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The Condition of Education is an annual statistical report prepared by the National Center for Education Statistics, Department of Health Education and Welfare, for submission to Congress on March 1 of each year. The first edition was issued in 1975. The report was mandated by Congress in the Education Amendments of 1974. The Amendments created the National Center for Education Statistics, formerly a branch of the U.S. Office of Education, as a separate agency, attached directly to the DHEW Assistant Secretary for Education and serving both the National Institute of Education and the Office of Education as well as many other public and private users of data. They directed NCES to complete several specific studies, examining such problems as impact aid, safe schools, and athletic injuries.

The Amendments require an annual statistical report on the condition of education. NCES was assigned the task of preparing the report, though the content and organization of the report were not precisely specified. The authorizing legislation. directs that the Assistant Secretary for Education. of the Department of Health, Education, and Welfare, submit to Congress on March 1 a report which:

"(A) contains a description of the activities of the Center during the then current fiscal year and a projection of its activities during the succeeding fiscal year;

"(B) sets forth estimates of the cost of the projected activities for such succeeding fiscal year; and

"(C) includes a statistical report on the condition of education in the United States during the two preceding fiscal years and projection, for the three succeeding fiscal years, of estimated statistics related to education in the United States.

In selecting a format and focus for the report, previsous work by the federal statistical system to develop and periodically report indicators of social well being was a major influence. The OMB chartbook, <u>Social Indicators 1973</u>, provided a useful model for style, organization and presentation as well as content and emphasis. A chartbook form of presentation was selected as an efficient means of communicating detailed statistical information in an easily-assimilated format.

Two editions of the Condition of Education have now been issued. This presentation reviews the report as it currently is, raises some of the questions in designating content and choosing presentation, and then considers possible areas of change.

Organization of the Report

The full report contains a statistical report on the condition of education in the United States and a statement of the program and plans of the National Center for Education Statistics. It is to the statistical portion of the report that the following remarks are directed. The report consists of chapters with text and charts, with all tables supporting the charts appearing together in a separate section.

The chartbook portion of the report is presented in two parts. The first part, consisting of three chapters, presents a <u>core</u> of statistics chosen to provide an inclusive, if sketchy, view of education. The second section of five chapters presents more detailed information on selected information on selected topics, with the choice of topics to vary from year to year. This organization was chosen to provide a variety of content in the publication while responding to the demands of an annual publication schedule. Efforts are made to provide comprehensive statistics on educational offerings, participants and outcomes, balanced in coverage overtime but not necessarily in a single year. Special emphasis chapters in 1976 examined the following topics:

Postsecondary Education Participation Relationships Between Education and Work Education Personnel Elementary and Secondary School Finance International Comparisons of Education in the United States and Other Countries

Each chapter contains descriptive text interspersed with groups of charts. Depending upon the chapter, the text may parallel, complement, or extend the information presented in the charts. A "running commentary" is provided in the form of one-sentence statements accompanying each chart.

Content

The report has the responsibility of informing the Congress as to the condition of education. Selection of content to fulfill this responsibility requires resolution of the antecedent issue of audience definition. The report obviously is intended for persons with some interest in education, but within that large and heterogeneous group it is possible to designate as a primary audience those persons who make decisions which have a direct impact on the content and consumers of educational services. This audience includes representatives of many groups and institutions: Congress and Congressional staff, Federal agencies concerned with education, State education agencies educational institutions, and boards of education. Note that this enumerations leaves out several groups. The reports furthermore is not intended to serve directly the more specialized needs of educational researchers. In summary, the report is a statistical report intended for use not only by statisticians but also by many lay persons and educators who may or may not possess some statistical sophistication.

Given a heterogeneous audience, some deci-

sions were made about content. The report contains many descriptive statistics which can not be considered "indicators": enrollments, degrees, expenditures. It also contains several statistics that are indicators: the high school graduation rate, participation rates in higher education, performance on particular exercises. It was believed that those statistics which describe directly educational services and educational results should necessarily be included, even though they did not meet a formal criterion as indicators. Making this choice of entries required selecting from many available statistical series (and having to approximate desired but non-available series). A core of statistics were selected which include information on participants in education, characteristics of those participants, returns participants receive from schooling, educational offerings and the institutions which offer them, and the costs of providing educational experiences.

The report presents information about education together with statistics describing the larger societal context in which it occurs. It is in the breadth of coverage that this report differs from some other describing education. The report includes statistics on the population, the economy, the labor force, and public opinion on a variety of topics.

The measures used to describe inputs, processes or outputs of education should be sensitive to changes over time and should provide some basis for establishing whether conditions are improving wor worsening. Systems of monetary accounts which trace economic performance provide enviable but as yet unattainable models for reviewing changes impacting on education. In lieu of derived measures, simple time series statistics are used currently. Unfortunately, series data exist for some, but certainly not all, of the variables which might be identified as important. Series data are often readily available to portray characteristics of institutions, yet do not exist to describe persons and their interactions with those institutions.

The report does not sponsor data collection efforts. It is a compilation of published and unpublished descriptive statistics drawn from NCES surveys and many other government and nongovernment sources. In the 1976 edition, onethird of the entries were from sources outside of NCES. This of course raises the problems which derive from the presentation of non-comparable or not - quite - comparable statistics. The report has been deliberately limited to a presentation of data which have a national base. Some statistics are presented for States or regions, but are provided for the purpose of delineating the condition of education at a national level or the scope of the federal role in responding to educational needs. Disaggregations are thus intended to identify particular areas of change, in order to evaluate impacts of national policies or review those under consideration.

Presentation

The <u>Condition of Education</u> differs from the first OMB Social Indicators publication in several ways. It is instructive to review three aspects of the report in comparison with the earlier OMB report:

- (1) graphical presentation
- (2) discussion of statistical properties of presented data
- (3) analysis and interpretation of data

Graphical presentation. The range of graphic styles chosen for the first two editions has been deliberately limited to ensure (hopefully) accessibility to a large audience which includes laymen and policy makers. Consequently, several candidate presentations have been omitted. The book is comprised of simple bar charts, line graphs and, in the 1976 edition, percentage distributions over time, cumulative distributions over time, and histograms. Missing are growth rates, semi-log scales and regression equations. One might ask whether such self-imposed restrictions are appropriate. Such bland treatment of the data may render the report limited in utility. The statistical sophistication of the general readership is an important unknown here, and perhaps the report has been unnecessarily cautious. While Condition of Education, 1976 did go beyond Social Indicators, 1973, attempts to offer more detailed graphic presentations would seem desirable.

Discussions of Data Characteristics. The Condition of Education has only in special cases presented information describing the characteristics of a data base or the means by which the data were gathered. The 1976 edition contained descriptive discussions of five of the data bases from non-NCES sources used in the report. A more comprehensive set of notes describing the data sources is needed, and more complete discussions of data will be provided in future editions.

<u>Analysis and Interpretation of Data</u>. The Condition of Education is intended to present statistics describing American education in a context which will permit interpretation and contribute to the data base for decision making. Considerable emphasis has been given to presenting current statistics. Such an emphasis runs counter to attempts to conduct <u>sophisticated</u> analyses of data. Trend analysis is possible, but detailed studies will necessarily not be analyses of the latest data.

Aside from the problem of time constraints deriving from data availability and production schedules, plans for the future do call for more analytical report, to the extent that this is possible. It is hoped that some analyses will be conducted specifically for inclusion in the report.

Summary

The <u>Condition of Education</u> is a report still in its infancy. Improvements in data collection and timely reporting, graphical techniques, and analytical capability should all be expected to contribute to improved reports in the future. The process of preparing the report is in itself instructive, identifying those areas where either data gaps or methodological deficiencies impede our ability to report effectively and usefully on the condition of education.