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The Emerging National Policy Agenda on Higher Education Assessment: A Wake-Up Call

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INTRODUCTION

Among the most effective ways of influencing the direction of American public policy is to produce evidence that a crisis exists, then rally public interest and support in addressing the crisis. In her 1961 essay "The Crisis in Education," Hannah Arendt wrote about the great difficulty at that time of mobilizing national attention on the problems in education: "It is somewhat difficult to take a crisis in education as seriously as it deserves. It is tempting to regard it as a local phenomenon, unconnected with the larger issues of the century" (1961, 174). Among the obstacles for Arendt at that time may have been the lack of enough powerful indicators to seize the public imagination and simultaneously provide persuasive evidence of the nation's educational crisis. The growing reliance upon such indicators has proven vitally important and effective during the past decade in rallying public action, shaping national goals, and charting the course of national education policy.

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FOCUS OF THE PAPER

This paper has four objectives: (1) to illustrate the indicators used to reveal the present crisis in American education and discuss their effect on shaping public opinion and elevating education to new national prominence. Some distinctions in how the public views higher education compared to elementary and secondary education are presented; (2) to discuss national education goals and provide examples of how educational assessments of students are being used both as a means to measure the progress of the nation toward achieving the goals and as the most powerful tools for effecting public interest; (3) to discuss the assessment dilemma confronting higher education as the crisis gains national attention; and (4) to propose questions that higher education leaders, scholars and researchers must address in the near future to respond adequately to the growing concern about the quality and value of higher education.

INDICATORS OF THE EDUCATIONAL CRISIS

In 1983 the National Commission on Excellence in Education published its pathbreaking report, *A Nation at Risk*. This commission and the authors of many subsequent reports dramatized the contemporary American crisis of education by such indicators as: the relatively poor performance of America's youth on international standardized assessments; the low performance of American adults on adult literacy assessments; the declining performance of high school graduates on college admissions tests; the poor performance of America's elementary and secondary school students both on state-mandated achievement tests and on the National Assessment of Educational Progress (NAEP); the increasing amount of remedial education offered in universities, the military services, and in the civilian workforce; and the decline in test scores among American college graduates, especially those applying to graduate schools.

A year later, a Study Group on the Conditions of Excellence in American Higher Education published *Involvement in Learning* (National Institute 1984), warning the public about an emerging crisis in the quality and conditions of the nation's colleges, universities, and community colleges after two decades of unprecedented expansion. Two of its issues, which overlapped with those raised in *A Nation at Risk*, have received steady attention in the national policy arena for ten years: improving the preparation of college-bound students, and expanding student access to higher education. *Involvement in Learning* also targeted four issues that have received state and local (rather than national) attention: improving the quality of undergraduate programs, improving the value of college

degrees, increasing the supply and vitality of college and university faculty, and updating the general condition of college and university facilities, laboratories, and infrastructure.

A 1993 report on the status and condition of higher education, *An American Imperative: Higher Expectations for Higher Education,* drew on the talents of a distinguished group of college and university leaders, and public policy leaders. They defined the crisis in American colleges and universities as low and declining public opinion about higher education. Like *Involvement in Learning, An American Imperative* concluded that providing greater access and generating better evidence of student learning outcomes were vitally important for colleges and universities to reclaim public prestige and increased public support for higher education.

Of the recommendations that were presented in *Involvement in Learning* and *An American Imperative,* perhaps the boldest, most progressive, and most controversial called for each college and university in America to set standards for the knowledge and skills that it expects its undergraduates to achieve and then to measure students' actual performance. *An American Imperative* also recommended that colleges and universities develop new forms of assessment that "focus on measuring what college and university graduates have learned, and the knowledge and skill levels they have achieved" (Wingspread 1993, 15). Until recently, higher education assessment was exclusively a state policy issue rather than a national one. In fact, during the 1980s forty-two states enacted assessment policies for their public colleges and universities, either requiring or encouraging colleges and universities to measure their students' learning outcomes.

In 1993, the national government finally began taking action to develop such standards and assessments for college students. In the spring of 1993, the U.S. Department of Education issued a request for proposals for the development of a consensus on the skills that college and university students should be expected to acquire during their college experience. The National Education Goals Panel in August 1993 directed its staff to participate in developing a national consensus on the skills and knowledge that college students should attain by the time they graduate with a baccalaureate degree. The consensus-building process that the Goals Panel envisages for higher education resembles that used in developing the National Assessment of Educational Progress (NAEP), designed for assessing the knowledge and skills of America's fourth, eighth, and twelfth graders.

The national government also established State Post-Secondary Review Programs, as part of the 1992 Higher Education Reauthorization Act. This program requires the U.S. Department of Education to establish

a State Postsecondary Review Entity (SPRE) in each state. Each state SPRE will establish outcomes standards for all colleges and universities within their state that define the criteria they will use in judging the quality of colleges and universities. This action was taken by the Congress in an effort to reduce fraud and abuse of student financial aid, but the standards that the SPREs are required to establish also include such institutional outcomes as student retention and graduation rates, performance on standardized tests, and success of graduates in attaining employment after graduation.

Despite the best attempts by the distinguished study groups and the Congress to dramatize the crisis of declining quality in American collegiate education, they have lacked the critical evidence needed to make a sufficiently substantial case to attract widespread public interest—namely, the test and assessment scores and reports of college graduates and meaningful and reliable retention, progression, and graduation rates. As a result, the public perception remains that the nation's elementary and secondary schools are of low quality, but the problem with colleges and universities is not their quality but rather their costs, accessibility, fraud, and abuse, especially in student financial aid. In short, elementary and secondary schools have captured the public's interest in supporting radical reforms. But, if indeed America's colleges and universities have a crisis in the quality of undergraduate education that goes beyond costs, accessibility, fraud, and abuse, all of which have been suggested by *Involvement in Learning* and *An American Imperative,* the public simply needs more and better evidence to be persuaded.

PUBLIC OPINION AND SUPPORT

Elementary and high school education are regarded differently from higher education by the public. In a 1993 Gallup Poll sponsored by *Phi Delta Kappa,* (Elam 1993), parents of American public school students were asked to use the A-through-F grading system on the public schools in their local community. Only 19 percent gave the public schools a grade of A or B. They did, however, rate the schools that their own children attended much better than they rated the public schools in general; 72 percent gave their oldest child's school a grade of either A or B. Unfortunately, this poll did not ask the sample to rate public colleges and universities so we cannot make any direct comparisons between perceptions of higher education and public schools.

Evidence of higher education's positive national image, however, was revealed in a 1991 poll conducted by the Gallup organization for the Council for the Advancement and Support of Education (CASE). In re-

sponse to the question, "If technology makes Americans more competitive in the world marketplace, who can best lead the way in developing new technology?" an equal percent of Americans indicated that colleges and universities (34 percent) and businesses and corporations (35 percent) are better than the state government (3 percent) or federal government (8 percent). That same poll revealed that the majority of people consider a college degree essential for a good job or career advancement (73 percent compared to 58 percent in 1986).

While a majority consider a college degree valuable and important, however, they do not consider the education that college students receive to be as important nor as valuable as the degree. A 1993 poll conducted by the Public Agenda Foundation for the California Higher Education Policy Center revealed that 62 percent of the public believes that too many employers hire college graduates for jobs that can be performed just as well or better by people without a college degree. These polls suggest that the public's demand for a college degree is associated more with its labor market value than with any intrinsic value of a college education. A majority (64 percent) believed higher education needed to be overhauled, though the need is less than that at the elementary and secondary school levels. But when the public is asked to contrast elementary and secondary schools with colleges and universities, the public simply does not have sufficient evidence to make the appropriate comparisons, nor does the public have sufficient evidence to draw clear conclusions about the quality inside academic institutions or programs.

The public opinion pollster Louis Harris, who has been tracking confidence in public institutions of all types since 1966, reported that only 25 percent of Americans had a great deal of confidence in higher education leaders in 1993, down from 56 percent in 1966. A spring 1993 *Business Week* article stated that "poor teaching, arcane research, skyrocketing tuition, and racial strife are causing America's most valuable economic asset, its colleges and universities, to become less admired." The author, Christopher Farrell (1993), maintained that the costs of tuition, room, and board for private colleges and universities increased an average of 9.2 percent per year between 1980 and 1992—twice the rate of overall inflation; these costs were tarnishing the public's image of higher education. The CASE-sponsored Gallup Poll (1991) revealed that 73 percent of Americans believe that most people cannot afford to go to college.

From such observations, we might conclude that high and rapidly increasing costs could lead to declining enrollments and less public support for the nation's colleges and universities. On the contrary, both enrollments and public funding for higher education have been increasing. During the past decade, public funding has increased at a slower rate

for higher education than for K-12; but enrollments in America's colleges and universities have grown steadily even while the number of both American high school graduates (-7.6 percent) and foreign undergraduate student enrollment (-12 percent) have declined. Figure 1 shows that enrollment in the nation's colleges and universities increased by 16 percent between 1982 and 1991, with every ethnic group contributing: African Americans' enrollment grew by 21 percent, American Indians' by 30 percent, Asian Americans' by 81 percent, Hispanics' by 67 percent, and whites' by 10 percent. Enrollments in America's colleges and universities increased from over 12 million students in 1982 to over 14 million in 1992.

Figure 2 illustrates that the enormous public concern about elementary and secondary reform during the past decade coincides with (and probably caused) higher growth in its public funding compared to that

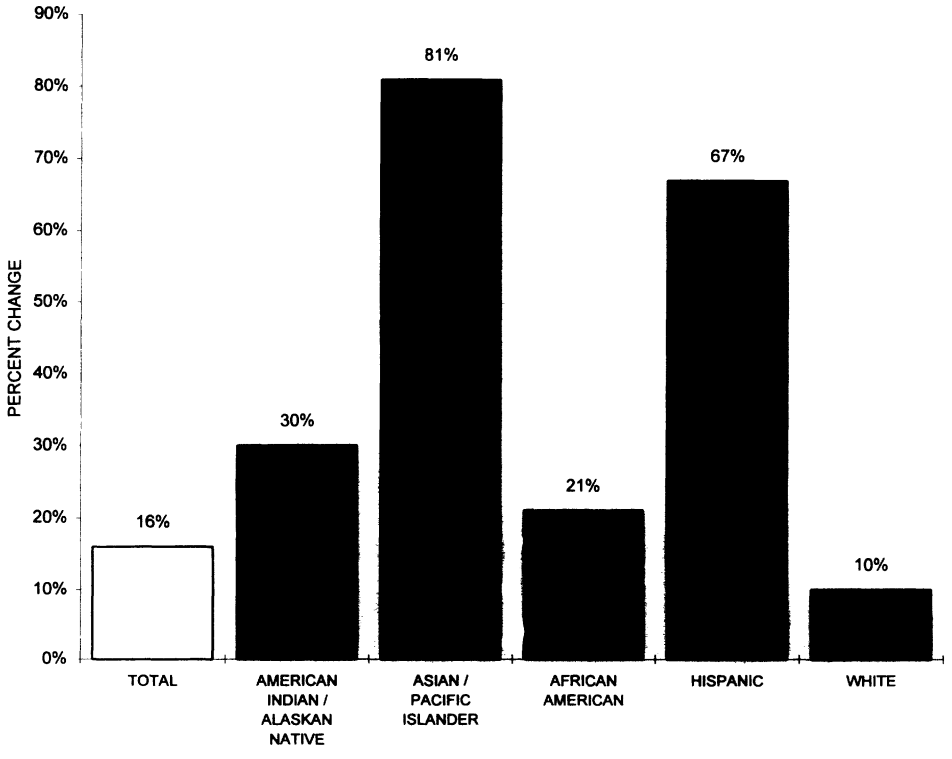

FIGURE 1. Percent change in higher education enrollments 1982–1991.
SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Education*. Washington, D.C.: U.S. Government Printing Office, 1993.

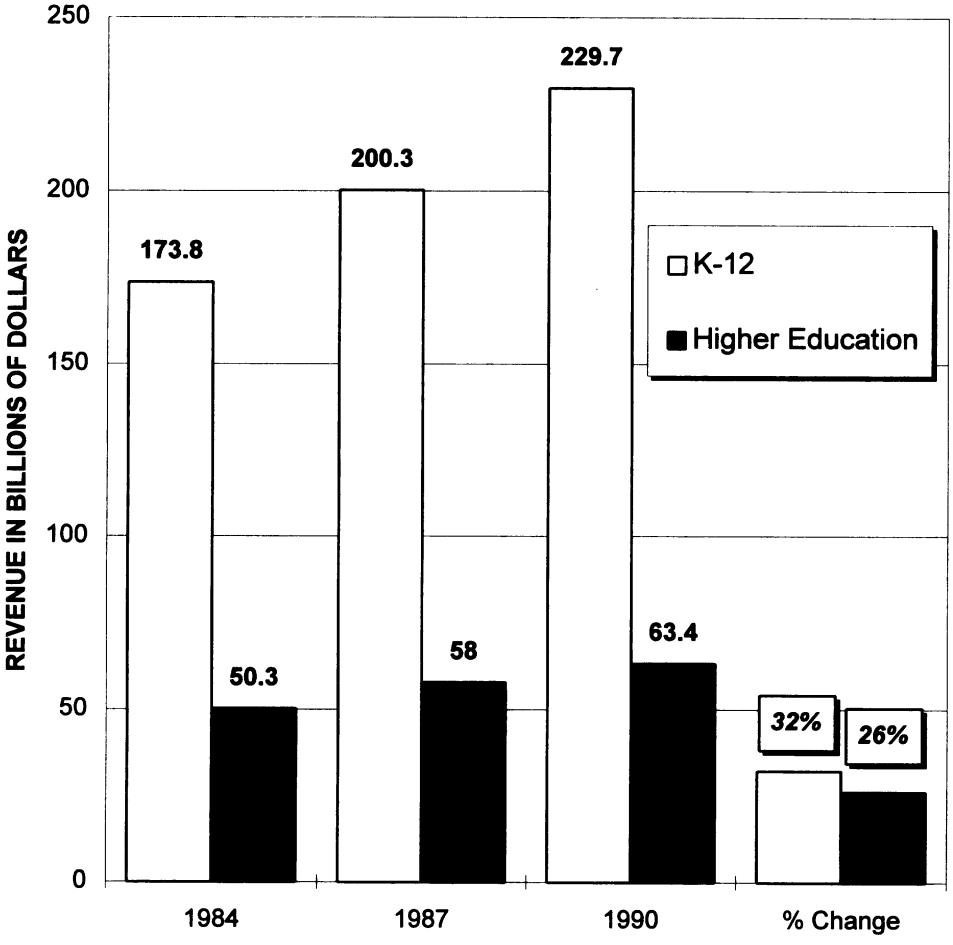

FIGURE 2. Public revenues for K-12 and higher education. (Percent change)
SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Education*. Washington, D.C.: U.S. Government Printing Office, 1993.

of higher education. Public funding for K-12 education increased by 32 percent in constant dollars compared to 26 percent for higher education over the past decade.

Thus, during the ten years following *Involvement in Learning* and the few months following *An American Imperative,* higher education, rather than mobilizing public sympathy and support, has apparently faced greater public scrutiny and mistrust. In addition to being concerned about the relative lag in funding growth trends, the higher education community must pay careful attention to five issues as it seeks greater public support

for and interest in higher education reforms: (1) the poor quality of public elementary and secondary schools, (2) the perception by employers of college graduates that there is no real difference in work performed by high school graduates compared to that of college graduates, (3) the growing cost of higher education relative to the rate of inflation, (4) the declining public confidence in higher education leadership, and (5) the public's uncertainty about the efficiency and quality of America's college and university programs as measured by student retention, progression, and graduation rates.

The most promising and expeditious vehicle for higher education to use in addressing these matters may be the National Education Goals process. The national government has begun to address the issues related to student performance for elementary, secondary, and higher education. But the higher education community is responding with less enthusiasm and interest than K-12. Perhaps the best aspect of the National Education Goals is the annual progress reports which present the results of various assessments of progress toward achieving the national goals. The K-12 response to the national goals setting movement and its involvement in the National Goals assessment process can be instructive to higher education.

GOALS IN NATIONAL EDUCATION

In September 1989, the U.S. President convened a historic national education summit with the fifty state governors in Charlottesville, Virginia. The conference's purpose was to confront the crisis of American education, revealed in *A Nation at Risk* and many subsequent reports. That conference produced six national goals, all to be achieved by the year 2000:

Goal 1: All children in America will start school ready to learn.

Goal 2: The high school graduation rate will increase to at least 90 percent.

Goal 3: 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.

Goal 4: U.S. students will be first in the world in science and mathematics achievement.

Goal 5: 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.

Goal 6: Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

In spite of a long history of national education policies and billions of dollars spent on educational programs, the nation had never before had national goals. Since 1989, two national strategies for achieving these goals have been proposed to the Congress. The first was George Bush's "America 2000." The second was Bill Clinton's "Goals 2000," Educate America Act of 1994. In the process of enacting Goals 2000, the Congress added two additional goals, parent involvement and professional development, bringing the number of national goals to eight. Although the national goals are clearly slanted toward K-12 education, goals 4 and 5 reflect directly upon the quality and performance of higher education.

A consideration of these two goals raises some important questions that higher education scholars, researchers, and administrators must address to generate greater public knowledge, understanding, and interest in higher education.

Goal 4

Colleges and universities may be best suited of any American institution to help "U.S. students . . . be first in the world in science and mathematics." The three objectives defined with this goal are:

> Math and science education will be strengthened throughout the system, especially in the early grades.
>
> The number of teachers with a substantive background in mathematics and science will increase by 50 percent.
>
> The number of U.S. undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.

The nation's colleges and universities are best suited in two ways: first, they have the greatest amount of talent in these relevant disciplines, and second, they prepare teachers for the nation's elementary and secondary schools. If we were relying upon students' views of their own abilities in mathematics and science as the key indicator of achievement, then Goal 4 would not be much of a challenge for the United States. The International Assessment of Educational Progress (IAEP) (Lapointe, Mead, et al. 1992) reveals that American youth generally believe that they are good in mathematics. But their actual performance in science

and mathematics is so woefully low that Goal 4 may be an extremely ambitious, perhaps even impossible, target. And in spite of the best reform efforts by the National Academy of Science, the National Council of Teachers of Mathematics, the American Association for the Advancement of Sciences, and other professional associations to improve standards, curricula, and assessments, there is no foundation for optimism that this goal will be achieved at any time in the foreseeable future.

Among the fifteen nations[1] participating in the IAEP, the United States ranked near the bottom. The leaders were Korea, Taiwan, Switzerland, Hungary, and the Soviet Union. Ironically, the students in these nations felt less confident about their knowledge and abilities than American students. (See Figure 3.) Japan and Germany, two of the leading industrial and technological nations that place great emphasis upon education, were not included in the 1991 IAEP.

The IAEP provides student ratings on a variety of behavioral indicators such as the amount of time spent on homework, the amount of time spent watching television, their access to and use of technology in performing their schoolwork, and out-of-class activities related to their curriculum. The IAEP is very useful for showing where American students stand compared to other nations in both cognitive achievement and some relevant affective qualities, and it is extremely effective in capturing public interest and mobilizing public support for reform.

However, these data are not very helpful in explaining why the various nations rank where they do nor what they can do to improve their absolute or relative performance. The IAEP is limited in identifying strategies to improve quality and outcomes for the following reasons: (1) Its group representative sampling prevents relational analyses that allow identification of connections between behavioral/attitudinal measures and performance measures; (2) Even though many of the nations that participate have heterogeneous populations, the IAEP samples are not stratified by socioeconomic status, curriculum experience, or ethnicity; therefore the participating nations cannot examine the contributions of minority groups or recent immigrants; (3) The content of the assessment is negotiated by the participating countries; rather than representing a common world standard of knowledge and skills reflecting a common world curriculum, the assessments contain items and tasks that students are often not expected to master.

In addition to overall student test scores, the National Assessment of Educational Progress (NAEP) samples, unlike the IAEP, report student

[1]Fifteen out of the twenty participating countries reported comprehensive populations.

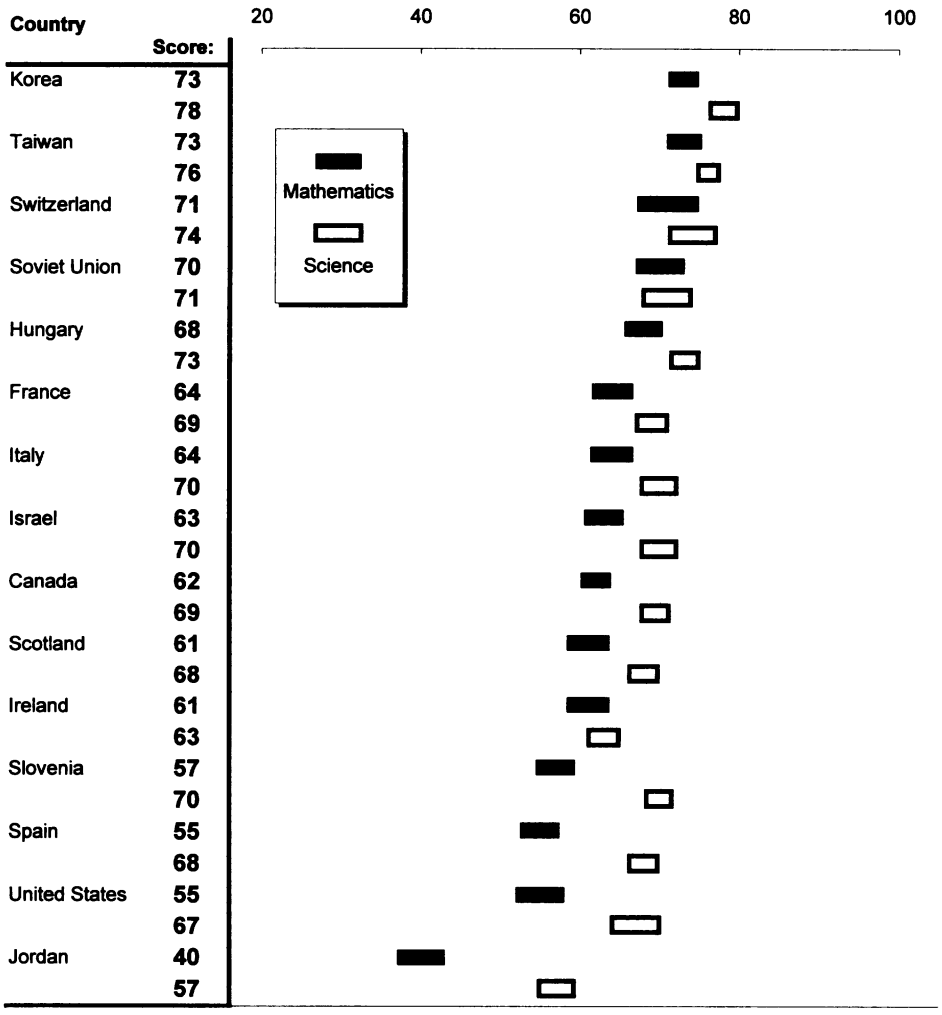

FIGURE 3. Distribution of average percent correct scores in mathematics and science. Average percent correct with simultaneous confidence interval controlling for all possible comparisons among comprehensive populations based on the Bonferroni procedure (the average +/−2.79 standard errors [math] or 2.78 standard errors [science]).

SOURCES: Lapointe, Archie E., Nancy A. Mead, and Janice M. Askew. *Learning Mathematics*, Princeton: Educational Testing Service/IAEP, 1992.

Lapointe, Archie E., Janice M. Askew, and Nancy A. Mead. *Learning Science*. Princeton: Educational Testing Service/IAEP, 1992.

performance by race, sex, and region. Participation in the 1992 mathematics assessment was voluntary, and no state was required to participate. Forty-two states volunteered to be involved in the 1992 mathematics assessment and therefore appear to find value in comparing their state's performance to national standards. Also in 1992, the national assessment Governing Board (NAGB) established achievement levels representing standards the students were expected to achieve. By establishing three achievement levels, Basic, Proficient and Advanced, NAGB has provided the nation with its first national performance standards for fourth, eighth, and twelfth graders.

In 1992, only one quarter of the eighth graders achieved the "proficient" level. By race, these results are even more appalling. Only 3 percent of African Americans and 8 percent of Hispanics reached or exceeded "proficient," compared to 32 percent of whites and 44 percent of Asian Americans. Hence, 97 percent of the African Americans and 92 percent of the Hispanics compared to 68 percent of the whites and 56 percent of the Asian Americans are performing at or below "basic." These data reveal the severity of the crisis in educational quality for early education in the United States overall and the devastating handicaps toward upward mobility of African American and Hispanic youngsters.

Like the IAEP, the NAEP is helpful in providing a view of how students are performing, and the NAEP goes even further by providing standards that students can aspire to achieve. But the NAEP also suffers from the same sampling dilemmas as the IAEP that prevent relational analyses. Another limitation is that the NAEP is not being administered and used below the state level (although in the 1994 re-authorization, the Congress removed the prohibition of reporting scores below the state level) nor are the standards yet a part of statewide curricula frameworks, school level frameworks, or mandated assessment programs. Also since the NAEP is a representation of the population rather than individual student assessment, students' motivation to perform their best is questionable.

The IAEP and the NAEP data illustrate one view of the challenge that the nation confronts in pursuit of Goal 4, but lacking are much more of the data and information needed to understand the sources of the problems that are revealed and the type of information needed to target goal-centered interventions. Making this even more complicated is the fact that the nation is transforming standards and curricula as well as the assessments that will be used to measure student progress in the future. So in many respects Goal 4 is an illusive and moving target.

Two other indicators that the National Education Goals Panel uses to monitor progress towards Goal 4 are the number of students taking Advanced Placement courses and examinations, and student ACT, SAT,

Advanced Placement, and GRE scores. The GRE quantitative results show that the leaders are Taiwan, Korea, China, Japan, and Hong Kong. U.S. results are comparable to those of Pakistan, the Philippines, and Mexico. In terms of the Advanced Placement (AP) results, only 1.7 percent of eleventh and twelfth graders took the AP mathematics and science examinations in 1993. Of these, only 1.2 percent and 1.1 percent respectively received a score of three or higher.

Goal 5

Goal 5 states: "By the year 2000, 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." The National Education Goals Panel presently uses the percentages of registered voters and actual voters as an indicator of progress toward the citizenship component of Goal 5. This goal is broken down into five objectives: (1) Every major American business will be involved in strengthening the connection between education and work; (2) All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, and other programs; (3) The number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and mid-career students will increase substantially; (4) The proportion of those qualified students (especially minorities) who enter college, who complete at least two years, and who complete their degree programs will increase substantially; (5) The proportion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems will increase substantially.

Even though all five of the objectives for this goal are within the realm of higher education, the last two are the most relevant for the traditional concept of the university. These two objectives are aimed toward having colleges and universities increase access, retention, and graduation rates, and to measure and improve the performance outcomes of college graduates. The methods for measuring the first of these two objectives are well established; but as with the measures used for monitoring Goal 4, the methods are being transformed. The methods used for measuring the last of the objectives are in the process of being conceived and invented.

For the first objective, the National Educational Goals Panel used data that report the college-going rates for high school graduates entering both two-year and four-year colleges and universities, and the educa-

tional attainment of adults (primarily ages twenty-five through twenty-nine). The college-going rate for high school graduates has increased steadily until almost two-thirds of American high school graduates enter college immediately after high school. However, only 47 percent of African Americans and 53 percent of Hispanics do. Figure 4 shows how both four-year and two-year institutions grew at about the same rate over the past decade, with four-year institutions in 1991 enrolling about 39 percent of high school graduates while two-year colleges enrolled 23 percent.

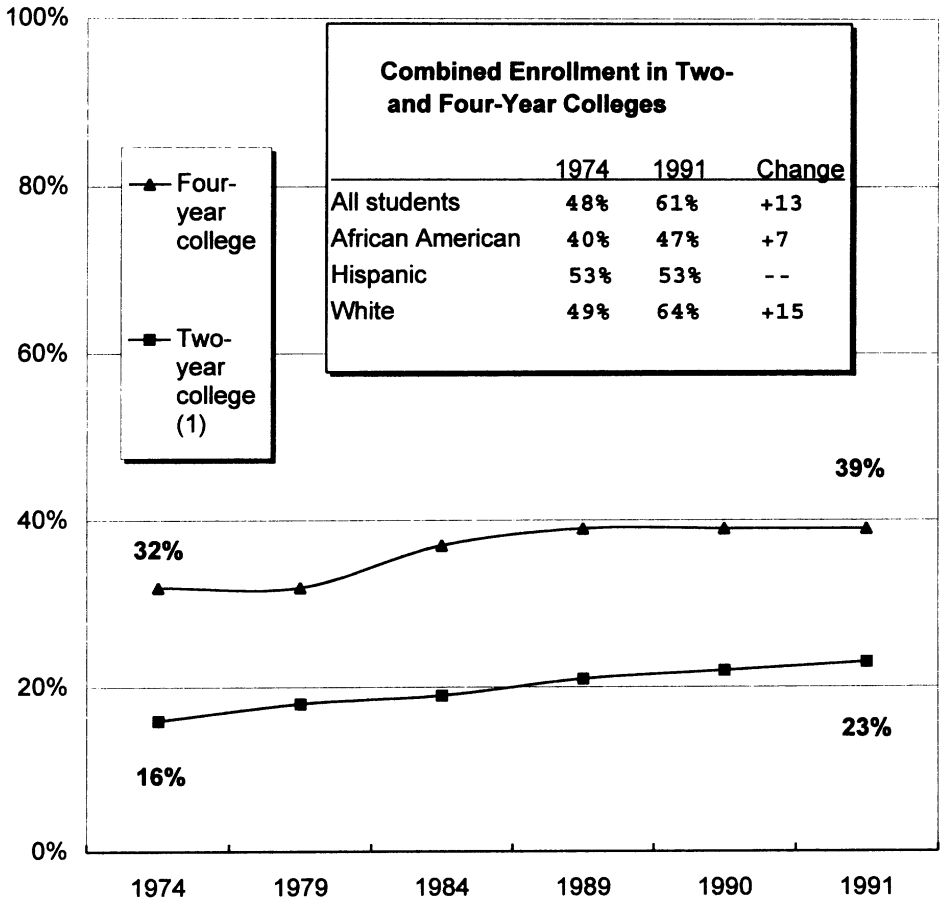

FIGURE 4. Percentage of high school graduates who enrolled in two- and four-year colleges immediately after graduation.
SOURCE: *The National Education Goals Report: Building a Nation of Learners*. Washington, D.C.: National Education Goals Panel, 1993.
[1]Includes junior colleges, community colleges, and universities.

Figure 5 illustrates a more dismal story and perhaps higher education's greatest challenge. Although roughly 60 percent of high school graduates have entered college in each of the past ten years, only 22 percent of American citizens between 25 and 29 have bachelor's degrees and only 8 percent have associate's degrees. Obviously, attrition continues to be an important issue; and even though the National Education Goals Panel has included college completion among its objectives, it needs better data to measure progress.

Completely absent are data and information for monitoring progress toward achieving the fifth objective—improving the cognitive abilities of college graduates. But neither the Goals Panel nor its progress reports provide an indication of what these skills and abilities currently are. In fact, the nation has no evidence of the achievement levels of college

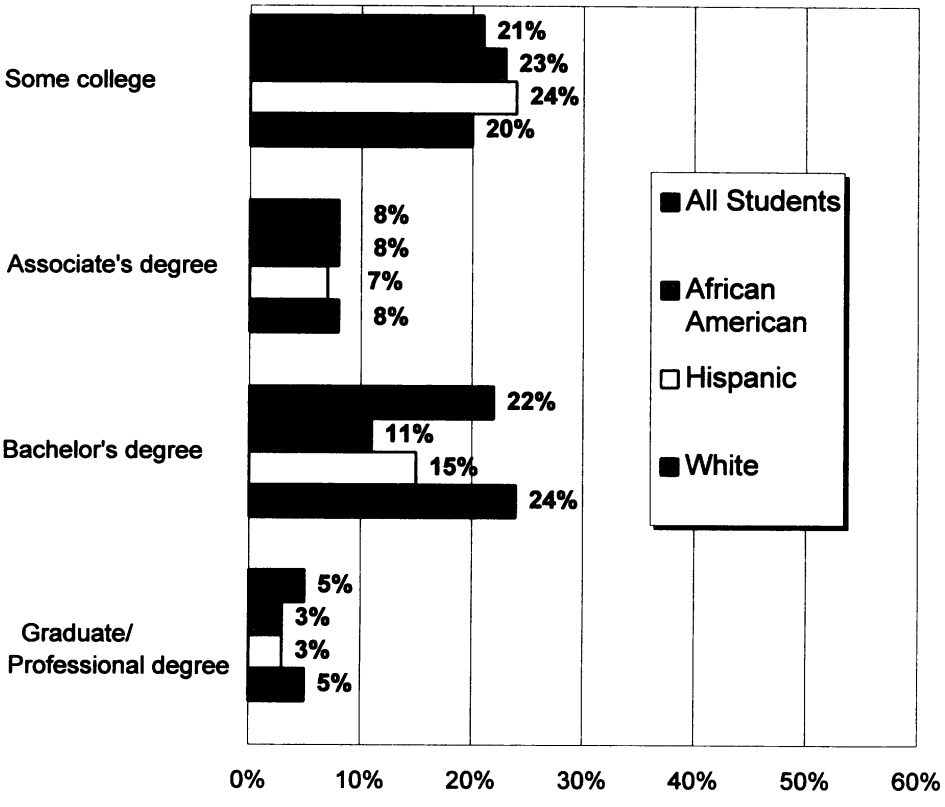

FIGURE 5. Percentage of college students aged 25–29 who have completed the following levels of education, 1992.
SOURCE: *The National Education Goals Report: Building a Nation of Learners*. Washington, D.C.: National Education Goals Panel, 1993.

graduates and no evidence of their college-acquired knowledge and skills. Perhaps the objective is based on the general public perception that college graduates are not markedly superior workers to high school graduates. However, these very lacks create an opportunity for higher education to take the lead in developing its own criteria, standards, and assessments for measuring undergraduate student learning. Unfortunately, colleges and universities have staunchly resisted doing so in the past and still manifest the utmost reluctance to do so today. Presently forty-two states have policies and all the regional accrediting agencies have criteria that compel colleges and universities to plan and carry out their own ideas of outcomes assessment. But no consensus has emerged among the colleges and universities regarding the best practices. Moreover, because colleges and universities are not measuring achievement against a commonly agreed upon standard, then current practices are also not likely to satisfy the national policy agenda for setting national goals and measuring progress.

QUESTIONS FOR HIGHER EDUCATION LEADERS AND RESEARCHERS

The two initiatives undertaken by the U.S. Department of Education to begin this process of developing national standards and assessments for higher education raise the following concerns and questions for America's colleges and universities:

1. How can a common set of standards and assessments be established to measure college graduates, given the diversity of institutional missions and curricula?
2. How can such standards and assessments benefit colleges and universities?
3. How can such national standards and assessments be used to help colleges and universities improve the quality of student preparation?
4. How can national standards and assessments help improve teaching in colleges and universities?
5. Would national standards and assessments help colleges and universities identify and eliminate their weak programs and focus upon the areas of their strengths?
6. Who in higher education today can command the attention and respect of policymakers and higher education professionals to successfully carry out a mandate to develop standards and assessments for undergraduate programs?

This is a crucial decision point for higher education professionals either to take action and develop strategies for articulating standards and

assessments or to stand aside while policymakers chart the future direction of standards and outcomes assessment. These are decisions with high stakes for higher education. The following lessons from the fourth, eighth, and twelfth grade NAEP assessments can be instructive:

First, any student assessment with appropriate content and challenging proficiency levels is likely to show a high frequency of low achievers; this finding will reflect negatively on the image of quality in colleges and universities and support the general public perception that marketplace demands for college credentials (degrees) are more important than the content of the college experience. The California Higher Education Policy Center (1993, 9) reported that only 47 percent of citizens think that colleges and universities are teaching students what they need to know.

Second, new assessments might persuade colleges and universities to back away from aggressively recruiting low-income and minority students, restrict access to attract higher-scoring students, or administer the assessments only to students who will likely achieve high scores.

Third, assessments, once developed and made available are vulnerable to misuse and misinterpretation. One potential misinterpretation would be to assume that yearly changes in overall performance prove that the quality of higher education has either improved or declined. Thus, quality would be based on the standards imbedded in the assessment rather than on how well education was meeting society's changing needs—and these needs will likely change faster than the assessments.

Fourth, new assessments without consequences for students or institutions are likely to reveal results that are not necessarily indicative of true capacity, due in part to students' lack of motivation to perform their best.

Fifth, new assessments that conform to traditional standards of economic efficiency and psychometric quality, are unlikely to interest college and university professionals; they will view traditional standardized, multiple-choice type assessments as unrelated to the college curriculum. The growing interest in performance assessments and active teaching and learning are perceived as incompatible with conventional testing practices. The alternative is to alter college curricula to match the constructs of the assessments; this has been the practice (teaching to the test) in elementary and secondary schools and is being challenged strenuously by some educational reformers.

It is possible to identify some positive outcomes of intrusion by policymakers:

1. The public could view such a mandate for new standards and assessments imposed by policymakers as more objective and more honest appraisals of higher education's quality.
2. New standards and assessments could produce results, particularly if negative, that attract greater public interest in supporting the improvement of colleges and universities—something that policymakers have found impossible at the higher education level but have succeeded in accomplishing for elementary and secondary schools.
3. A mandate for a new national assessment for higher education could permit college and university professionals to discover through experimentation how effective higher education can be in reaching national consensus on standards and modes of assessments for college graduates.
4. A mandate for new standards and assessments would permit American colleges and universities to compare outcomes with the performance outcomes of colleges and universities abroad.

The recent actions taken by the U.S. Department of Education and the National Education Goals Panel are part of an evolution toward greater accountability in higher education that has been underway since the mid-1970s. This movement had its beginnings with the Tennessee Performance Funding Program in the late 1970s, the Florida CLAST examination system of the early 1980s, the forty-two additional states that adopted outcomes assessment policies in the 1980s, and the new outcomes standards and criteria adopted by regional accrediting associations in the mid-to late 1980s.

A review of state assessment policies and practices and accrediting associations shows mixed results. On the one hand, the states and accrediting associations must be applauded for their leadership and for responding to the growing public demand for accountability. On the other hand, too little is known about the attitudes and opinions of campus officials, faculty, legislators, and the general public to understand the impact and effectiveness of existing assessment policies and practices. Furthermore, the states' implementation strategies have not been uniformly adopted among several states nor have they engendered much public interest and acceptance. Efforts need to be made to reach consensus on implementation strategies.

CONCLUSION

In short, scholars and researchers are receiving a wake-up call to become more actively engaged in the public policy process by creating

new standards and assessments that are understandable and useful to the public. In his fabulous reexamination of John Henry Newman's nine discourses entitled *The Idea of the University,* renowned Yale University historian, Jaroslav Pelikan called for higher education scholars to get involved in educational reforms at all levels. He, like Newman, viewed such involvement as the proper social role and responsibility of universities and their scholars and as part of the normal business of a university. He stated:

> One of the most besetting vices of the university, and yet at the same time one of its most charming characteristics, has always been its quaint tendency to look inward and ignore the context of the society within which it lives and without which it could not exist. . . . Of the university's "duties to society," perhaps the most fundamental is the need and the possibility to initiate educational reform, including the work of self reformation in the university itself. Such reform, moreover, must address also the responsibility of the university for educational reform at all levels and the entire body academic must bestir itself to address it. . . . What the university does as one institution and corporation of society among others is an important component of that "business of the university." The university as institution, employer, wage-payer, and property-owner contributes to its local society and in turn depends on it: if one of these partners is sick, the other suffers as well. (1992, 137–38, 168)

Pelikan thus acknowledges that higher education's involvement in matters external to the university is related to its primary missions of research and teaching. Interestingly, Pelikan also believes that "for a variety of reasons, including the methods followed almost everywhere for funding research, the predominant 'duties to society' in the research enterprise of universities and their scholarly publishing have been the duties of the university to its national society in preference to either its local or its international society" (1992, 140).

Finally, Derek Bok in *Beyond the Ivory Tower* urged that research on education be of the highest possible quality:

> To a much greater extent than in the natural sciences, social science research in our universities is directed at specific practical problems and its findings are used by public officials to justify controversial political decisions. We have seen recent examples in fields such as school busing, Head Start programs, and welfare reform, not to mention monetary and fiscal policy. Moreover, unlike most findings in physics and chemistry, which usually have a short and uneventful life if they are wrong, conclusions reached by social scientists are often hard to disprove and can influence government policy or public attitudes even if they are eventually

> discredited. Hence, social scientists have special reasons to worry about their responsibilities for the consequences of their work. (1982, 172–73)

It is because the research and development on public policy and assessment issues must occur and must be of the highest quality that I believe researchers and scholars of the Association for the Study of Higher Education (ASHE) are among the best in the nation to take on this challenge for higher education. The public will be persuaded that a crisis does in fact exist in higher education only when student outcome measures become the main source of information about the crisis. Therefore, it is imperative that higher education faculty take the lead in setting standards and deciding the best way to measure what students achieve during their college years.

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