

NEW DEVELOPMENTS IN EDUCATIONAL STATISTICS
Summary or Roundtable Discussion

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Participants, named at the end of this summary, represented a wide range of interests: the evaluation of local school-district educational programs, the projection of the supply and stock of nurses in the future, the adequacy of a state-wide educational statistics program, the development of a research program to serve a variety of planning and administrative needs, and finding ways to improve the Federal statistics program in education. While all of these interests were not equally served by the discussion, each contributed to the exchange of information and ideas.

The demographic "stock and flow" model (1) was briefly presented and the attempt to assess its application to U.S. data on education was discussed(2). Examples of the use of the Life Table model in producing various educational statistics -- educational expectancy, years of education remaining for a given age, etc. -- were cited as examples of the application of other demographic models to educational data (3). References to demographic models were provided the discussants (4).

Since several of the group were interested in longitudinal studies, the methodological work underway by the Committee on Methodology of Longitudinal Research of the Social Science Research Council was cited, and information was provided the discussants on access to these developments. This included a copy of the "Longitudinal Methods Bibliography", assembled by the Committee (5).

Of particular interest were the six projects supported by the National Institute of Education, each focusing upon various issues in longitudinal analysis: analysis of qualitative educational data, methodological problems in educational research, "developmental-educational considerations", evaluation research from a "general systems perspective," and others. The source of additional information on these developments was provided to the group (6).

Of particular interest was the Nesselroade-Baltes project, "Developmental-Educational Considerations in Longitudinal Research Methodology," which is developing a technical manual of methods of designing and analyzing data from longitudinal designs in the social sciences. The manual will consist of eight or ten chapters, each prepared by a different author, or authors, especially for the manual. The volume is expected to contribute significantly to the methodology of longitudinal analysis (7).

There was some comment, also, on data from the National Assessment of Educational Progress, the release of NAEP data tapes, and related matters (8), and the release of data from the National Longitudinal Study of the High School

Class of 1972.

Since the present status and immediate future plans for much of the work in progress by the Federal government on education, particularly the studies of the National Center for Educational Statistics, are contained in Part 2 of the most recent (1977) issue of The Condition of Education, the discussants were referred to that volume, and a copy provided them (9).

Representatives from the U.S. Bureau of the Census and the Statistical Policies Division, U.S. Office of Management and Budget, present for the discussion, reviewed the prospects for new or improved developments in educational data from the standpoint of their agencies.

Participants in the discussion: Robert J. Cruise, Andrews University (Mich.); Carole Perlman, Chicago Board of Education and Roosevelt University; Aleda Roth, American Nurses Association, Kansas City, Mo.; Larry Suter, U.S. Bureau of the Census; Amanda Kautz, Hawaii State Manpower Commission; Khazan Agrawal, Chicago Board of Education; Kathy Wallman, U.S. Office of Management & Budget; Jack P. Kornfeld, ITT Research Institute, Chicago; Samuel T. Mayo, Loyola University, Chicago; Abbott L. Ferriss, Emory University, Discussion Leader.

References

- (1) United Nations, Department of Economic and Social Affairs, Towards a System of Social and Demographic Statistics, Series F, No. 18, New York: United Nations, 1975.
- (2) "A Test of Demographic Accounting Methods with U.S. Data on Education," Abbott L. Ferriss, Principal Investigator, National Science Foundation Grant SOC76-17387 to Emory University.
- (3) Abbott L. Ferriss, "Trends in the School Enrollment of Females and Consequences," paper presented at the annual meeting of the Population Association of America, St. Louis, April 21, 1977, MS.
- (4) "References on Demographic Models Applied to Educational Data" (Ditto).
- (5) "Longitudinal Methods Bibliography: Papers Received by the Committee on Methodology of Longitudinal Research, Social Science Research Council," June 1977, available from SSRC, 650 Third Ave., New York, N.Y., 10016 (mimeo).
- (6) "List of Projects on Longitudinal Models Supported by National Institute of Education," (Ditto); additional information available from Carlyle E. Maw, National Institute of Education, Dept. HEW, Washington, D.C., 20208.

- (7) "Overview of Project, Developmental-Educational Considerations in Longitudinal Research Methodology," (NIE-C-74-0127), Principal Investigator John R. Nesselroade and Paul B. Baltes, The Pennsylvania State University.
- (8) "User Tapes," National Assessment of Educa-

tional Progress, Education Commission of the States, 1860 Lincoln Street, Suite 700, Denver, Colorado, 80295.

- (9) Shirley A. Radcliffe, The Condition of Education (1977 edition), part 2 (NCES 77-400) Washington: U.S. Government Printing Office, 1977.

DISCUSSION MEASUREMENT OF PUBLIC WELFARE STATUS

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BACKGROUND: The macrohousehold income structure can be divided into five social systems: (1) employment, (2) social insurance, (3) welfare, (4) capital income, and (5) inter-intra household transfers. (Reference 1) The tax system encompasses all of these components. The discussion attempted to identify work needed to improve the public welfare statistical system covering such public assistance programs as the Aid to Families with Dependent Children (AFDC), Medical Assistance (Medicaid), Supplemental Security Income (SSI), Food Stamps (FS), certain social services (SS) categories, and the Work Incentives (WIN) programs. Compared with other components, e.g., the employment system, the public assistance statistical system can be significantly improved.

Detailed program descriptions are found in reference 2. According to reference 3, these programs involved total expenditures of \$54 billion in FY 1976. About 66 percent of the total were Federal transfers, with the rest coming from State and local governments. Approximately 25 million beneficiaries participated in one or more of these programs.

We need to know the operating characteristics of these programs to understand statistical reporting problems. Some of these are: (1) Assistance programs are fragmented. Coordination efforts to reduce overlaps are difficult to implement effectively. (2) Since programs involve Federal, State, and local government participation, management becomes complicated because of competing priorities generated from legislative and administrative initiatives. (3) States' administrative structures for collecting and reporting data vary, e.g., State-administered versus county-administered operations. (4) Wide variations exist among States in channeling program funds, e.g., some States operate mostly through public agencies while others use contractors. (5) Priorities on information needs are always evolving because of legislative and administrative mandates. (6) Data processing capabilities of State agencies vary widely. Financial and grant award processing are given higher priorities than statistical reporting. (7) Although some States have privacy laws, others are still developing such legislation. (8) Because of complexity of program operations, the ideal integration of financial, cost, and performance data for planning and managerial purposes is not practical.

These complex institutional arrangements, the lack of adequate analytical models (probably due to paucity of integrated data), the lack of adequate resources and difficult coordination and administrative problems encountered in producing data are important analytical considerations.

The writer believes that the production or supply side in generating data on public welfare assistance should have higher attention than the demand side on data needs. Thus, States need help in establishing computerized sample data files to generate adequate State data. National data could be consolidated from such sample State data. A project is currently under way in the State of Texas to test this concept. (Reference 4) In addition, better information on target eligible populations is required from general purpose sample surveys on households.

Other priorities include establishment of strong Federal-State-local government statistical cooperative systems, development of State confidentiality laws, formulation of minimum data sets, and standardization of data elements used by State agencies.

Finally, we need to develop a public assistance transaction accounts system which can trace the flow of transfer payments between and among different public welfare assistance program category populations, with appropriate accounting for multiple beneficiaries. (Reference 5) This social accounts system could also include social progress indicators.

DISCUSSION: Items discussed can be divided into four major headings. The first dealt with the need for better coordination and interchange of information among users and producers of general purpose household surveys and censuses, which provide data used to estimate low-income households and welfare programs' eligible population. These sources cover the Decennial Censuses, the Current Population Survey, the Survey of Income and Education, the Consumer Expenditures Survey, etc. Participants expressed the need for better documentation of User Manuals especially for public use samples, for more interchange of ideas between users and producers in forums such as CPS Workshops to take wider account of users' needs and problems, etc. It was also noted that