CONTRASTS AMONG INDIANA COUNTIES IN EDUCATIONAL RESPECTS.

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The following maps, except 10 and 11, are based on the official statistics tabulated in the report of the Superintendent of Public Instruction for 1922 or 1923. These maps reveal notable variations among the counties in several aspects, of great educational importance. Some of these contrasts are related to geographic conditions, especially to the ruggedness of the land, the fertility of the soil, and the presence of, or proximity to educational centers. But in respect to each of the topics mapped, artificial conditions are apparent. In other words, in many cases there appear to be no adequate reasons why one county should rank so far below a neighboring and similar county. These maps were prepared as part of the author's comprehensive study of the geographic contrasts in Indiana.

Salaries Paid.—Figures 1, 2 and 3 deal with salaries paid teachers in 1922-23. In the black counties of figure 1, from 70 to 94 per cent of the elementary teachers received a salary of less than \$900 per year, while in the white counties less than 25 received that small salary. Most of the black counties contain much poor land, and most of the white counties contain large cities. In the numerous black counties of the second map (fig. 2) less than 1 per cent of the elementary teachers received a salary of \$1,500 per year or over, while in the few white counties (which contain the chief cities) from 25 to 73 per cent of the teachers received \$1,500 or more. Most of the black counties are either rural or contain much rough land. Few of them are increasing in population; indeed, most of them contained fewer people in 1920 than in 1890. In the black counties of figure 3, from 0 to 20 per cent of the high school teachers received a salary of \$1,500 or over, while in the white counties from 80 to 92 per cent received that much salary. Most of the black counties are in the rougher southern part of the state, but the writer knows of no adequate reason why Fulton, Vermillion, and Jennings counties should be black when their neighbors are not. In the intermediate shades, also, there are contrasts apparently not due to differences in richness.

Enrollment.—Figures 4 and 5 deal with enrollment, figure 4 showing the percentage of children of school age enrolled in school in 1921-22,

¹ Acknowledgment is gratefully made to Misses Eva J. Graham and Elsie Pierson for assistance in the numerous arithmetical calculations required to obtain the percentages and other numerals used.

² See several papers in the Proceedings of the Indiana Academy of Science; The Geography of Indiana in the Handbook of Indiana Geology, State Department of Conservation, 1922; and especially the Economic Geography of Indiana, D. Appleton and Company, New York, 1923.

[&]quot;Proc. Ind. Acad. Sci., vol. 34, 1924 (1925),"

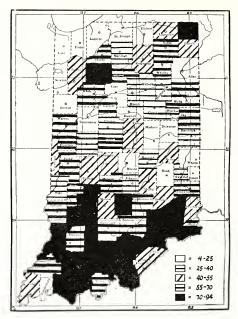


Fig. 1. Percentage of elementary school teachers receiving a salary of less than \$900 in 1922-23.

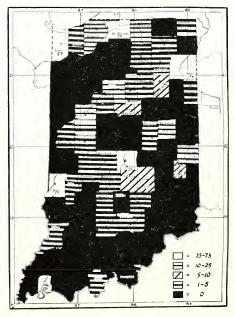


Fig. 2. Percentage of elementary school teachers receiving a salary of \$1,500 or over in 1922-23.

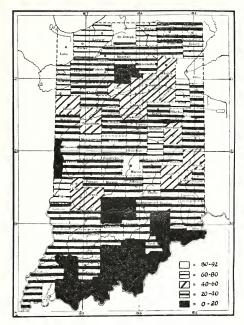


Fig. 3. Percentage of high school teachers receiving a salary of \$1,500 or over in 1922-23.

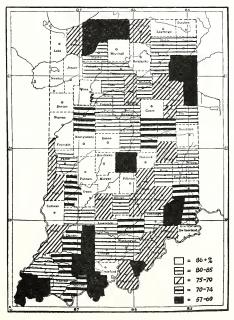


Fig. 4. Percentage of children of school age enrolled in school in 1921-22.

and figure 5 the percentage of enrolled pupils which were in elementary schools, the others being enrolled in high school or college. In the 11 black counties of figure 4, only 57 to 69 per cent of the pupils of school age were enrolled in school, while in the white counties more than 85 per cent were enrolled. In nearly one-half of the counties in the state more than one-fourth of the children of school age are not enrolled in school. Figure 5 shows that less than 15 per cent of the pupils of the extreme south, southwest, and northwest counties were beyond

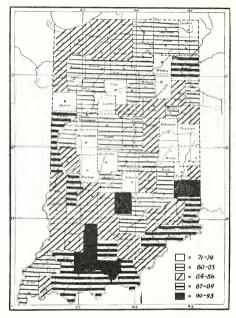


Fig. 5. Percentage of school children enrolled in elementary schools in 1921-22.

the elementary school in 1921. Most of the central counties, in contrast, had more than one-fifth of their school children enrolled in high school. But why the dark counties there?

Graduation.—The percentage of the pupils graduating is very significant. In the black counties of figure 6, only 4 to 5 per cent of the elementary pupils graduated in 1922, or less than half as large a percentage as in the white counties. This map and figure 4 show that many of the southern and northwestern counties fall behind the average of the state, not only in the percentage of the children of school age enrolled in school, but also in the percentage graduated from the elementary schools. However, some of the rougher counties graduate a very creditable percentage of their pupils. Some of the northern counties which are black in figure 6 contain many foreigners; Vanderburgh County has many negroes, and Vigo many miners. Each of these

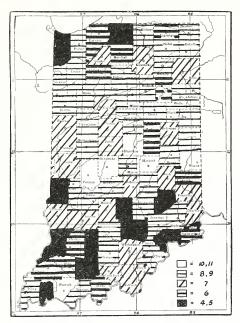


Fig. 6. Percentage of elementary school pupils who graduated in 1922.

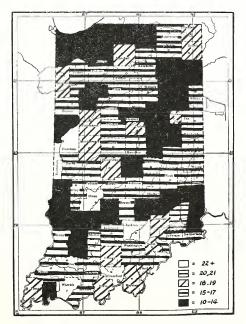


Fig. 7. Percentage of high school pupils who graduated in 1922.

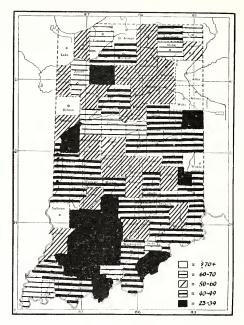


Fig. 8. Average per capita cost per student of elementary schools, 1921-22. (From 1922 Year Book.)

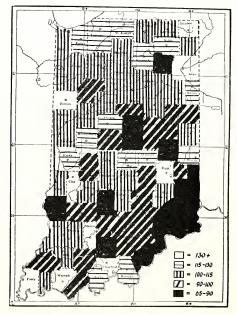


Fig. 9. Average cost per pupil of high schools, 1921-22. (From 1922 Year Book.)

classes have less than the average desire that their children actually graduate. Figure 7, giving the percentage of high school pupils graduated in 1922, reflects among other influences the opportunities to go into factories. The counties having large cities are all black, but many of the more strictly rural counties are light.

Per Capita Cost of Schools.—In the black counties of figure 8 the average yearly cost per pupil in the elementary school was only \$23 to \$39 for the year 1921-22. In contrast, the people of the white counties expended over \$70 per year for the education of each pupil in their elementary schools. The black counties of southwestern Indiana include some of the poorest, financially, in the state. But why did the people

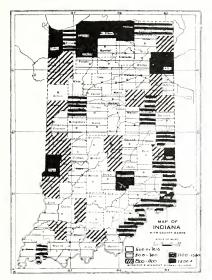


Fig. 10. Ratio between students at Indiana University (average of three school years, 1920-1923) and population, 1920. Figures in legend are persons per student.



Fig. 11. Ratio between students at Purdue University (average, 1920-1922) and population, 1920.

of the scattered black counties of central Indiana expend so much less than the average?

Figure 9 shows the per capita expense in 1921 of the education of high school pupils. In the white counties the expenditure was from one and one-half to over twice as great as in the black counties.

Attendance at Purdue and Indiana Universities.—Another contrast among Indiana counties in educational activities is in the percentage of their population attending Purdue and Indiana universities. Figures 10 and 11 show the ratios between the population, according to the 1920 census, and the average attendance at these two universities during two or three recent years. The counties in white have one representative

for each 500 of population, while those in black have one representative for each 1,500 or more. These novel maps should correct several common misconceptions. For example: Figure 10 shows that most of the counties are well represented, in proportion to population, at Indiana University. The counties with the least representation are mostly on the borders of the state, nearer to other strong institutions. Other geographic factors are transportation facilities, wealth, and proportion of the population engaged in agriculture and in industries.

FURTHER STUDIES IN DEATH RATES IN INDIANA.

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In the Proceedings for the last meeting (Vol. 33, pp. 55-61) may be found a paper concerning the wide variation among Indiana counties in the average death rates from typhoid, tuberculosis, cancer and in total deaths with maps showing these variations, and also with eight maps

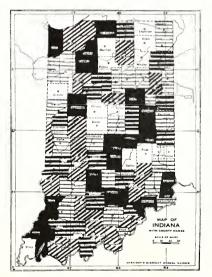




Fig. 1. Pneumonia: Deaths per 100,000 persons, average of four years, 1920-1923 (calculated from unpublished tables of State Board of Health). Legend: Black, over 115; wide lines, 100-115; diagonal lines, 90-100; light lines, 80-90; white, below 80.

Fig. 2. Deaths of infants under one year, average rate per 1,000 persons for the three years 1920-22 (from Reports of State Board of Health). Legend: Black, over 86; wide lines, 74-86; diagonal, 62-74; light, 50-62; white, 38-50.

showing the distribution of geographic conditions apparently causally related to the irregularities in the distribution of death rates. A study of these eight maps will be helpful in interpreting the present set.