This article provides a brief review of the genesis of the National Education Goals and considers the role of the National Center for Education Statistics (NCES) in monitoring progress toward them. Reform movements began the call for back to basics in the 1970s. The emerging debate among educators, business and professional leaders, policymakers, and parents led to the 1989 Education Summit of President Bush and the governors. At the Summit a broad vision of educational goals was set forth, and the National Education Goals Panel began the work of defining specific national goals. The NCES is faced with the problems of determining what policymakers need to know and finding a way to collect this information. The problem of measuring dropouts exemplifies the complexities of the task faced by the NCES. In addition to definition and measurement, the NCES provides extensive technical advice. Assisting policymakers to understand what is measurable and in what ways is a role statistical agencies are uniquely able to perform. (SLD)
[EDITOR'S NOTE: The approaching turn of the millenium -- the year 2000 -- has become a focal point for initiatives in numerous areas of economic and social concern. In the last three issues of Chance, WINDOW ON WASHINGTON has featured discussions of initiatives underway to plan for the Year 2000 Census, and activities and issues related to "monitoring the Nation's Health Objectives for the Year 2000." To discuss challenges for those charged with measuring progress toward meeting the Nation's education goals for the year 2000, I am pleased to welcome as guest columnists John Burkett, Senior Analyst, and Jeanne E. Griffith, Associate Commissioner for Data Development, National Center for Education Statistics. (The views expressed are those of the authors, and do not represent views or policies of the U.S. Department of Education.)]
Setting goals -- "By the Year 2000..." -- has become a fashionable enterprise at the national level, and with it has come the task of finding ways of measuring whether (and to what extent) national goals are being achieved. That task falls, for the most part, upon the shoulders of statistical agencies. The endeavor requires that we have some knowledge of the present state of affairs and a sense, a vision if you will, of what would be better. In theory, it is all simple and straightforward; in practice, the work is daunting. This article provides a brief review of the genesis of the National Education Goals and considers the role of the National Center for Education Statistics in monitoring the nation's progress towards achieving them.

The Condition of Education. A brief historical perspective sets the stage for current initiatives. The United States has long prided itself on striving to provide universal education. In 1910, 13.5 percent of those twenty-five and older had completed at least a high school education; by 1990, 85.7 percent had done so. Nearly 3 percent of those twenty or older had completed four or more years of college in 1910; by 1990 that figure had jumped to just over 23 percent. These statistics attest to no small achievement.
But during the 1970s a growing dissatisfaction with the quality of American education emerged. Popular books discussed "Why Johnny Can't Read". Professional literature documented declining student performance on tests of academic achievement. Even as the American dream of universal education seemed to have been realized, we came to recognize that while more and more American children go to school and complete formal education, we are not sure that more and more Americans have become well educated. A series of international assessments during this period suggested they have not.

Reform movements began with the call for "back to basics" in the 1970s. In the early 1980s, first with the publication of A Nation at Risk by the U.S. Department of Education and then with the National Governors Association project, Time for Results, an important shift took place in the debates about improving education. Instead of looking at how many students are attending schools and for how long, and at how much was being put into schooling -- at inputs to education -- the governors called for looking at the results of the educational processes -- at outcomes. This shift has suggested fresh questions about what the goals of American education are and should be. The emerging debate among educators, business and professional leaders, policy makers, and parents led to the September 1989 Education Summit of the President and all 50 Governors.

**Education Goals for the Year 2000.** At the Education Summit, a broad vision of goals for American education was set forth; and the nascent National Education Goals Panel
was charged with developing specific goals, designing ways to monitor progress in reaching them, and reporting annually to the American public on the nation's progress toward achieving the goals. That work began immediately after the Summit and culminated in the February 1990 adoption of six national education goals by the Administration and by the Nation's 50 governors. These goals stated that by the year 2000:

- All children in America will start school ready to learn.
- The high school graduation rate will increase to at least 90 percent.
- American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.
- U. S. students will be first in the world in science and mathematics achievement.
- Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
- Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

Measuring Progress Toward the Goals. A fundamental characteristic of the agreed-upon goals is that none states the baseline, starting point on the objective. Given these goals, then, just what is the role of a federal statistical agency in assisting the policymakers in their efforts to monitor progress? The substantial challenge facing NCES in this work is

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that while there exists a wealth of data on a variety of the topics subsumed in the goals, it is not always of the precise kind the policymakers want. Staff from the National Center for Education Statistics (NCES) have been involved as advisors to the groups reviewing the goals and posing alternatives for measuring the Nation's progress toward achieving them. NCES has worked closely with the National Education Goals Panel, securing data for monitoring and advising as appropriate on statistical matters. The nature of that involvement has been extensive, but a single simple example illustrates the important role statistical agencies play.

Measuring Dropouts. Consider the second goal for high school completion rates -- seemingly one of the simplest goals to measure. For the policymaker, it appears a simple matter: add up the number of high school graduates in a given year and divide by those who should have graduated. But just what is a high school graduate? One who receives a regular diploma? A certificate of completion? A General Equivalency Degree (GED)? All of these? Should policymakers address the issue that not all states have the same criteria for graduating? Furthermore, just who "should have graduated"? Is it any 18-year-old (since normally we believe a child begins first grade at age six)? But do all children follow that "normal" path? Clearly some take less time, others more to achieve this goal. What about those who drop out and then return? What about those were held back by their parents on grounds that they did not believe their children to be ready for school at age six (see the first goal)? Indeed, in many States, regulations on school entry age have been modified in recent years to later ages. Depending on the
inclusion or exclusion of these different students in the numerator and denominator, the calculated dropout and completion rates can vary greatly - sufficiently, indeed, to suggest either that the goal has already been achieved or that it may be nearly unattainable under any reasonable scenario.

In this case, NCES set forth the available data sources and clarified what these data could and could not support. Information also was provided about the growing prevalence of delayed entry, often on readiness grounds; on retention through grades; and on the relatively high number of eighteen- and nineteen-year-olds still enrolled in high school. The Panel initially considered measuring high school completion with a highly targeted definition -- including as completers only those who had completed through a traditional program and "on time." NCES examined changing patterns in high school completion, demonstrating that more children, particularly in some disadvantaged groups, were taking longer to complete high school or were availing themselves of the alternative certification methods that have become part of our U.S. system of education. Most of these data already were available in existing NCES surveys and from the analyses of the Current Population Survey's (CPS) October supplements for an annual report on dropouts mandated by the Congress. Ongoing efforts by NCES and the states to develop common definitions of dropouts, a core student record system, and common reporting of high school completions also were noted.

This information was invaluable to the Panel in their consideration of the effects of
deciding what ages and what types of certification to include. Since flexibility and "second chances" have been built into our education system, the Panel finally decided that it was sensible to account for that in their measurement of high school completion and dropout. The Panel, with other outside advice, concluded that progress toward the second goal should be reported in terms of completion by diploma or other certificate (including the GED) for the age groups 19-20 and 23-24. The Panel also called upon the states to cooperate with NCES in the development of a core student record system to improve these statistics for small areas in the future.

Providing Technical Support for Policy Decisionmaking. The example concerning high school completion is but one instance of the ways in which NCES plays a role in assisting the National Education Goals Panel. The goal on school readiness, reflecting strong convictions about the importance of early childhood and preparation for schooling, was adopted without any prior foundations in operationalizing the statistical concept. Here basic conceptual problems must be worked out. The complexity of defining and measuring young children's readiness for school is far greater than that involved in measuring dropouts, and developing and implementing the measures will take commensurately longer.

In addition to definition and measurement, there are numerous issues that influence the design -- and cost -- of supportive survey programs. NCES provides extensive technical advice on issues related, for example, to the periodicity and representation of surveys.

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Though policymakers initially may want information as frequently and for as small populations and geographic areas as technically feasible, when they consider the fiscal implications, their appetites for data typically are tempered. More pragmatic advice on the marginal gains of varying levels of detail then receives consideration.

In providing information to monitor national goals, NCES must also furnish policymakers with a full accounting and evaluation of existing data and possible new data. Beyond that, the agency must clarify the strengths and weaknesses of alternative approaches to measurement. The task is to identify available information and state clearly what it does and does not tell the policymaker about the item of interest. Future possibilities and needs for data collection also should be identified along with their costs and benefits. This work should begin as early as possible in the process of developing goals -- preferably it should play an integral role in the selection and statement of the goals -- and it should continue throughout the process. Above all, this work should be seen as an on-going dialogue with policymakers about how their data needs can and cannot be met. Assisting policymakers in understanding what is measurable and in what ways is a role statistical agencies are uniquely able to perform.