Instead of measuring the productivity of our public primary and secondary schools in any direct manner, an indirect method might be tried. It would move along the following lines: time series data of current education expenditures plus debt service would be so adjusted and standardized that price level and variety, scope, and quality of education—to the extent that they affect expenditures—are held constant and are expressed in per pupil in average daily attendance terms. This series could be called education costs in constant terms. It could trace over time cost changes of a given bundle of public primary and secondary education. But it can also testify to productivity changes. For example, should education costs in constant terms have consistently fallen, it stands to reason that productivity increases would have occurred and vice versa.

While it is not too clear whether and, if so, how much productivity in Government in general increased, it is even more difficult to assess the productivity increases in public education. Many of the forces that apparently work in general State and local governments do not work in education. Thus, for instance, electronic computers have not been introduced nor do they warrant introduction; likewise, ad-

ministrative improvements appear to have been minor.

While we cannot identify many steps taken in the past with a view to improving productivity, a few new methods have recently been discussed and tried. Perhaps the most important one is television. The Ford Foundation and the Fund for the Advancement of Education have been instrumental in experimenting with what has been described as the most important new educational tool since the invention of movable type. In their May 1959 report, "Teaching by Television," Ford Foundation and the Fund conclude that—

Today the question is no longer whether television can play an important role in education. That question has been answered in the affirmative not only by the experiments supported by the Fund and the Foundation but also by the many other programs in which the medium is being used successfully for direct classroom instruction. The question that now needs fuller exploration is what kind of a role television can play most effectively \* \* \*

Television can play most effectively. \* \* \*

Television can be used—and in some places is being used—to do the traditional job of education, and to do it well. However, those who have had experience with the medium know that, if wisely and imaginatively used, it also can bring to students educational experiences far beyond what is possible in the conventional

classroom. \* \* \*

Also, television makes possible exciting new developments in the team approach to teaching, in which the particular skills and competencies of many teachers are used cooperatively in planning and presenting courses. The status and rewards of teaching can be vastly enhanced by this new medium.<sup>16</sup>

Another method that can possibly increase productivity in schools is the use of teachers' aids, who are employed to relieve teachers of such burdensome and nonteaching chores as compiling attendance records, collecting various kinds of contributions and fees, cleaning blackboards, watering plants, etc.

To make fuller use of the physical plant, the length of the school term has been expanded. Some schools are beginning to have summer sessions. Some are considering a four-quarter system. The entire school year would be divided into four school quarters; schools would be open all year and students would attend any three quarters they choose. If this is successful, the present physical plant could thus accommodate as much as one-third more students.

<sup>&</sup>lt;sup>16</sup> Ford Foundation and Fund for the Advancement of Education, "Teaching by Television" (New York 1959), pp. 60-61.