The Need to Broaden Our Perspective Concerning America's Educational Attainment

LLEGATIONS about the low performance of U.S. students compared to their counterparts in other nations repeatedly surface in the media. For example, in a recent survey by the International Association for the Evaluation of Educational Achievement (IEA), the U.S. ranked 15th in science in a field of 17 nations. This low showing internationally is now accepted by policy makers and repeated as part of the conventional wisdom. Business leaders point with alarm to the declining skills of the labor force and proclaim that the U.S. economy will lose out to Asian and European competitors.1

There may be cause for alarm, but the current policy discussion is partly misleading because it does not analyze what happens to U.S. students and their international counterparts *after high school*. Similarly, the National Education Goals Panel needs to assess the performance of the entire U.S. education system, not just that portion of it devoted to students up to the age of 18.

Such indicators as the IEA assessment, the National Assessment of Educational Progress (NAEP), the Scholastic Aptitude Test, secondary school standardized achievement tests, and state assessment programs all ignore the value added by the postsecondary education system. But in the international arena, the United States' strongest suit is probably its entire postsecondary education system,

MICHAEL W. KIRST (Stanford University Chapter) is co-director of Policy Analysis for California Education and a professor in the Department of Administration and Policy Analysis, School of Education, Stanford University, Stanford, Calif. Mr. Kirst wonders why the "international education olympics" end at age 17. He suggests some possible comparisons that might make us look better.

By Michael W. Kirst



PHI DELTA KAPPAN

including community colleges, trade schools, and universities. For example, in 1985 the U.S. spent a higher percentage of its gross national product on higher education than any other country in the world. Moreover, U.S. spending on higher education as a percentage of all education spending (including K-12) was 39.4%, compared to 20.8% for West Germany and 21.4% for Japan. The principal reason for the high level of U.S. spending on higher education is that the proportion of the population participating in higher education is larger here than in any other nation. But the U.S. perstudent expenditures in higher education are also at the top. For example, in 1985 California spent about \$6,500 per pupil for higher education, compared to \$4,250 spent by West Germany.2

Why does the international education olympics end at age 17? Why don't we compare postsecondary systems and see if the U.S. is not like football teams that are behind at half time but catch up with the competition late in the fourth quarter? While it is quite possible that the U.S. would fare even worse if we were comparing 25-year-olds rather than 17-year-olds, I will suggest here some possible comparisons that might make us look better.

Newspaper headlines decry the U.S. dropout rate and point to numbers as high as 30%. But the General Education Development (GED) examination that adults study for in a variety of settings, including community colleges and the military, helps bring our graduation rate up to 87% by age 29. In 1989 the high school completion rate was 81.1% for 19-year-olds, 86.5% for 24-year-olds, and 86.9% for 29-year-olds.³ In those figures we can see the U.S. practice of giving students a second chance after age 16, which is not common in Europe or Asia.

We could also look at the total years or days of school attainment up to age 25 or beyond. Much is made in the press about our 180-day elementary/secondary school year compared to a school year of 240 days in Japan. But it is rarely mentioned that the U.S. graduates the highest percentage in the world of 24-year-olds from a four-year college or university. As Table 1 shows, our particular edge is with females: the U.S. graduates 24% of its women by age 24, compared to 12.4% in Japan and 10% in West Germany.

Many studies have emphasized that U.S. students complete little homework and do not work hard at academics in high school.⁴ But U.S. students are often confronted with a demanding academic regimen in college. The adjustment to the academic pressures of the university in freshman year can be dramatic and difficult, but many students make up for ground lost in high school.

The more difficult postsecondary experience in the U.S. contrasts sharply with the situation in Japan, where the university years are viewed as a time to take it easy between the intense academic pressure of high school and the de-

ic curriculum that prepares them for homemaking.⁵ A 1988 study of teacher education students in the U.S. and Japan concluded:

Although American students seem to know less about global issues than Japanese students at the beginning of college, by graduation they are performing as well. This is attributable to a considerable positive difference between U.S. freshmen and seniors, and a small difference between Japanese freshmen and seniors. This finding corroborates recent statements by Japanese scholars expressing concern about the quality of higher education.⁶

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mands of Japanese business. Japanese universities are not as challenging as those in the U.S., especially for many women who take a less rigorous academ-

TABLE 1. Higher Education Graduates As a Percentage of All 24-Year-Olds

Sex and Nation	Year	All Fields
Males		
Japan	1988	33.4
U.S.	1986	25.0
Canada	1987	20.6
England	1986	16.0
W. Germany	1985	15.3
France	1987	14.3
Females		
Japan	1988	12.4
U.S.	1986	24.0
Canada	1987	23.3
England	1986	13.0
W. Germany	1985	10.0
France	1987	14.5

Source: National Center for Education Statistics, *The Condition of Education 1990, Vol. 2, Postsecondary Education* (Washington, D.C.: U.S. Department of Education, 1990), p. 34.

The preeminence of U.S. graduate schools is widely recognized. The U.S. attracts a large number of foreign students, and our most prestigious research universities are certainly competitive by world standards — many consider them to be the best in the world. Is there a better technical university in Japan or Germany than MIT, Cal Tech, or Stanford? Given the overall quality of all U.S. research universities, it is likely that some of the international academic gap is closed at this final stage for our most outstanding science and math students.

BEGAN to question the conventional wisdom after closely observing the marvelous growth in the economy of California between 1980 and 1990. The state's total population went from 23 million to almost 30 million – growing by the equivalent of the total population of Virginia or Massachusetts. The economy generated more than 350,000 new jobs each year and increased its economic diversification and strength. In order to meet its robust demand for labor, California imported unskilled workers from all over the world and from other parts of the U.S.

The strength of California's postsecondary education system is well-known. Part of its success is attributable to the ease of transferring credits from community colleges or adult education programs to colleges or universities. But the open access of the California postsecondary system is also notable and surpasses what I have observed in Europe and Asia. Community colleges are located all over the state and start or adapt classes to meet the needs of industry. Moreover, community colleges and adult education programs start educating the students from whatever base they require. If an immigrant from Mexico did not complete grade school, there is an appropriate educational program for that student. Unlike California high schools, community colleges use the latest vocational education equipment and are staffed by teachers who currently work in industry.

Perhaps the highly touted German apprentice system is better, but I doubt whether the California adult education system ranks near the bottom in the industrialized world! The U.S. postsecondary vocational education system is especially important because, as a recent national survey concluded, American industry invests very little in upgrading its work force. U.S. businesses make a big investment in management training, while Germany stresses apprenticeships for those members of its work force with the fewest years of formal education.⁷

A popular contention is that Japanese and German workers are significantly more skilled than their counterparts in the



"I knew Sir Walter Scott wrote Ivanhoe, but who the dickens wrote A Tale of Two Cities?"

U.S. The current policy debate focuses on the connections between high-quality education, the productivity of the labor force, and economic growth. If there is a connection between high-quality education and a vibrant economy, then California education must be doing something right. Yet, by conventional measures, the California elementary/secondary system is average for the U.S. in terms of inputs and of student outcomes.8 Certainly, no one has called the California elementary/secondary system world class. Perhaps the theory of linkage between education and economic growth is weak, or perhaps the conventional measures of educational quality miss something like postsecondary education. Another possibility is that the current poor performance of high school students in California will manifest itself in an economic decline in the future.

There are clearly problems posed by a mediocre elementary/secondary system. It is inefficient and costly for students to loaf through high school, work at a menial job until their 20s, and then repeat the 11th grade at a California community college. While the GED is helpful, many adults experience a very poor quality of life before they finally earn a high school diploma. Only a rich state like California can afford high school remediation at expensive universities and can assume the financial burden of allowing adults to take high school courses over again. The low levels of education found in big cities and among minorities are appalling and are a factor in America's weak showing in international comparisons of least-skilled workers.

These problems, however, should not obscure the basic argument that international tests of 17-year-olds and other comparisons, such as high school homework and length of school year, may not be indicative of the international competitiveness of the entire U.S. education system. The large cohort that completes college might be more competitive internationally than we think, and, given the ease of access to U.S. higher education, the majority of other adults might be better educated than we have been led to believe. Moreover, there are some serious criticisms of the sampling, reliability, and validity of the much-ballyhooed international tests, such as those given by IEA and the International Assessment of Educational Progress.⁹ The whole area of international education comparisons is easily misunderstood.¹⁰

The U.S. national goals for education for the year 2000 do not address the type of postsecondary comparisons stressed above. While U.S. universities are under attack for having large classes and for underemphasizing the quality of teaching, numerous articles criticize the quality of undergraduate instruction in other nations as well. If we are to rely so heavily on international academic comparisons and indicators to guide our new policies, then the comparisons should include all levels of the education system. If other nations invest more at the "front end" (ages 0-18) than they do for adults, then the U.S. should certainly explore whether prevention is more cost-effective than remediation. Nevertheless, the national goals panel needs to keep a broader view of educational attainment in mind as it devises the indicators of U.S. educational progress.

^{1.} David T. Kearns and Denis P. Doyle, *Winning the Brain Race* (San Francisco: Institute for Contemporary Studies, 1988).

^{2.} Arthur Hauptman, Eileen O'Brien, and Lauren Supena, Higher Education Expenditures and Participation: An International Comparison (Washington, D.C.: American Council for Educational Research, 1991). All statistics in this paragraph are for 1985.

^{3.} National Center for Education Statistics, *The Condition of Education 1991, Vol. 1, Elementary and Secondary Education* (Washington, D.C.: U.S. Department of Education, 1991), p. 28. See also N. L. Gage, "Dealing with the Dropout Problem," *Phi Delta Kappan*, December 1990, p. 281.

^{4.} Joseph Murphy, *The Education Reform Movement of the 1980s* (Berkeley, Calif.: McCutchan, 1990), pp. 10-19.

^{5.} Michael W. Kirst, "Japanese Education: Its Implications for Economic Competition in the 1980s," *Phi Delta Kappan*, June 1981, pp. 707-8.

^{6.} John Cogan, Judith Torney-Purta, and Douglas Anderson, "Knowledge and Attitudes Toward Global Issues: Students in Japan and the U.S.," *Comparative Education Review*, vol. 32, 1988, pp. 282-97.

^{7.} America's Choice: High Skills or Low Wages (Rochester, N.Y.: National Center on Education and the Economy, 1990).

^{8.} See Michael W. Kirst, James Guthrie, and Allan Odden, *Conditions of Education in California* (Berkeley: Policy Analysis for California Education, University of California, 1991).

^{9.} Iris C. Rotberg, "I Never Promised You First Place," *Phi Delta Kappan*, December 1990, pp. 296-303.

^{10.} Judith Torney-Purta, "International Comparative Research in Education: Its Role in Educational Improvement in the U.S.," *Educational Researcher*, October 1990, pp. 32-35.