

students per librarian? Likewise, how many counselors are there, and how many students per counselor? Similar figures should be collected for other specialists.

(4) Quality of school administration: The leadership offered and ability of the school superintendent and his principals cannot be neglected; yet it is most difficult to appraise their contributions. Usually, principals who are not relieved from all teaching cannot do a superior job.

(5) Teaching program: Schools with a good college preparatory program insist that college-bound students carry four courses a year in English, mathematics, science, history, or foreign languages. What percent of the students have such a program? How far does the mathematics program go? What percent of the students take mathematics courses beyond a second year of algebra and 1 year of plane geometry? Are they taught calculus? In the foreign language field, what percent of the students take 3 or 4 years of foreign languages? How much writing is done in the English classes?

While it is possible to develop an ideal hypothesis about the quality of education, the task of implementation is enormous. It was attempted in a study of the public schools in the St. Louis city-county area.²⁰ This quality index was composed of six subindexes:

A =number of teachers per 100 pupils in average daily attendance.²¹

B =number of college hours of average teacher.

C =average teacher salary.

D =percent of teachers with more than 10 years of experience.

E =number of high school credit units.

F =percent of high school seniors entering college.

In this index, A is supposed to reflect class size, B , C , and D quality of teaching staff, and E quality of teaching program. It is true that F is not an ingredient of good education. Instead it is a way of crudely approximating an achievement-native ability comparison. It may, however, be a better measure than appears at first glance. It is widely assumed that whether a high school senior enters college depends mainly upon the financial situation of his parents. Yet the rank correlation coefficient measuring the relation between percent of high school seniors entering college in 1955 and average assessed valuation of the 27 school districts, which were considered in this case study, is +0.34, and is statistically barely significant at an α of 0.05. This low correlation may have a number of causes. College education has become more and more universal and is no longer available primarily to the sons of the well to do. Also, school districts are not entirely homogeneous in regard to property values. And finally, assessed valuation is not only the product of residential property values, it is also affected by the relative importance of commercial and industrial property located within the district.

Another subindex tried was one reflecting average capital expenditure per pupil in average daily attendance for the past 4 years. As

²⁰ For detailed discussion, see Werner Z. Hirsch "Measuring Factors Affecting Expenditure Levels of Local Government Services" (St. Louis: Metropolitan St. Louis survey, 1957), 94 pages.

²¹ Teachers per 100 pupils in average daily attendance and average teacher salary are usually expected to be highly correlated with the general level of expenditures. An analysis revealed that the correlation, while high, is far from perfect. It is +0.71 in the first case and +0.68 in the second case. Both are not very high. Thus, the inclusion of factors A and C in the scope and quality index appears warranted.