,205	154	275	203	206	144	118	51	42	10	6.6
Oklahoma	1,213	30	134	162	400	178	155	81	57	16	8.4
Texas	3,414	179	462	499	713	695	450	234	150	30	8.5
<i>Mountain</i>											
Montana	315	5	19	25	126	47	49	27	15	3	8.7
Idaho	275	2	12	18	106	50	44	27	12	4	8.9
Wyoming	137	3	7	10	47	25	25	12	7	1	9.2
Colorado	638	15	42	51	216	104	114	51	38	8	8.9
New Mexico	247	26	41	28	57	32	30	17	11	4	7.9
Arizona	253	23	27	25	65	37	38	19	16	3	8.6
Utah	268	4	11	16	79	57	53	29	16	3	10.2
Nevada	67	2	4	4	20	12	13	6	4	2	9.6
<i>Pacific</i>											
Washington	1,074	13	50	73	387	183	212	86	59	9	9.1
Oregon	676	7	28	42	252	117	126	58	37	8	9.1
California	4,421	111	247	307	1,299	779	965	371	296	47	9.9

Table 3. Median years of school completed for persons 25 years old and over, by race-nativity for the United States, urban and rural, by States, 1940. (Median not shown where base is less than 100.)

DIVISION AND STATE	URBAN				RURAL-NONFARM				RURAL-FARM			
	All Classes	Native White	Foreign-born White	Negro	All Classes	Native White	Foreign-born White	Negro	All Classes	Native White	Foreign-born White	Negro
UNITED STATES	8.7	9.6	7.4	6.8	8.4	8.6	7.3	5.0	7.7	8.0	7.2	4.1
<i>New England</i>												
Maine	9.1	10.2	7.4	8.2	9.0	9.5	7.8	7.6	8.7	8.8	7.7	—
New Hampshire	8.6	9.3	7.3	8.1	8.9	9.2	7.7	—	8.7	8.9	7.6	—
Vermont	9.5	10.3	7.8	8.1	8.8	9.0	7.9	—	8.5	8.6	7.7	—
Massachusetts	9.0	10.7	7.4	8.2	9.3	10.4	7.5	6.9	8.6	9.8	6.5	2.2
Rhode Island	8.3	8.8	6.8	7.6	8.3	8.6	7.0	7.4	8.2	8.6	6.3	—
Connecticut	8.4	9.0	7.0	7.5	8.7	9.6	7.4	7.9	8.3	8.8	7.0	7.7
<i>Middle Atlantic</i>												
New York	8.4	9.1	7.4	7.8	8.7	8.9	7.7	7.2	8.3	8.4	7.3	7.0
New Jersey	8.4	8.9	7.1	7.2	8.4	8.7	7.5	6.7	7.9	8.3	7.1	5.9
Pennsylvania	8.4	8.8	6.1	7.1	8.1	8.3	5.2	6.6	8.0	8.1	5.7	6.5
<i>East North Central</i>												
Ohio	8.7	9.4	6.9	7.4	8.5	8.6	6.9	6.9	8.2	8.3	6.8	7.2
Indiana	8.7	8.9	7.1	7.6	8.5	8.5	7.6	7.3	8.2	8.2	7.2	7.5
Illinois	8.6	9.2	7.5	7.7	8.3	8.4	7.2	6.6	8.1	8.2	7.6	6.5
Michigan	8.8	9.8	7.6	7.6	8.6	8.8	7.5	7.0	8.1	8.3	6.5	7.4
Wisconsin	8.6	8.9	7.3	7.6	8.4	8.5	7.4	7.5	7.9	8.0	7.1	7.1
<i>West North Central</i>												
Minnesota	8.9	10.0	7.7	8.4	8.4	8.7	7.4	7.8	8.0	8.1	7.3	—
Iowa	9.6	10.0	7.8	8.0	8.7	8.8	7.7	7.1	8.4	8.4	7.8	7.7
Missouri	8.6	8.8	7.5	7.4	8.3	8.3	7.7	6.5	7.9	7.9	7.4	4.9
North Dakota	9.8	11.0	7.8	—	8.4	8.8	7.5	—	7.0	8.1	7.2	—

Maryland	8.0	8.5	6.4	6.1	8.2	8.5	8.0	5.6	7.4	7.7	7.6	4.7
District of Columbia	10.3	12.1	8.3	7.6	—	—	—	—	—	—	—	—
Virginia	8.7	10.0	8.3	5.9	7.6	8.3	8.7	4.8	6.6	7.3	7.7	4.1
West Virginia	8.6	8.9	6.9	7.4	7.6	7.7	5.1	6.1	7.3	7.3	5.2	5.7
North Carolina	8.7	10.3	10.5	5.8	7.6	8.2	11.7	5.0	6.6	7.2	8.8	4.4
South Carolina	8.7	11.3	8.9	4.8	6.9	8.2	10.3	3.8	5.5	7.7	9.7	3.5
Georgia	8.1	10.0	8.8	5.1	7.5	8.6	10.1	4.0	6.0	7.2	9.2	3.5
Florida	8.9	11.0	8.2	5.8	7.9	8.7	8.6	4.3	7.1	7.8	8.1	3.8
<i>East South Central</i>												
Kentucky	8.4	8.6	7.8	6.7	7.7	7.8	7.8	5.9	7.2	7.2	7.7	5.2
Tennessee	8.4	9.4	8.4	6.2	7.8	8.0	8.9	5.4	7.0	7.3	7.2	4.9
Alabama	8.3	10.3	8.3	5.6	7.3	8.2	8.0	4.5	6.1	7.1	7.6	3.7
Mississippi	8.7	11.7	8.4	5.8	8.0	9.9	8.5	5.0	6.2	8.1	5.4	4.3
<i>West South Central</i>												
Arkansas	8.9	10.4	8.4	6.3	7.8	8.3	7.8	5.3	6.9	7.4	6.8	4.6
Louisiana	7.9	9.1	7.3	5.2	6.5	8.1	6.1	3.5	4.5	6.3	2.7	2.8
Oklahoma	9.9	10.4	8.3	7.6	8.2	8.3	7.2	6.3	7.7	7.7	7.1	6.0
Texas	9.5	10.6	4.8	6.8	8.7	9.3	2.9	5.7	7.5	8.0	2.4	5.3
<i>Mountain</i>												
Montana	9.6	10.7	7.8	8.0	8.7	9.1	7.7	—	8.3	8.5	7.7	—
Idaho	10.5	10.8	8.2	7.5	8.9	9.0	7.9	7.0	8.6	8.7	7.8	7.4
Wyoming	10.3	10.9	7.6	7.9	9.3	10.0	7.4	7.5	8.6	8.7	7.5	—
Colorado	9.9	10.5	7.6	8.5	8.7	8.9	7.0	7.5	8.3	8.5	7.2	7.7
New Mexico	9.3	9.9	6.4	7.4	7.5	7.8	3.8	7.1	6.7	7.2	3.2	6.2
Arizona	9.6	10.9	6.5	7.6	8.6	9.2	4.8	7.3	7.2	8.5	3.9	6.6
Utah	10.8	11.5	8.0	8.4	9.7	10.1	7.6	—	9.0	9.4	7.5	—
Nevada	10.5	11.3	7.9	7.6	9.5	10.5	7.5	8.2	8.4	9.0	7.4	—
<i>Pacific</i>												
Washington	10.1	11.0	8.2	8.2	8.9	9.4	8.0	7.9	8.4	8.6	7.8	7.6
Oregon	10.2	10.8	8.2	8.4	8.9	9.1	8.1	8.0	8.5	8.6	7.9	—
California	10.5	11.4	8.0	8.5	8.9	9.6	7.5	7.3	8.3	8.8	6.9	6.8

stock than the urban areas. In the Dakotas, the Mountain States, and California the reverse was true. This contrast may explain part of the above-mentioned regional variations in education according to residence. Immigrants from Southern and Eastern Europe and Latin America probably did not have as many years of schooling as the white immigrants from other regions.

*Educational Status of Negroes by States.* The relatively low educational attainment of the Negro population is most marked in the South but exists to some extent in other regions. The native-white median was less than three years above the Negro median in most residence areas of Northern, Western, and border States. In the deep South, on the other hand, the difference was greater than three years in most States. It was 6.5 years in urban South Carolina. We need have no hesitancy in ascribing a major part of these regional variations to a wider spread between educational opportunities for whites and Negroes in the South than in the North or West. In no urban, rural-nonfarm, or rural-farm area of any State did the native-white population fail to average more formal education than the Negro, however.

In comparing the education of Southern Negroes with that of those living in the North and West, it is desirable to confine our attention to the urban areas since few Negroes outside the South are found in rural areas. The median of 7.1 years of school completed among Negroes in urban Pennsylvania was lower than the median in any other Northern or Western State, there being a range up to about 8.5 years. In the District of Columbia and in Oklahoma, the median for urban Negroes was 7.6 years, and it was 7.4 in West Virginia. Elsewhere in the South it was below seven years, ranging down to 4.8 years in South Carolina. It is probably true that part of the superior education of Negroes living in the North and West is attributable to the northward migration of some of the better educated Negro youth from the South, but at present we have few quantitative data on this selective process.

The educational status of Negroes was, of course, very low in the rural South. In rural-nonfarm areas, the average Negro had completed as much as six years of elementary school only in Oklahoma and West Virginia. The median was below five years in the rural-farm areas of all Southern States except Oklahoma, West Virginia, Texas, Kentucky, and Delaware. Louisiana rural-farm Negroes 25 years old and over averaged less than three years of elementary school.

*Educational Status of the Foreign-Born Whites by States.* The highest grade of school completed by foreign-born whites was lower on the average than that completed by native whites in every residence area except in a few Southern States where the foreign-born whites were numerically unimportant. The differences seem to have been somewhat smaller in rural than in urban areas. They were only a fraction of a year in the rural-farm areas of the West North Central States, Wisconsin, Montana, and Idaho. Here many of the foreign-born were from Germany and Scandinavia, and many of the native whites were the children of immigrants from these countries. In the urban populations of practically all Northern and Western States, the educational attainment of foreign-born whites was less than that of Negroes.

*Sex Differences by States.* As in the United States as a whole, differences within States were generally small between the educational attainment of males and of females. Usually, medians were higher for women. In the native-white population, women had more education than men on the average in practically every urban-rural area of every State, but the difference was generally less than two years. The situation in the foreign-born white population was less simple. In the large foreign-born urban populations of the Middle Atlantic and North Central States, males were slightly better educated. The average male had decidedly more education in the nonfarm areas of Arizona and New Mexico, where many of the foreign-born whites were born in Mexico. Elsewhere, females

had slightly more schooling. Much more meaningful differentials would probably be found if years of school completed were shown by country of birth for the foreign born. Negro women were better educated than Negro men, particularly in the rural South where the need or opportunity for employment was probably greater for Negro boys than for Negro girls.

*State Differences Within Groups.* The regional patterns described above among the entire adult populations of States become much less clear-cut if we compare educational attainment within a particular group by States. The urban native-white population in the Southern States did not compare at all unfavorably with that in the Northern and Western States. Both the highest and the lowest medians were in the South, and it is striking that the highest median (over three years of high school) was in Mississippi in the deep South and the lowest median (less than a full year of high school) was in Maryland, a border State. In the rural-nonfarm native-white population, and even more in the rural-farm, Southern States did not make so good a relative showing; nevertheless, in these same areas the medians in some Southern States were higher than the medians in some Northern and Western States. Educational differentials by States for the foreign-born white population were even less uniform. Regional variations in the educational attainment of Negroes have already been discussed.

It is possible that, with allowance for differences in race-nativity and residence, State differences in medians may reflect largely the age composition of the adult population. Then, other things being equal, a State with a young population would have a relatively well educated population.

#### CONCLUSION

We have seen that there are rather wide variations in educational status among certain types of groups and areas in the United States. Within a particular group in a particular area there is also a range



among individuals, which is not brought out by the median years of school completed. The distribution of an adult population in an area by residence, race, age, and, to a lesser extent, sex, affects but does not determine its educational level. Standardized rates holding these factors constant would indicate the importance of other factors associated with inter-area differentials. Measures of some of these factors are undoubtedly available. It is obvious that differences in economic status must account for a large part of the inter-group and intra-group differentials, but local and individual peculiarities (some of which are listed in Appendix A) also play a part.

Familiarity with the effects of internal migration upon the educational level in both the area of destination and the area of origin would direct the interests of a citizenry beyond the school system of its own locality. Much research remains to be conducted upon these effects, but a good beginning may be made on the basis of forthcoming census tabulations. This problem has implications for the instruction of youth as well as for adult education, whereas the existence of differentials among the foreign-born according to country of birth is relevant chiefly to programs of adult education. Here again a census tabulation, now fairly well advanced, will provide useful information.

A much more satisfying analysis of the data on years of school completed can also be made when the Fourth Series Population Bulletins, giving education by age, are published. Although these contain data only for such large areas as States, urban and rural, and cities of 50,000 or more, the tables of age-specific rates for such areas will furnish a means of indirect standardization for smaller areas with similar characteristics. Many valuable data on years of school completed from the 1940 Census remain to be presented but much can be done with what is already available, particularly on a descriptive level for small areas. When some of the other publications become available, it will be possible to undertake a more

thorough analysis of the relationships between education and other factors.

#### APPENDIX A.—DEFINITIONS AND EXPLANATIONS

*Definition of "Last Year of School Completed."* The instructions to the enumerator read "Enter . . . for each person, the last full grade of school completed, that is, the highest full grade that the person has successfully finished or from which he has been graduated. Do not include half years or grades that were not finished." This question referred only to education obtained in public, private, or parochial schools, colleges, or universities. Education obtained at vocational schools was not considered, unless such a school or college was a part of the regular school system. For a person still in school, the last full grade completed was the grade preceding the one in which he was then enrolled. For a person who completed his formal education in an ungraded school or in a foreign country, the approximate equivalent grade in the American school system was to be entered. Also for a person who obtained his entire education in night school, the approximate equivalent grade completed was called for.

*Limitations of the Census Index of Educational Status.* It seems desirable to state here some reservations that should be made in interpreting the foregoing data; the fact that age is not controlled beyond a restriction to those 25 years old and over has already been noted.

The census definition of years of school completed has been given, and it has been remarked that the measure of formal education so defined is a valuable index of social-economic status. It is evident, however, that the same number of school years completed in two different States will not represent exactly the same thoroughness of training or the completion of the same curriculum since the educational standards of the two States may differ.<sup>5</sup> The number of years of school completed by an individual is the resultant of such factors as his innate intelligence, his effort, and the economic circumstances of his family. It is also influenced by opportunities for employment in the community, the attractiveness of the local curriculum, and the school facilities in general. These last are largely determined by the economic resources of the area but are also affected by local or State govern-

<sup>5</sup> In a few of the Southern States there are only seven years of elementary school. For the sake of uniformity, however, the first year of high school in such areas has been treated as the ninth rather than the eighth year of school. It is felt that this convention leads to more comparable medians for the several States.

mental policy. Despite this lack of constancy in what the measure ultimately represents, special studies<sup>9</sup> have found very high correlations between the number of years of school completed and demographic characteristics like fertility and age at marriage and social-economic characteristics like broad occupational group, equivalent rent, and income. It is thought that most other demographic, social, and psychological characteristics will also be more profitably analyzed when the factor of education is controlled. Furthermore, education may be held constant for many groups of adults to whom some other social-economic index would not be applicable.

It must also be considered that practically all of the persons in the age group 25 years old and over completed their education some time in the past, and hence their amount of schooling does not reflect the facilities existing in their communities at present. Furthermore, many present residents of an area were reared and educated elsewhere. Prominent examples are the many Negroes who have migrated from the rural South to the urban North and the Dust Bowl people who have settled on the Pacific Coast.

*Comparability with Literacy Statistics.* Many persons will be interested in knowing whether the statistics on years of school completed may be used in any way to continue the time series on illiteracy that extends from 1870 to 1930. The answer is mainly in the negative since the completion of no particular grade of school corresponds to the attainment of a state of literacy. Ability to read and write is a less clear-cut concept than the completion of a given number of years of school, and even if literacy could be precisely defined the grade in which it was acquired would depend both on the individual and the school system. Some few quite literate individuals, of course, never had any formal schooling.

Comparison of the 1930 figures on illiteracy with the 1940 figures on years of school completed confirms this reasoning. The 1930 proportion of illiterates among persons 25 years old and over generally lies between the proportion of persons of this age in 1940 who had not completed a full year of school and the proportion who had completed less than five years. (Separate statistics on the number of persons completing one, two, three, or four years are

<sup>9</sup> Karpinos, Bernard D. and Kiser, Clyde V.: The Differential Fertility and Potential Rates of Growth of Various Income and Educational Classes of Urban Populations in the United States. The Milbank Memorial Fund *Quarterly*, October, 1939, xvii, No. 4, pp. 367-391.

Hutchinson, E. P.: Education and Intramarital Fertility in Stockholm. *Ibid.* July, 1936, xiv, No. 3, pp. 285-301.

*Population Index*, January, 1940, 6, No. 1, pp. 72-74.

not yet available.) More important, when the codistributions of the 1930 illiteracy rate and either 1940 education index are plotted for States, high correlations are indicated, but a fair amount of scatter about the regression lines is also obvious. This scatter shows that among the States there is not a constant relationship between the percentage of illiteracy and either the percentage completing no years of school or the percentage completing less than five years of school.

#### APPENDIX B.—TABULATIONS AVAILABLE OR PLANNED

The following outline summarizes the material now available, classified as tabulated and published or as tabulated but not intended to be published, and also material in process or included in plans that have a reasonable certainty of being carried out. The statistics so far available on education give abridged detail on the number of years of school completed and are limited to persons 25 years old and over without any further classification by age. Tabulations now under way for the larger areas give for five-year age groups from 25 to 74 the number of persons who have completed each year of school. From the same count of the cards for individuals, we shall also obtain distributions by years of school completed for each single year of age from 5 to 24 classified according to whether or not attending school. These data for younger persons will enable educators to gauge much more exactly than ever before the extent of retardation or acceleration in the school population of a given area.

#### DATA ON LAST YEAR OF SCHOOL COMPLETED FROM THE 1940 CENSUS

##### I. PUBLISHED

Population covered: All persons 25 years old and over.

Categories of school years completed: 0, 1-4, 5-6, 7-8, H1-H3, H4, C1-C3, C4 and over.

<i>Publication</i>	<i>Areas</i>	<i>Cross-Classified Characteristics</i>
A. Release Series P-6	States by urban, rural-nonfarm, and rural-farm areas	None
B. Release P-10, No. 8	1. U. S. by urban, rural-nonfarm, and rural-farm areas	Sex by race (native white, foreign-born white, Negro, other races)

	2. Regions, divisions, and States	None
C. Second Series Population Bul- letins	1. States by urban, rural-nonfarm, and rural-farm areas; cities of 100,000 or more; large metropolitan districts	Sex by race (native white, foreign-born white, Negro, other races)
	2. Counties; urban places of 10,000-100,000	Sex
	3. Rural-nonfarm and rural-farm areas of counties; urban places of 2,500-10,000	None

II. AVAILABLE

Population covered: All persons 25 years old and over.

Categories of school years completed: 0, 1-4, 5-6, 7-8, H1-H3, H4, C1-C3, C4 and over.

<i>Areas</i>	<i>Cross-Classified Characteristics</i>
Tracted areas by tracts, untraced cities of 100,000 or more by wards, each urban place of 2,500-100,000 separately; rural-nonfarm and rural-farm areas of counties	Sex by race (native white, foreign-born white, Negro, other races)

III. IN PREPARATION

To be published in Fourth Series Population Bulletins.

Areas: Each city of 50,000 or more; balance of each State by urban, rural-nonfarm, and rural-farm areas.

Categories of school years completed: Single years from 0 to C5 and over.

<i>Population Covered</i>	<i>Cross-Classified Characteristics</i>
A. Persons 5 to 24 years of age	N.B. Cross-classification by color is complete in the tabulations but will be published only for selected areas. Sex by age (single years) by school attendance

B. Persons 25 years of age and over      Sex by age (5-year groups to 74 years)

IV. *OTHER TABULATIONS PLANNED OR IN PROCESS*

<i>Subject</i>	<i>Data</i>
A. Migration	Last year of school completed (under 5, 5-6, 7-8, H1-H3, H4, C1-C3, C4 and over) by sex by residence in 1935 for persons 25 to 34 years old.
B. White population by nativity and parentage (sample tabulation)	Last year of school completed (0, 1-4, 5-6, 7-8, H1-H3, H4, C1-C3, C4 and over) by sex by age (under 25, 25-34, 35-44, 45-54, 55-64, 65 and over) by nativity and parentage, native of native parentage, native of foreign or mixed parentage, foreign-born).
C. Male population, 18 to 44 (sample tabulation)	Last year of school completed (under 4, 4-8, H1-H3, H4, C1-C3, C4 and over) by age (18-29 by single years, 30-34, 35-39, 40-44) by relationship and marital status (head; nonhead, single; nonhead, other) by broad occupational group.
D. Fertility (sample tabulation)	Contents under consideration
E. Families (sample tabulation)	Contents under consideration