a mayor saying that they will stand for reelection on a platform of abandonment of the high schools? Is there a social reformer who will try to convince American families that their boys and girls will fit into the industrial scheme better if they are given as meager an education as the law will permit?

Of course, there is no one who will try to stem the tide. The high school is here, and it is expanding at an astounding rate. It is costly and is about to cost more. The problem is not how to curtail it or how to contract its operations. The real problems are of a wholly different order.

I believe that the first problem is to secure general recognition of the fact that higher education does not rapidly produce real property and that it is hazardous to try to support high schools by levying the costs as a tax on real property only. Higher education reflects itself most promptly and effectively in increased incomes. An income tax is the natural and only adequate source of support for higher education. The present difficulty in meeting the increased costs of schooling can be removed only by an income tax.

I believe that the second problem of high school educa-
tion is the elimination of waste. There is waste because students do not take their opportunities seriously. There is waste because incompetent teachers are employed at low salaries. There is waste because equipment is not provided inside the school and because lavish decorations are built into the exterior walls. There is waste because the elementary schools are separate from the high schools, the two often coming into competition with each other. There will be waste until a coherent plan is worked out which will put the high school on a surer and better foundation through the development of a better elementary school. Incidentally, it may be remarked, this means a more expensive elementary school rather than a cheaper high school.

I believe that the third problem is to exhibit clearly to the people of the United States the reasons why the American high school costs so much. It is my firm conviction that they will see that there is a public return in the broadest sense from this democratic expenditure of public funds. If they are convinced, I believe that they will gladly pay more liberally in the future than they have in the past for free high schools.

Charles H. Judd.

# The Social Composition of the High School 

IN the public high school, more than in any other of our educational institutions, has the genius of the American people expressed itself. The establishment of this secondary school as a continuation of elementary education and its maintenance at public expense constitute one of our greatest cultural achievements. Through it the privileges of higher education are theoretically extended to the masses and through it American society has registered its attitude towards such fundamental matters of social concern as the equalization of opportunity, the inheritance of privilege, the stability of classes, and the sources of leadership.

The growth of the high school, however, during the first half-century of its existence was not rapid. But within the last generation this institution has expanded at a rate that is quite without precedent in the history of American education. From 1890 to 1920 the number of high schools increased from about 2,500 to more than 14,000 and the number of students in attendance from approximately 200,000 to almost $2,000,000$. At the same time the public expenditures for secondary education increased many fold and in not a few communities the highschool building became a source of civic pride.

So impressive has been this growth that the uncritical have been led to conclude that in America secondary education has abandoned the selective principle, that the absence of tuition charges has opened the doors of the high school to all children, and that within this institution are now gathered without discrimination the boys and girls of every social class. But only a moment's reflection is sufficient to dispel this illusion. The number of children of high school age, children from fourteen to eighteen years, greatly exceeds the two million students enrolled in the secondary school. There are, in fact, more than eight million children of this age in our population. To be sure, many of those not attending the secondary school may be found among the aver-
age pupils in the grades below. But it is altogether clear that the great majority of those of appropriate age who are not in high school are enrolled in no school whatsoever.

We shall assume, therefore, that the two million high school students in the United States are more or less highly selected. But what is the principle of selection? A simple and direct answer to this question cannot be given, because selection must be traced to the subtle interaction of three factors or sets of factors. Since these forces are always acting together, their relative importance in determining attendance at high school is difficult to estimate. They may be described as psychological, geographical, and sociological. Although it is with the third that we are primarily concerned here, each of the other two must receive recognition. The ground will then be cleared for considering our major problem.

The psychological equipment of the individual child undoubtedly plays a large part in determining the extension of the opportunities of secondary education. Throughout history the secondary school has sought to minister to the needs of the intellectually gifted. With diminished force this tradition remains with us today. Although high school teachers may on occasion doubt it, nevertheless all available evidence indicates that the average high school student is relatively gifted. Owing to the operation of other forces there are, of course, many individual exceptions to this general rule. Moreover, the selection is negative rather than positive. Boys and girls may be excluded from high school because they lack capacity, but they are seldom brought into the high school because they possess it. With the impartial operation of this psychological factor, however, we would find no fault. If we are not to have universal secondary education, it would seem that here is a just basis for determining the extension of this level of educational opportunity. No progressive society, conscious of its needs and purposes, can permit the development of
the capacities of its talented members to rest on the operation of the arbitrary forces of geography and social status.

The influence of the geographical factor is well known. If high schools are inaccessible, or relatively so, children will not attend them. The rare individual may overcome rather serious obstacles of this type, but for the great majority distance serves as an effective damper on educational ambitions. Even in our most populous states there are wide areas which are practically devoid of high schools. The extension of secondary education to the children inhabiting our rural districts has by no means been achieved. And in our great cities, in spite of efficient transportation systems, distance as a factor limiting educational opportunity cannot be disregarded. Perhaps, if it worked by itself, its effective influence would be much reduced; but it is usually working in conjunction with other forces, such as poverty, a dwarfed family tradition, or limited capacity. A problem which has thus far defied practical solution on a wide scale is that of making secondary education geographically accessible to all.

This brings us to the consideration of the third factor, the factor with which we are more particularly concerned. In the past secondary education has followed class lines. In theory the American people have abandoned this conception of education. In order to determine the extent to which this conception still prevails in practice, the writer has undertaken in recent years a study of the situation in four typical American cities, namely, Bridgeport, Connecticut; Mt. Vernon, New York ; St. Louis, Missouri ; and Seattle, Washington. In each of these cities the entire high school population was studied. Certain groups of children of high school age not in high school in Bridgeport and Seattle, the children of the sixth grade in Mt. Vernon, and the student populations of two private secondary schools, the Phillips-Exeter Academy and the University of Chicago High School, were also included in the investigation. With a view to determining the representation in these different groups of the various social classes data of a sociological nature were secured from each child. The major findings of this study may be summed up under the five conclusions to which attention will now be directed.

In the first place, the student population of the public high school exhibits a large measure of social selection. For the most part the children attending this institution are drawn from the more favored classes. The degree of selection varies from community to community and inversely with the proportion of children of secondary school age attending high school. In these industrial cities less than 30 percent of the students were drawn from the classes engaged in manual labor. By taking into account the representation of the different occupational groups in that portion of the adult population capable of having children of high school age, it was concluded that children whose fathers are engaged in professional service or as proprietors of business have more than twenty times the chances of attending the public high school that obtain for children of common labor parentage. In Bridgeport approximately 27 percent of the children attending the evening continuation classes had fathers engaged as common laborers, while the representation of this occupational group in the high school was under 2 percent. This first proposition is easily supported by data from many other sources.

In the second place, in each succeeding year of the high school the student population becomes more highly selected. The table below will make the point clear and also acquaint
the reader with the occupational classification used in the study. In this table is given for each group the number of students in the senior year for every one hundred in the freshman year of the high school:

| I. Professional service |  |  |
| :---: | :---: | :---: |
| 2. | Proprietors | 48.2 |
| 3. | Commercial service | 48.2 |
| 4. | Managerial service | 46.2 |
| 5. | Clerical service | 37.4 |
| 6. | Agricultural service | 37.0 |
|  | Artisan-proprietors | 30.5 |
| 8. | Printing trades | 27.5 |
|  | Public service (no officials) | 23.9 |
|  | Miners, lumber-workers, fishermen | 22.6 |
|  | Building trades | 22.4 |
|  | Personal service | 21.9 |
| 13. Transportation service ......................... 21.6 |  |  |
| 14. | Machine trades | 20.6 |
| 15. Miscellaneous trades (mech. \& man. ind.).... 18.1 |  |  |
| 16. | Common labor | 12.4 |
|  | All occupations | 37.2 |

Although a detailed explanation of this occupational classification is desirable, space permits but a word. The first five groups are strictly non-manual labor groups. The next two, agricultural service and artisan-proprietors, may be said to occupy that marginal area which separates manual from the other forms of labor. The second of these includes artisans, such as cobblers, machinists, and tailors, who own the shops in which they work. The nine groups beginning with the printing trades cover the various grades and varieties of manual labor. All individuals occupying official or managerial positions in any division of occupational activity, except proprietors, are placed in the fourth group. The major findings presented in the table are now clear. The very classes that are least well represented in the first year of the high school are yet more poorly represented in the last. Note the extremes. Whereas there are sixty seniors whose fathers are engaged in professional service to every one hundred freshmen of like parentage, the corresponding ratio for the children of common laborers is but twelve. And in general the order in which the sixteen occupational divisions are arranged reflects social and economic status. A comparison of the sixth grade in Mt. Vernon with the last year of the high school is yet more striking. 'The change in the representation of a single group in the schools of this city must suffice to reveal the strength of the selective forces in operation. In the sixth grade of the elementary school children whose fathers were engaged in the building trades constituted 16.5 percent of the entire enrollment, while in the last year of the high school they formed but .7 percent of the total.
In the third place, the choice of curricula apparently is dictated in considerable measure by family circumstance. In the differentiation of the program of studies class lines are reflected. Into those curricula which stand as terminal points in the educational system the children of labor parentage tend to go, while the children of the more favored classes are inclined to enter the curricula which look towards the higher education. And this tendency seems to be more pronounced among the girls than among the boys. The latter often break through class lines; the former usually recognize them. The following comparison will make the point clear. Of the 250 girls pursuing the college preparatory course in the Bridgeport high school 35.2 percent had proprietors for fathers and but 10.4 percent represented the nine laboring groups combined. In the commercial curriculum, on the other hand, with an enrollment of 613 girls the corresponding percent-

