The question, "How many people are enrolled in public school adult education?" is presented. The current survey on Adult Education in the Public Education System is one of several surveys. Adult education is defined here as "organized instruction to meet the unique needs of persons beyond compulsory school age who have interrupted or completed their formal full-time schooling." In this survey, each state was asked to complete separate forms for adult education administered by departments of education and for those by community colleges. A list of federally funded adult education programs was compiled for comparison purposes. Data requests were limited to two items: numbers of students and numbers of teachers. Respondents were asked to rate the adult education programs for which they provided data to indicate whether the purpose was primarily or secondarily for basic education, high school diploma, occupational training, general or college subjects, or other. By a comparison of this survey with other surveys, figures are obtained. (CK)
Introduction

Everyone wants an easy answer.

One would assume that it should be easy to give an answer—to be able to say, "There are so many people enrolled in adult education." Then the question is, "How many of those people are enrolled in public school adult education?" It would seem logical that one could add up the figures from all the States to get a total for the Nation. But when you ask the States how many people they have in adult education, they want to know, "What kind of adult education?"

Then, when reviewing previous public school adult education reports, you find two surveys for the same year with about the same totals you may be surprised and dismayed to learn upon close inspection that the parts that make up those totals are very different. If you are curious and take the time and trouble, you may find that by adding the best of the parts from the two different sets, you can come up with a new total that probably is more nearly right than either of the two sets on which you based your investigation.

Or take another case. You collect your data on adult education enrollment, and then try to present them for maximum usefulness to the user. Simple national totals show a relatively small percentage increase from one year to the next. But the percentage increase grows to one and a tenth times as large when analyzed in terms of the average State, and burgeons more than two and a half times as great when calculated for the average of all the adult education programs in the country.
Then the percentage increase more than triples when figured for the average program in the average State.

Obviously, there are many different ways to interpret public school adult education data. The answer is not easy.

Nevertheless, we try to find an answer—or several answers for different users and different uses.

History

The current survey on Adult Education in the Public Education System is one of several adult education surveys conducted in the Adult and Vocational Education Surveys Branch in the National Center for Educational Statistics in the U.S. Office of Education. The umbrella over all of the adult education surveys in the Branch is the survey on Participation in Adult Education. I told you about that survey at our conference last year. The Initial Report was published and distributed to most of you last fall. The Participation survey collected information from people across the country about what they were taking in the way of adult education. Other adult education surveys in the Branch go to the institutions to learn what they are offering and to whom. There is a survey on Adult Education in Colleges and Universities and another on Adult Education in Community Organizations. The one we are discussing here is for Adult Education in the Public Education System.

Need for the current data on adult education in the public schools was discussed at the 1968 meetings of the National Association of Public School Adult Education. As a result, the U.S. Office of Education was asked to do the survey and a task force from the National Council of State Directors of Adult
Education was appointed to provide advice.

Three special public school adult education statistical surveys have been produced by the U.S. Office of Education in the past. The first, in 1947 by Homer Kempfer, was a State-by-State survey of school districts in communities with certain size populations. The second, in 1956 by John Holden, was a survey of State departments of education supplemented with data from the vocational education digests. The last, in 1958 by Marthine Woodward, was not done by State but was a national survey of school districts with elementary-secondary enrollments of certain size.

Since 1925 there have been adult education data in the biennial "Statistics of State School Systems." These reports vary in the number of States included.

Professional associations have conducted public school adult education surveys from time to time: the Adult Education Association for 1952; the National Education Association for 1952, 1968, and 1969; the National Association of Public and Continuing Adult Education from 1965 to the present; the National Opinion Research Council for 1962; and the Council of Chief State School Officers for 1966.

It is difficult to compare any of these surveys with each other. They have different bases for data collection; they have different coverage (for instance, including or excluding adult vocational education, community college adult education, cooperative programs; or not providing for duplication).

With no precedent to follow and with the most recent USOE survey ten years old, it seemed desirable to develop an "introductory" survey. This would help States realize the extent of adult education activities in their area through reporting current statistics.
Development of the Survey

Adult education is defined as "organized instruction to meet the unique needs of persons beyond compulsory school age who have interrupted or completed their formal full-time schooling."

To make the national survey as easy as possible and to keep the number of respondents to a minimum, it was decided this survey would be State summaries.

Because adult education is administered differently in different States, States would be asked to complete separate forms for adult education administered by departments of education and for those by community colleges.

As a device for collecting data which could be compared, a list of Federally-funded adult education programs was compiled. This was done by going through the two reports prepared in 1967 by Greenleigh Associates for the President's National Advisory Committee on Adult Basic Education and on Extension and Continuing Education and selecting those adult education programs for which public school systems were eligible. The initial list of 55 was cut by the task force to 24 programs more or less common among the States.

To complement this Federal section of the form, provision was made to write in State-sponsored and locally-sponsored adult education programs.

Respondents were to be asked to rate the adult education programs for which they provided data to indicate whether the purpose was primarily or secondarily for basic education, high school diploma, occupational training, general or college subjects, or other.

Data requests were limited to two items: number of students and numbers of teachers. Even two items became complex when they were broken down into full-time and part-time for two successive years: 1968-69 and 1969-70.
The task force circulated the draft survey instrument to a few potential respondents for review. After it met their approval and was cleared, the form was mailed to the States in April 1970. The last return was received almost a year later.

Data Collection, Tests for Adequacy, and Hand Processing

In the meantime, there was intensive followup with the States to get them to assign coordinators to collect the statistics from the various sources within the State and prepare the data for submission to the U.S. Office of Education. Of the 57 coordinators from the States and Outlying Areas, two-thirds were adult educators; the other third was from statistical or vocational services.

When about 75 percent of the returns were in, four tests were run to assess the adequacy of the data. The first checked comprehensiveness in completing the survey form—the notion being that attention to the several items of information requested would indicate the degree of confidence that could be placed on the information provided by the States. Scores were given to such things as whether there were an explanatory cover letter, information about duplication, parallel data for enrollments and instructional staff, data for both years, and specific program reporting rather than grouped reporting.

The second test compared 1968-69 figures supplied by the States for this survey with reports for the same year from the four USOE adult education program offices: Adult Basic Education, Adult Vocational Education, Civil Defense Adult Education, and Manpower Development and Training. One finding here, as in the illustrations in the introduction, was that comparison of a State’s individual programs with USOE data revealed greater differences when programs were examined separately than when statistics were summed for all four programs. In other words,
discrepancies in the detail data balanced out when the figures were aggregated.

The third test compared elementary-secondary enrollments and adult education enrollments, each as proportions of State populations.

The fourth test compared returns from our survey with figures for adult education reported to another Branch for inclusion in the publication on "Statistics of State School Systems" for the preceding year.

States were ranked according to differences revealed in each of these tests. Adequacy, gaps, or weaknesses on reporting become apparent.

The four USOE program officers and a sampling of program administrators in other government agencies were consulted for explanations of States reportings.

In the winter of 1970-71 telephone calls were made to each State coordinator to verify, clarify, or supplement statistics submitted. Although some States admitted their reports were not complete, almost all said that figures given were representative of adult education in their States.

Then began the tedious task of hand processing the data. This method seemed appropriate because there were only 57 respondents. Hand processing also permitted flexibility in working with the results of a first-time survey. About 20 worksheets were devised to systematize this job, to organize the data, translate them to percentages and rankings, and evaluate them by rank-difference correlations; 34 statistical tables and approximately 30 text tables were prepared.

**Quality of the Data**

The detailed manner of data collection and the cooperation of States in providing data coupled with the stringent testing and verification procedures resulted in data of seemingly high quality. The quality is particularly impressive considering the ambiguities of the adult education area, the history of previous studies, and the
fact that this was, in effect, a first-time effort.

All the data in the report were provided by the States. No effort was made to change data or supplement them with statistics from other sources. Indeed, there are no known files or reports which could provide statistics for the public school portion of any of the adult education programs.

The data are probably underestimations as a result of incomplete program reporting. Possible underreporting by States can be identified through statistical inferences. The proportion of programs lacking data appears quite small and unlikely to bias seriously any result based on the programs for which data were submitted. Indices on the national level should be solidly based and likely to vary only slightly, if at all, with addition of data on the missing programs. Most indices such as percentages and ratios derive their reliabilities more from representativeness of programs in the survey than from completeness of figures on enrollments and instructional staff. As we said before, all States except one or two asserted that their data were representative, or characteristic, of adult education in their State.

By requesting data for specific programs, the ability to compare adult education statistics from one State to another was enhanced. The request for specific data probably also gained greater cooperation and fuller reporting from the States than would otherwise have been the case. This is a feature unique to this survey.

As indication of data quality is the relationship of adult education statistics to other statistics. For the 50 States and D.C. the correlation between adult education enrollment and population was +.88, quite high considering that a perfect relationship was not necessarily expected.
With reassurances about the reliability of the data, they can be presented with confidence. The challenge then becomes one of how to arrange the adult education statistics for maximum usefulness by the users.

Design of the Report

Since this is essentially a first-time survey, there were no precedents inhibiting the presentation of the data. Creativity and innovation are balanced by practical considerations. Previous studies provided clues about some findings to expect. Several guidelines indicated specific data would provide more insights about adult education than general totals—the latter tend to camouflage or cover significant revelations.

With these things in mind, the report was designed to present all the critical information in the same order that the data were elicited on the form. The flow is from administration of adult education to enrollments, instructional staff, ratios of students to teachers, and descriptions of programs. Sets of statistics are given for Federal, State, and local governmental levels of sponsorship; for 27 selected Federally-funded programs; for four USOE programs; for community and junior college programs; and for cooperatively offered programs. Enrollment, staff, and ratio figures are shown for full-time, part-time, percent of part-time to total, and change from one year to the next. Statistics are given State-by-State, for Outlying Areas, for the average State, and for the Nation.

To place adult education statistics in context, to aid in understanding them, the adult education statistics are related to each other and to outside data. Though only a few kinds of analyses are given, they illustrate how the data can be used. Adult education figures are compared with State population;
enrollments in elementary, secondary, and higher education; average size of school districts; and adult education statistics in 1947-48 and 1956-57. Also, a State's adult education statistics can be viewed in relation to other States in the same population size group.

The data in the statistical tables and the analytical tables are intended to serve immediate needs and to be provocative for further analyses by the users.

Two Methodological Exercises

Two methodological exercises may be of particular interest to adult education researchers. We alluded to these in the introduction.

The first exercise compared two 1947 studies conducted by the U.S. Office of Education State-by-State: Homer Kempfer's Adult Education Activities in the Public Schools, and the biennial "Statistics of State School Systems." Kempfer's survey showed 2,128,877 adult education enrollments and the biennial showed 1,990,005. The total figures are fairly close, the biennial being only 6.5 percent less than the Kempfer figure. However, perusal of the State-by-State numbers revealed wide differences. Somehow the discrepancies for each State were so patterned to largely cancel themselves out to give reasonably similar national estimates.

A State-by-State analysis was done using the Kempfer data for the 48 States and D.C. as a base, ignoring the direction of the differences by forgetting about pluses and minuses, and focusing instead on the magnitude of the differences. The percentage difference for each State was obtained, summed for all States, and divided by 49 to yield an absolute percentage difference for the average State of 129.6. Only two States, Florida and Maryland, had an absolute percentage difference no greater than 6.5. The similarities of national totals for the two studies could mislead one to infer comparable similarities in estimates among the States.
For a more reliable figure, a new national total was derived from the Kempfer survey and the biennial survey whereby use was made for summation of the higher of the two numbers for a State. The resulting total was 2,764,403, or 30 percent more than the original Kempfer total of 2.1 million. This suggests that both Kempfer's survey and the biennial survey were conservative approximations.

A similar technique of working with increasingly finer detail was used for the second exercise with 1968-69 and 1969-70 data from the current survey. For the 27 Federally-funded adult education programs, the percent increase from 1968-69 to 1969-70 for total adult education enrollments for the Nation was 5.9. However, based on State-by-State changes, the average percent increase is 6.2 or 1.13 times the national total. By focusing on programs the average percent increase is 16.5, or 2.86 times the increase for the national total. By examining the enrollment increases as a function of the States and the programs, the average percent increase in adult education enrollment for the average program for the average State is 19.0, or 3.2 times the increase for the national total. Thus, the percentage increase can be 5.9 or 6.7, or 16.5, or 19.0 depending on how detailed the data are from which percentages are figured.

Conclusión

In an effort to shed as much light as possible on the little understood area of adult education in the public education system, the current survey presents tables of data telescoping from the general to the specific.

The easy answer is given. But before accepting it, the critical reader should examine the detail.