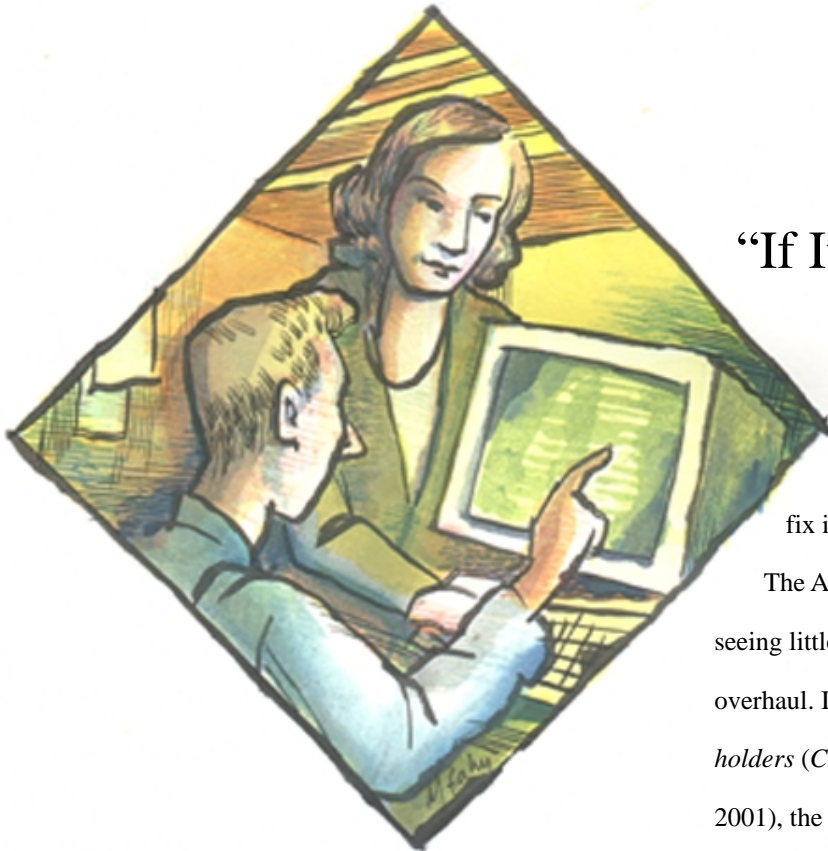




A Report to Stakeholders On the Condition and Effectiveness of Postsecondary Education

Part Three: Employers



“If It Ain’t Broke...”

When confronted with demands for change in higher education, dubious faculty often reply, “If it ain’t broke, don’t fix it.”

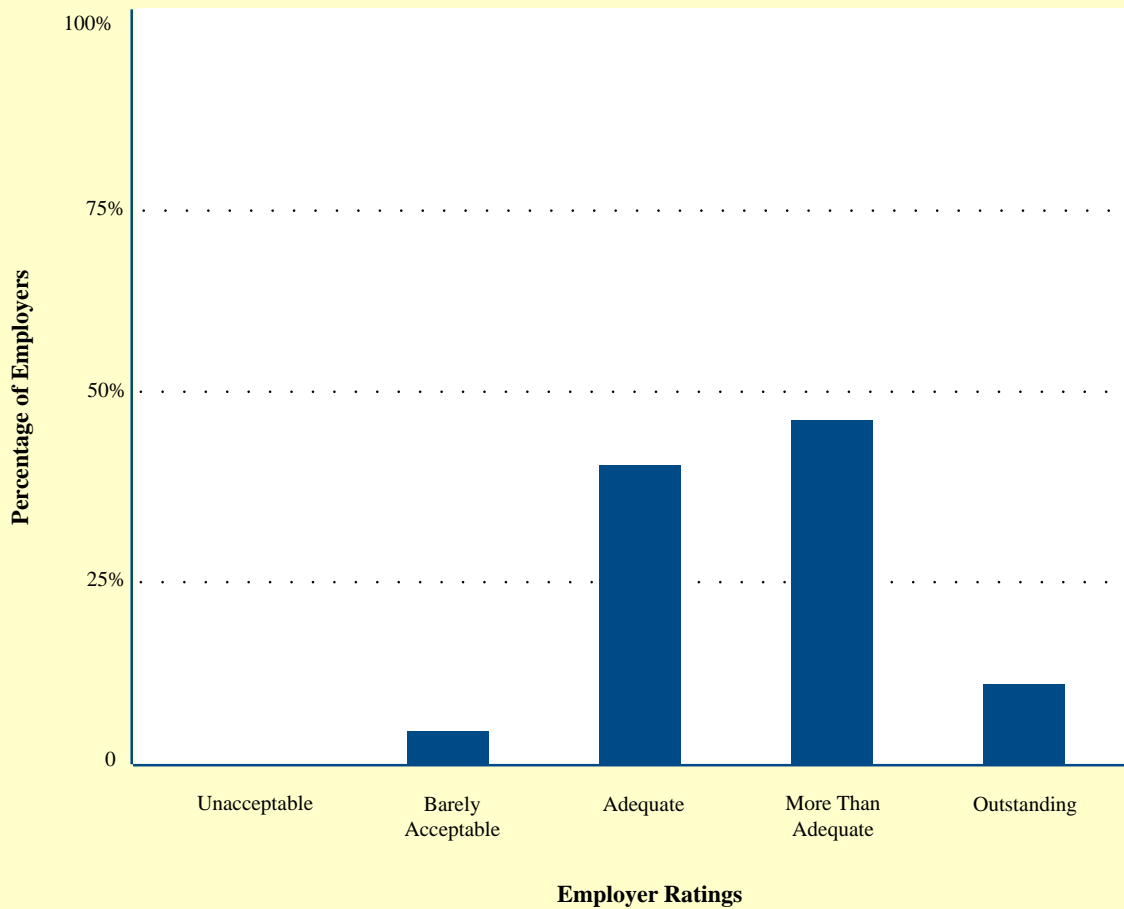
The American public also currently shares this opinion, seeing little in higher education that requires a major overhaul. In the second installment of *A Report to Stakeholders* (*Change, The Landscape*, September/October 2001), the general public granted postsecondary institutions a solid “B” for their performance, by and large expressing dispassion about concerns that, a decade ago, dominated national conversations about education. Clearly, the nation has accepted the notion that, in this new economy, a college degree is a necessary key to greater opportunity and fin-

This expanded edition of *The Landscape* is the final installment of *A Report to Stakeholders on the Condition and Effectiveness of Postsecondary Education*, a series based on research conducted under the auspices of the National Center for Postsecondary Improvement (NCPI). Each report is based on a survey of a particular set of higher education stakeholders. This segment describes the perspectives of a nationally representative sample of employers.

The first installment, which appeared in the May/June 2001 issue of *Change*, reported key findings from the Collegiate Results Survey (CRS), which captured the outcomes of a college education. The second report (September/October 2001) gauged public opinion on higher education using data from The Household Survey.

The National Center for Postsecondary Improvement (NCPI) is supported under the Educational Research and Development Center program, agreement number R309A60001, CFDA 84.309A, as administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. The findings and opinions expressed by NCPI do not necessarily reflect the position or policies of OERI or the U.S. Department of Education. The Institute for Research on Higher Education retains the copyright for this column.

Chart 1.
Employer Ratings of How Well Four-Year Colleges and Universities Prepare Graduates for the Workforce, 1997.



financial stability, no matter the inefficiencies or the cost. Time and economic prosperity have fixed what a lack of concerted, coordinated public educational policy did not.

Do employers—whose past criticisms of American educational institutions highlighted their inability to prepare students for the world of work—have opinions that mirror those of graduates, faculty, and the general public? This issue of *A Report to Stakeholders* explores their perceptions of postsecondary institutions and the U.S. educational system. It is based on a representative national survey of establishments that shows that em-

ployers, too, feel generally positive about American higher education, preferring college-educated workers whenever possible and citing graduates' preparation for the workforce as unilaterally above-average.

When asked in 1997 to rate how well four-year colleges and universities prepare their graduates for the workforce, an overwhelming majority of employers said they were in fact doing their jobs: 10 percent rated their performance as outstanding, 46 percent said it was more than adequate, and 40 percent of employers said their performance was adequate to satisfy current skill requirements (Chart 1). In

the estimation of one employer in ten, the nation's four-year institutions deserved an "A-," while nearly half believed they deserved a "B +." Indeed, in an era of tight labor markets, employers take as a given that a college graduate is inherently employable, commenting only in passing about the nature of the education that four-year colleges and universities deliver.

Instead, both employers and policymakers have shifted focus downward on the educational pipeline, from four-year institutions providing general education to two-year institutions and

high schools providing skills training and certificates. As enterprises once again began to expand in the mid-1990s, employers turned to secondary and two-year postsecondary schools in search of entry-level production or front-line workers with the basic skills they required or the aptitude to benefit from training. Policymakers concerned with the link between the worlds of work and education followed suit, fixing their eyes more closely on community colleges and the nation's high schools as places that could be retooled to better meet the needs of a stronger economy.

Chart 2.
Employer Ratings of How Well Two-Year Colleges Prepare Graduates for the Workforce, 2000.

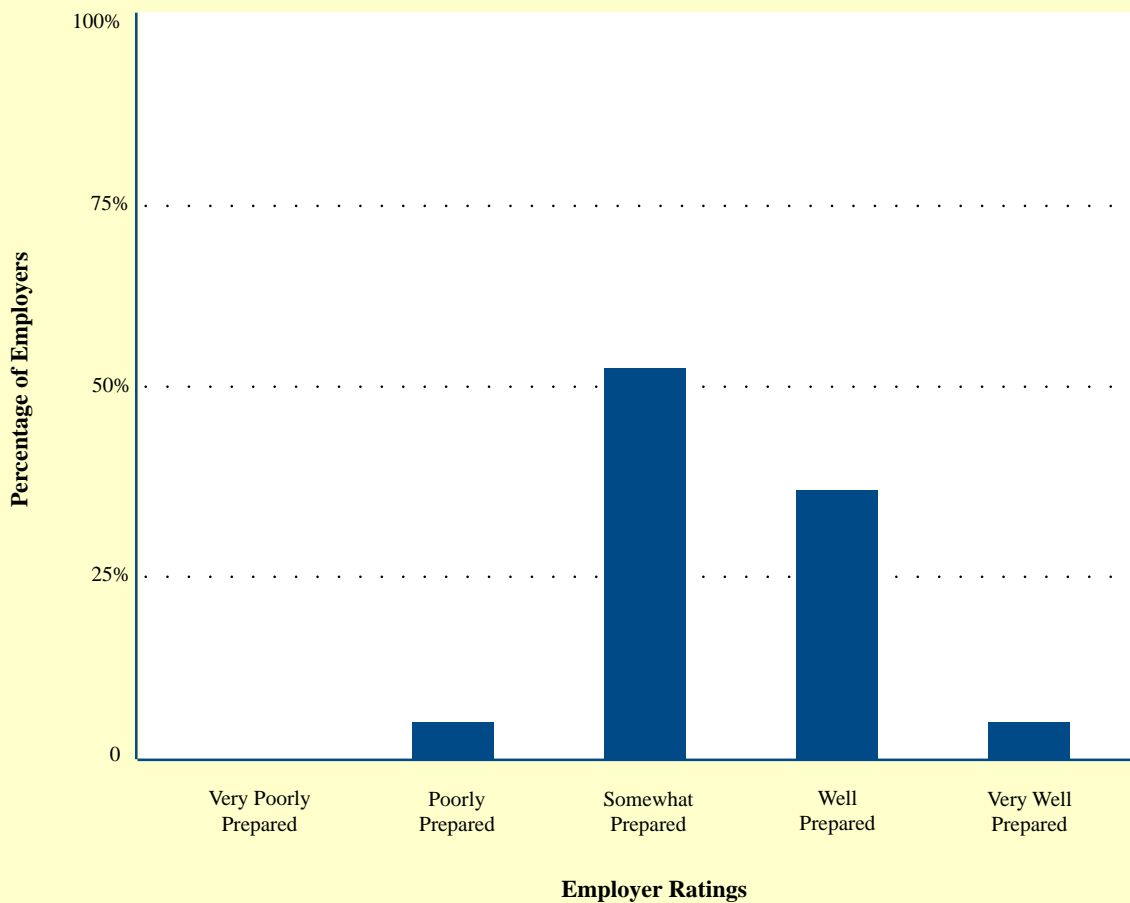
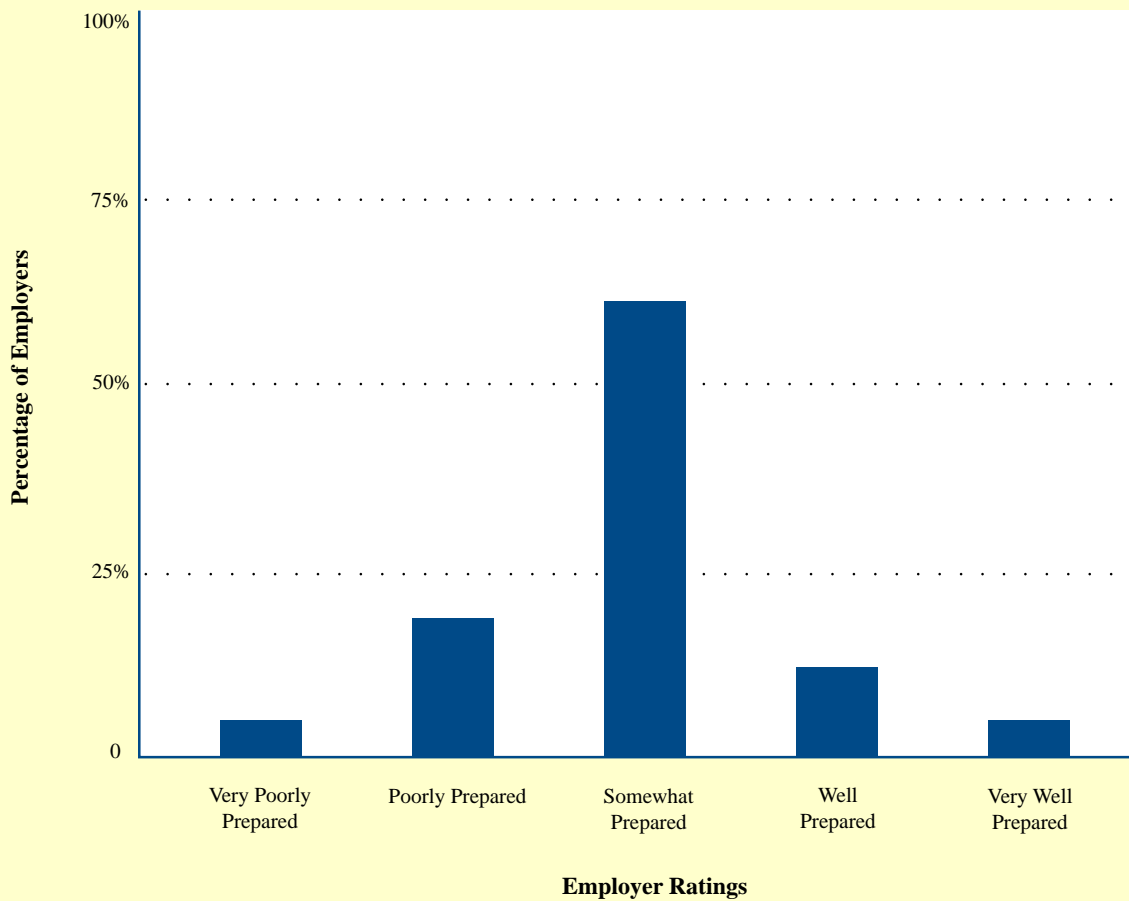


Chart 3.
Employer Ratings of How Well High Schools Prepare Graduates for the Workforce, 2000.



In this issue of *A Report to Stakeholders*, we also follow that shift in focus, reporting employers' impressions of community colleges and high schools as sources of skilled workers, as well as the nature of their involvement in schools and on campuses. What are employers' specific perceptions of community colleges and high schools? What do they believe needs to be fixed? For what repairs are they willing to roll up their sleeves and get their hands dirty?

Going Straight to the Source

Since 1994, the National Employer Survey (NES) has captured these impressions, as well as the links between education and the economy,

through a survey of nationally representative private establishments with 20 or more employees. Sponsored by the National Center for Postsecondary Improvement (NCPI) and the Consortium for Policy Research in Education (CPRE) and administered by the U.S. Bureau of the Census, the NES asked employers in 1994, 1997, and 2000 about their perceptions of the educational system, school quality, and the work preparedness of different types of graduates. It also asked them to report on the activities they pursue in partnership with schools.

Originally conceived and designed by the National Center on the Educational Quality of the Workforce (EQW),

the NES was the first national, representative survey to capture the interaction of education and employment from an establishment's perspective. When it was first administered in 1994, the NES documented a fundamental disconnection between employers and schools, including colleges and universities: although establishments discounted schools and measures of student performance when making hiring decisions, in the long run, those that hired more educated workers had more productive workplaces (*The Landscape*, March/April 1996).

In 1997, the NES explored this

disconnection further. In addition to capturing longitudinal information on many of the employers first surveyed, it posed new questions both to calibrate the link between work and school and to relate employers' impressions of schools to the quality of the schools' graduates.

In 2000, the survey was again adjusted, this time to focus primary attention on the nature and extent of employer involvement with schools across the United States. Because the 2000 survey was also the NES's third administration, it is possible to document how employer perceptions

Chart 4.
Employer Ratings of High School Graduates' Literacy Skills, 2000.

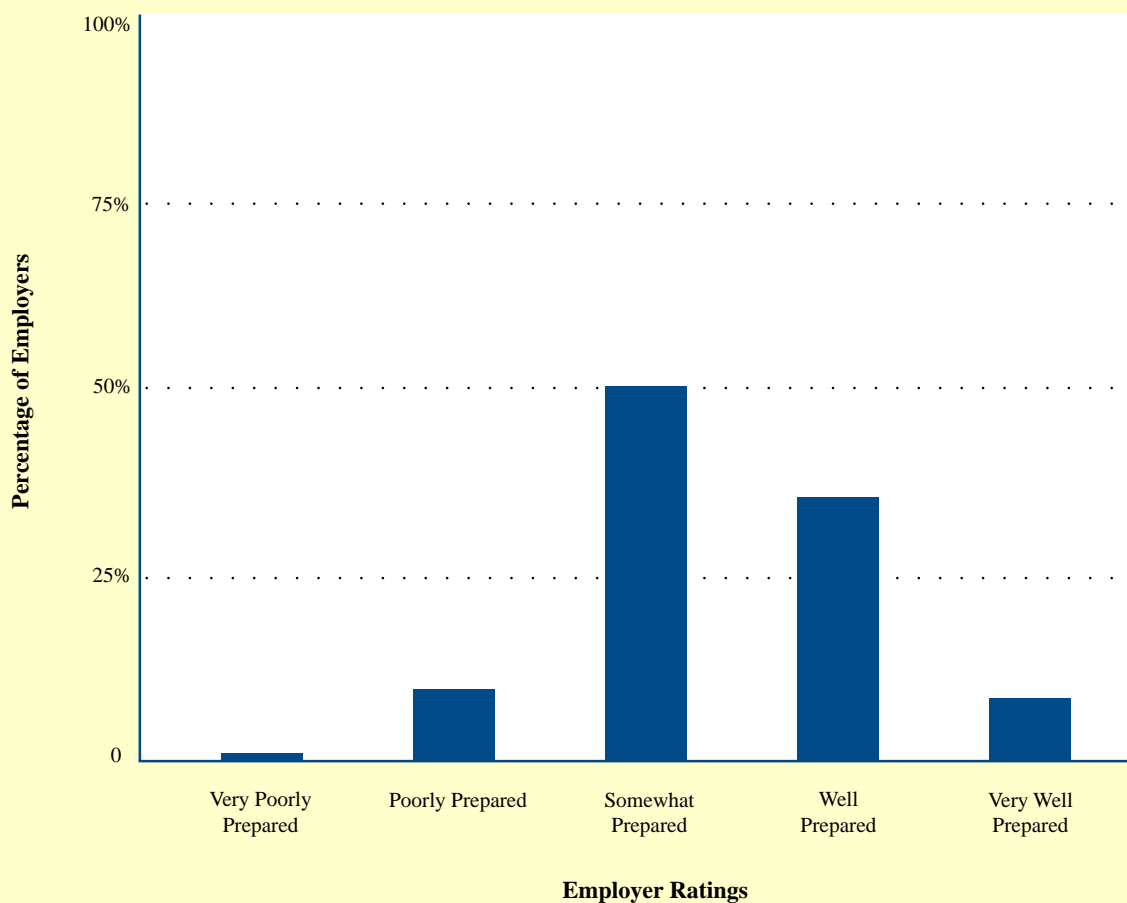
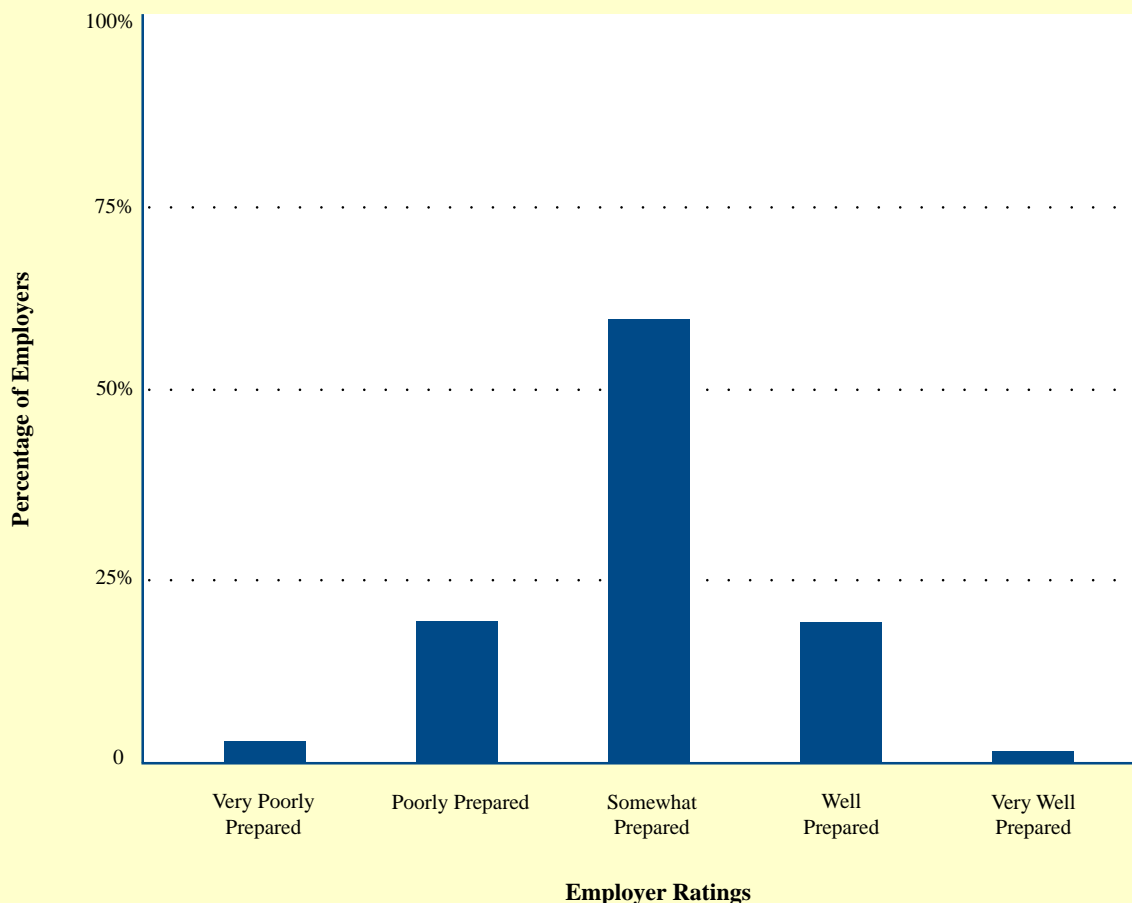


Chart 5.
Employer Ratings of High School Graduates' Technical or Occupational Knowledge and Skills, 2000.



have—or have not—changed over the course of the 1990s. In particular, the NES’s three administrations make it possible to tease out how employer strategies for finding skilled workers have changed and when and why employers engage with schools and colleges in pursuit of skilled workforces. It is precisely this type of analysis that NCPI researchers Peter Cappelli and William Carter of The Wharton School at the University of Pennsylvania pursued using the data collected by the NES—an analysis which serves as the basis of this final edition of *A Report to Stakeholders*.

Grading Community Colleges and High Schools

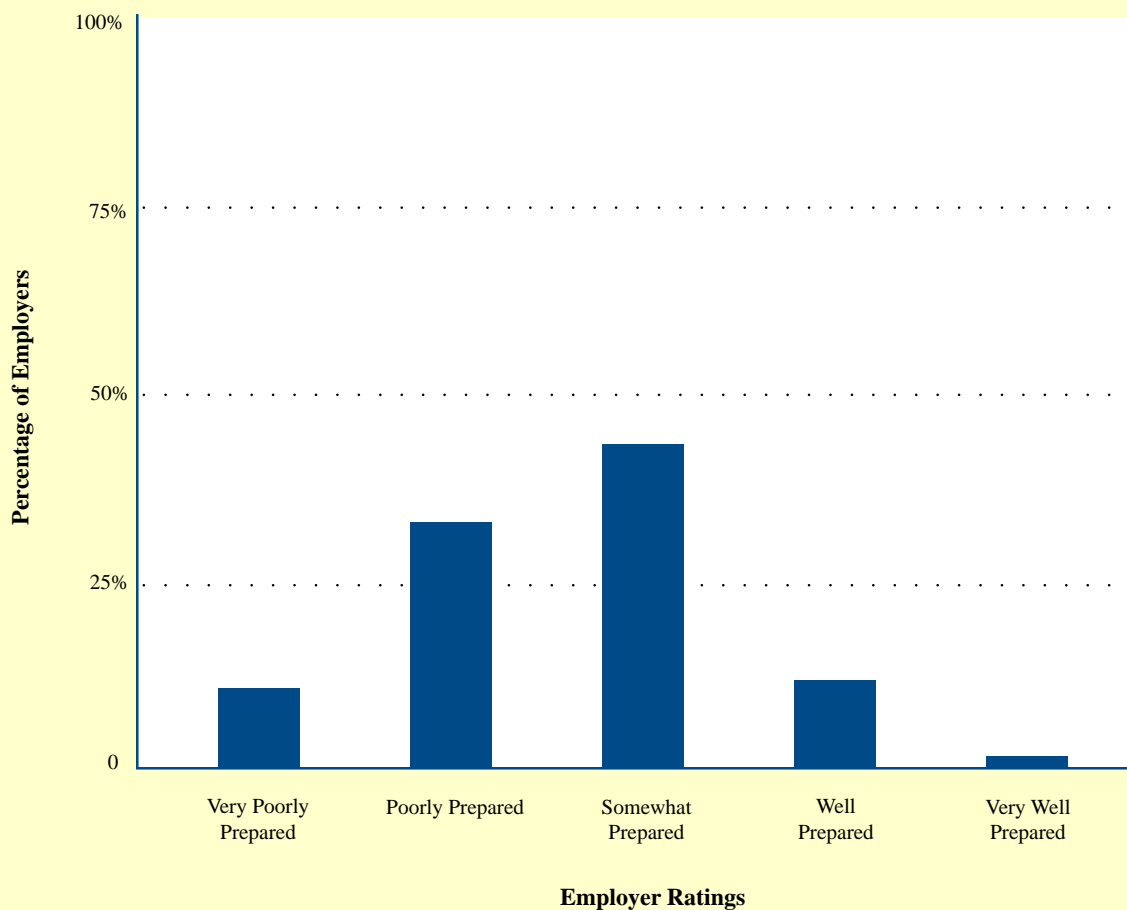
The questions asked in the NES 2000 followed the focus of policy discussions regarding the link between education and the economy. In 2000, the survey did not ask employers to rate the performance of four-year colleges in preparing graduates for the workplace, but it did ask that they rate the performance of community colleges and high schools—tiers in the educational system that have become more relevant as the need for occupation-related training and education has risen.

Employers were asked, “Based on your experience with hiring their graduates over the past three years, how would you rate local community colleges’ overall performance in preparing students for work in your establishment?” In response, only 4 percent of employers reported that graduates of these institutions were very poorly or poorly prepared, while 55 percent believed they were somewhat prepared for their entry-level, front-line, and production jobs (Chart 2). More important, the remaining 41 percent found the community college graduates they hired to be either well prepared or very well prepared. Employers’

impressions of community colleges changed little from 1997 to 2000—granting these two-year institutions a solid, consistent “B” in both the 1997 and 2000 administrations of the NES.

Employers’ assessment of high schools is decidedly less cordial. While roughly the same percentage of employers (60 percent) rated high school graduates as being somewhat prepared, far more considered them to be poorly prepared for work (Chart 3). In response to this question, 23 percent of employers rated high school graduates as being very poorly prepared or poorly prepared—a rate nearly six times that of community college

Chart 6.
Employer Ratings of High School Graduates’ Work Ethic and Responsibility, 2000.



graduates. A generous grade for America's high schools from the nation's employers would be, at best, a "C."

Locating Gaps in the System

Where do employers believe there are gaps in the educational system in terms of workforce preparedness? Given employers' less favorable grading of high school graduates, the first place to look is the nation's secondary school system. The 2000 NES asked employers to rate high school graduates' preparation along a

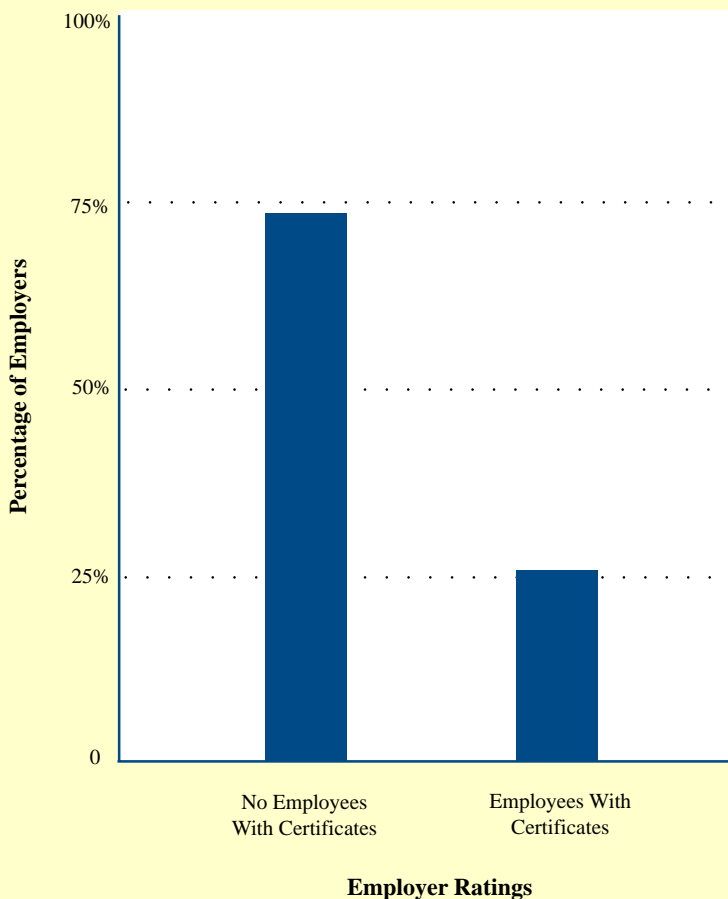
number of dimensions, including a range of academic and occupational skills. Overall, the majority of employers believed that most of the high school graduates employed in their workplaces had been prepared relatively well in terms of academic areas such as literacy (49 percent), mathematics and arithmetic (60 percent), and communications (55 percent). Graduates' literacy skills, in particular, received higher marks, with 40 percent of employers responding that students had been well or very well prepared in this skill set (Chart 4).

However, employers were less pleased with graduates' work-related preparation. When asked to rate their technical or occupational knowledge and skills, 22 percent reported that their newly hired front-line or production employees with a high school education were either poorly or very poorly prepared (Chart 5). While 57 percent were rated as being somewhat prepared, only 21 percent received the highest marks.

Graduates scored lowest in terms of their work ethic and willingness to take responsibility: a dramatic 43 percent of employers believed that high school graduates were poorly or very poorly prepared by high schools to handle the responsibilities of the workplace (Chart 6). Only 14 percent of employers reported that these young workers were well or very well prepared.

The 2000 NES did not ask employers to rate similar dimensions of preparedness for community college graduates, but it did ask them about whether or not they hired front-line and production employees with industry-recognized skills certificates. Such certificates were defined as credentials awarded for the attainment of skills specified by national or state trade

Chart 7.
Percentage of Employers Hiring Workers with Industry Skill Certificates, 2000.



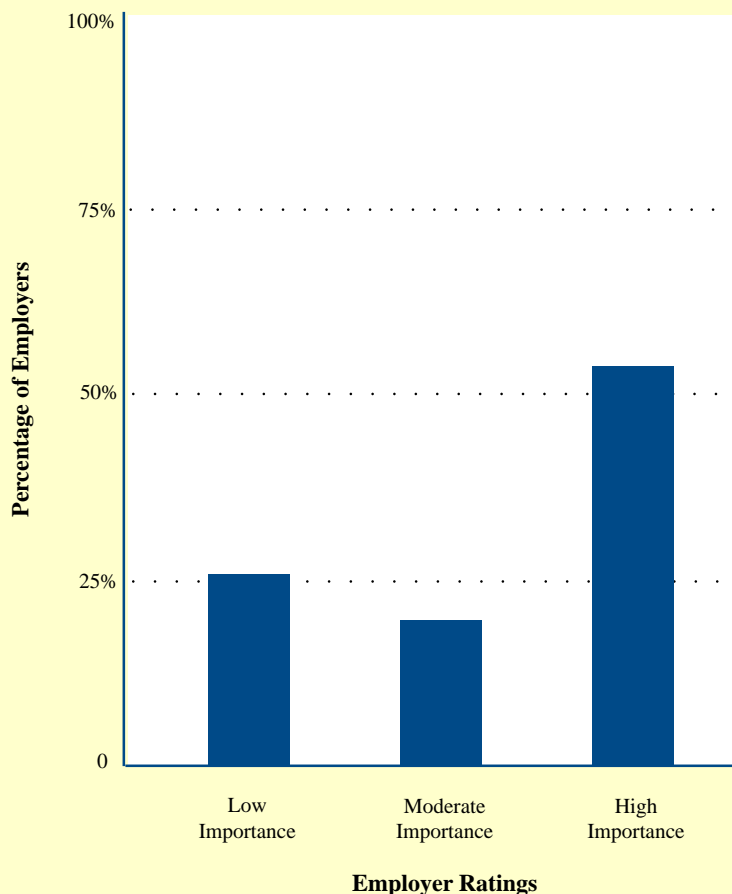
associations. Frequently, these credentials are granted by community colleges or other two-year post-secondary institutions, which offer specialized training courses for occupation-specific associate's degrees.

In this area, another disconnection appears between the perceived value of these credentials and the supply of employees who hold these certificates in the labor market. Chart 7 depicts the percentage of NES employers who, in the two years prior to completing the survey, had hired employees with industry-recognized credentials. Seventy-four percent reported that they did not have such employees, a rate that includes employers for whom industry standards have not been established or are not relevant. Only 26 percent had hired industry-certified front-line workers.

The NES then asked this 26 percent of establishments to rate how important those skill certificates were in making hiring decisions. The results are displayed in Chart 8. A total of 74 percent of these employers considered this aspect of an applicant's preparation to be moderately to highly important. While nearly three-quarters of U.S. employers have not hired employees with these certificates, when establishments do, they play an important role in assessing an applicant's readiness for a front-line job.

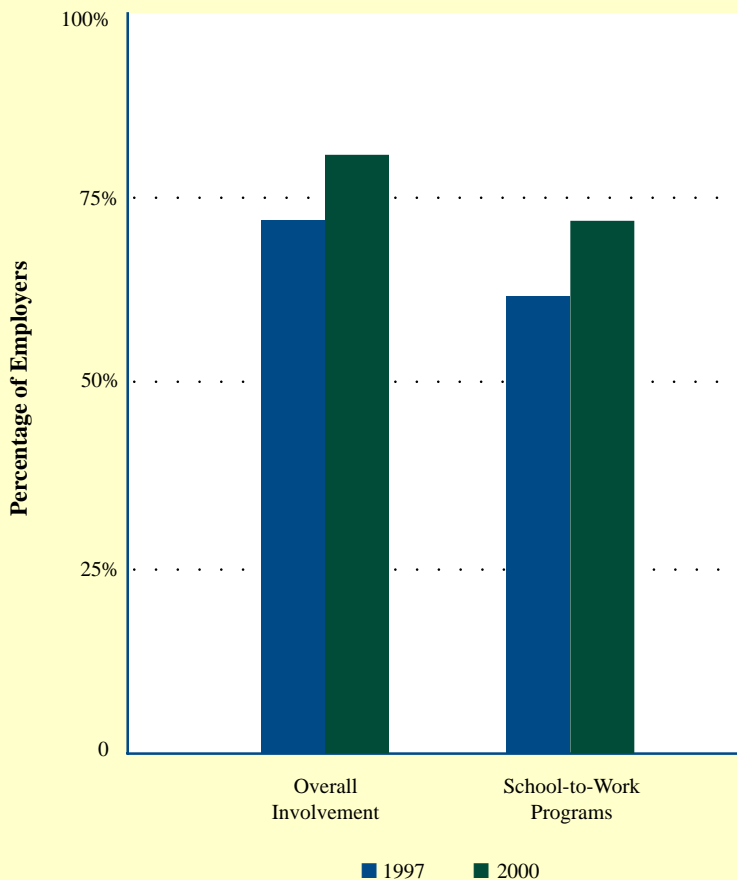
Overall, employer dissatisfaction with the ability of high schools to prepare students for the workplace, along with their relative rating of the importance of skills credentials in making hiring decisions, suggests that they are paying much closer attention to occupation-related training and education as markers of work preparedness for new hires. High

Chart 8.
Employer Ratings of the Importance of Industry Skill Certificates in Hiring Decisions, 2000.



schools seem to have been singled out as the location of the problem. And while it would appear that employers do not consider community colleges to be failing in this role, these institutions may either be producing an insufficient number of graduates with skills certificates, or they are not making connections with local businesses to place graduates in the industries for which they have been trained.

Chart 9.
Employer Involvement With Local Schools, 1997 and 2000.



Understanding Employer Involvement

The nature of employers’ evaluation of educational institutions can be explained, in part, by their shifting workforce needs. Regardless of the current state of the economy, data for the NES 2000 were collected at a time when the labor market was tight—near a high-water mark in the economic boom of the 1990s. Employers were looking for ways to obtain skilled young workers and lower their turn-over rates for front-line positions. And, increasingly, they were turning to schools as a strategy for finding these new recruits. As they reported in the NES, employers also seemed to be less

concerned with altruistic areas of engagement intended to reform the educational system and to be more focused on winning direct access to students with the skills they wanted their entry-level workers to possess.

The NES allows us to capture employers’ strategies for engaging the education system, using a broad measure of involvement with local schools. The definition of such involvement includes employers who reported participation in at least one of the specific programs associated with formal school-to-work arrangements—the work-based learning activities designated by the federal School to Work Opportunities Act of 1994—or in other, more general programs that support schools. Formal work-based learning activities include programs such as job shadowing, mentoring, internships, cooperative education, school-based enterprises, and apprenticeships. General programs, on the other hand, include providing professional development for teachers, curriculum development, communicating business practices to schools, donating equipment or money, offering teacher scholarships, or serving on advisory boards.

Overall, in 2000, employers at 80 percent of U.S. establishments reported engaging in some program to support schools—a percentage that increased from 71 percent only three years prior (Chart 9). In addition, 71 percent reported involvement in at least one general program designed to bridge the gap between school and work, up from 61 percent in 1997.

Given this steady trend of growth in employer participation in general school activities and specific school-to-work programs, it is helpful to examine the extent to which the increase reflects persistence on the part of involved employers. In other words,

once they initiate engagement with schools, do they stay engaged? Or, do they move in and out of these programs over time?

The answer appears to be a bit of both. Chart 10 indicates the status in 2000 of employers who were involved in school programs in 1997: 65 percent of those with some involvement in 1997 were still involved in 2000; only 12 percent had ceased their participation. As Chart 11 shows, 20 percent of employers who were not involved in 1997 had actually begun to engage schools by 2000.

Interestingly, employer persistence is greater for those involved in the work-based learning activities that comprise formal school-to-work programs: 74 percent of those so involved in 1997 continued to be in 2000. That the persistence of these employers is higher may reflect the fact that work-based learning programs have explicit benefits for employers, particularly in terms of preparing and identifying front-line workers. More general involvement, on the other hand, may relate more to basic citizenship motives on the part of employers to help improve schools or assist in efforts for school reform.

A breakdown of employer involvement according to the specific areas of work-based learning in which they participated demonstrates an increasing shift toward activities that help establishments identify employable graduates (Chart 12). The results indicate that the percentage of employers engaged in most forms of work-based learning increased—and, in most cases, increased substantially. Participation in mentoring, cooperative education, and youth apprenticeships essentially doubled. The growth of employer participation in internships was notably large, particularly since the initial level of involvement in 1997

already represented a substantial amount of engagement.

It is important to note that the growth of youth apprenticeships, which nearly doubled, was greater than that of regular, more formal apprenticeships, which increased by only one-fourth. The latter form of engagement represents one of the original avenues that employers followed to develop worker skills, and it served in many ways as the basis of the current federal school-to-work model. Formal apprenticeships are highly involved, costly, and elaborate programs that also convey a clear signal of marketable skills to other

Chart 10.
Turnover Among Involved Employers From 1997 to 2000.

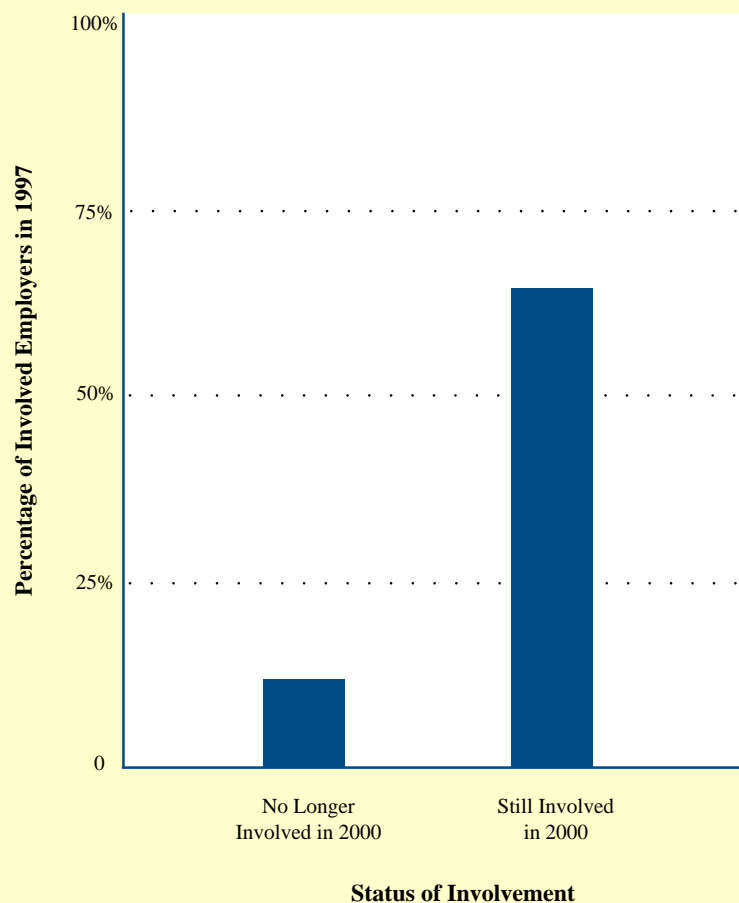
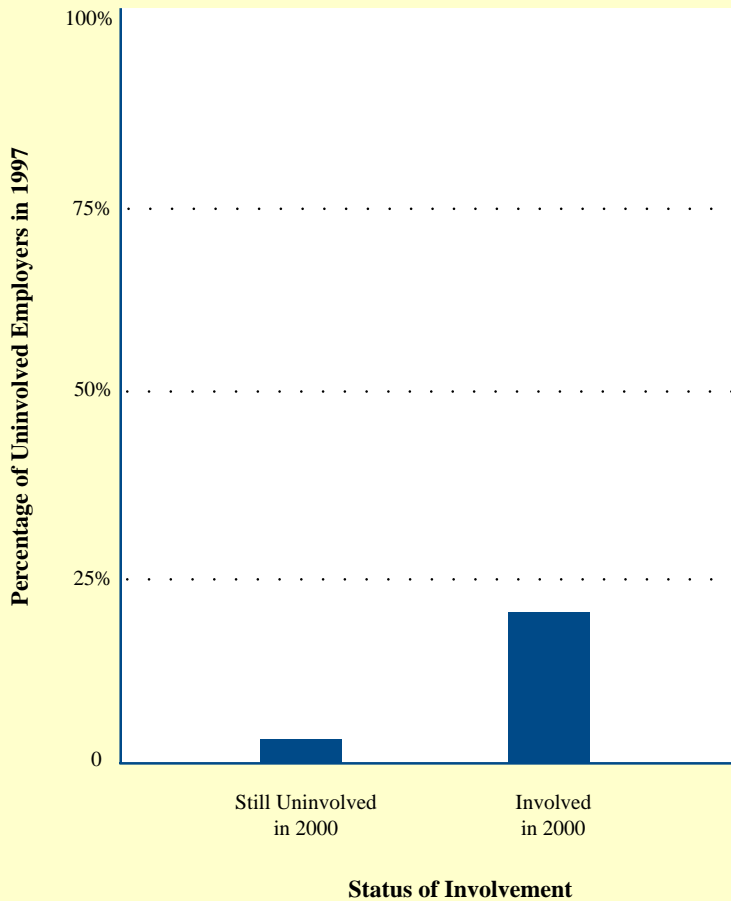


Chart 11.
Turnover Among Uninvolved Employers From 1997 to 2000.



employers who did not pay for the training. No doubt these characteristics contributed to the slower growth of formal apprenticeships as measured by the NES. The simpler, cheaper programs help participating employers identify good workers without supplying the credentials that make them attractive to non-participating employers—and easy to poach.

More interesting, however, is the fact that school-based enterprises were the only programs for which participation actually declined. In fact, the drop was sharp—over a 40 percent reduction in the percentage of employers so

engaged. School-based enterprises are the oranges among the apples; all other forms of work-based learning are employment-related and offer the greatest potential for providing direct benefits to the employer in terms of identifying and recruiting new hires.

Chart 13 provides a similar analysis for employers' support of schools through activities that are traditionally related to private-sector participation in education reform. Here, the results are more mixed. Participation in "high-level" rather than direct involvement—roles that offer the most *general* support for schools—either decreased or increased only marginally. Serving on advisory boards decreased by 15 percent, providing curriculum development decreased by nearly 30 percent, and donating equipment or money increased slightly by 9 percent.

In contrast, the activities for which the percentage of engaged employers expanded the most were scholarship programs for teachers (which tripled) and teacher professional development (which more than tripled). Both activities relate to advancing the skills, knowledge, and abilities of teachers in the classroom.

Although the NES reports neither the purpose of the scholarships nor the area of professional development, it is not uncommon for these programs to be targeted at helping teachers learn more about the world of work. These two activities essentially bypass school administrators and allow employers to influence education more directly by reaching teachers.

It is also interesting to note that the employers who are involved in more general efforts to improve schools are not necessarily those who are involved in formal work-based learning programs. The statistical correlation

between these two sets of employers is only .29, suggesting that their respective motives for participation with the educational system are decidedly different.

Identifying Who Participates

The next set of questions examines the characteristics of establishments that are involved in school-to-work programs and those that provide general school support. Taken together, the resulting patterns provide a detailed profile of the types of establishments that not only are concerned enough

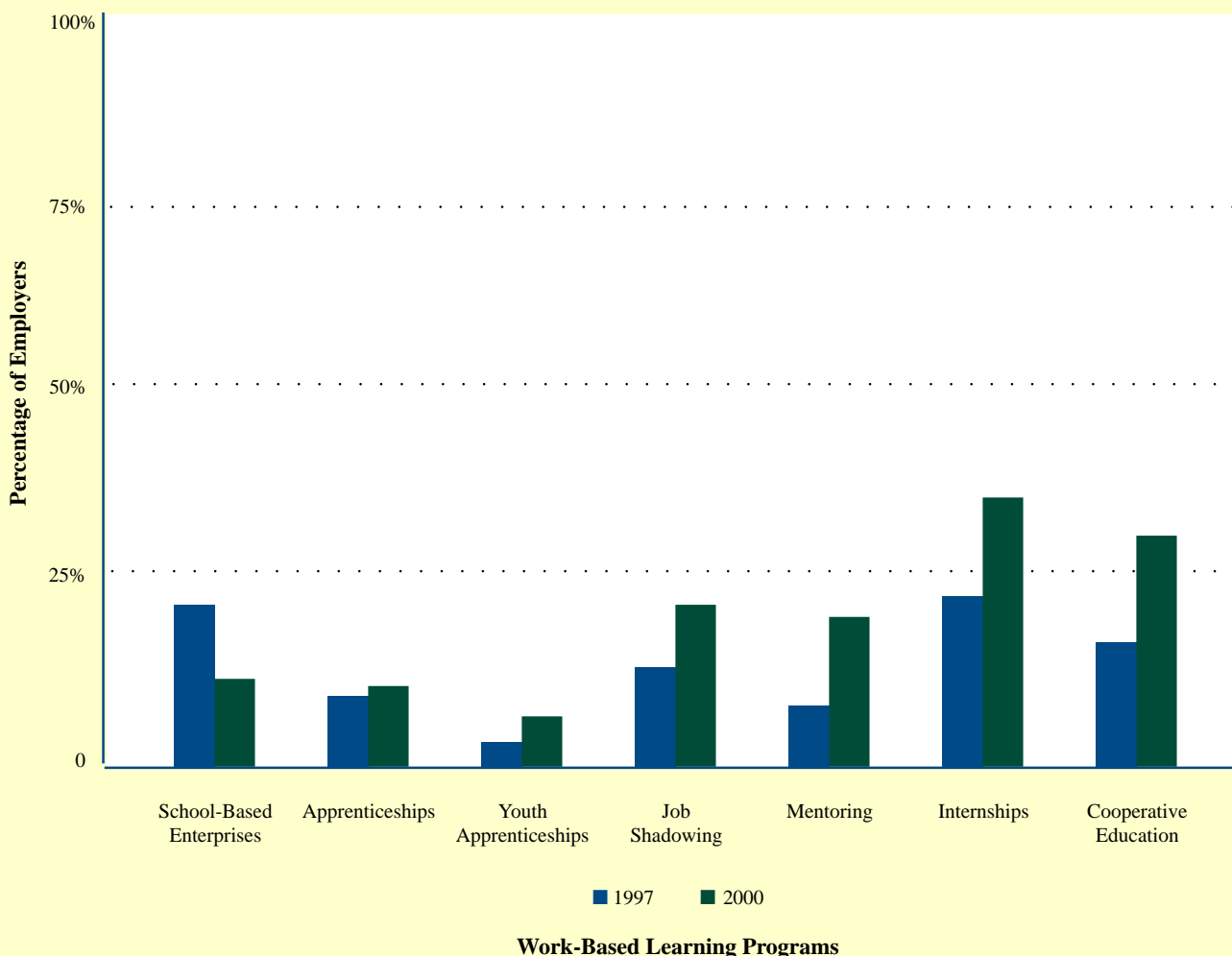
about the state of education to become engaged but are also motivated by a need to find skilled entry-level workers.

A note of caution: The NES cannot establish a direction of causation—whether certain characteristics actually cause employers to be involved.

However, it does allow us to generate regression estimates that represent associations between the characteristics of employers and the extent of their school involvement.

The first point of comparison is for

Chart 12.
Employer Involvement in Work-Based Learning Programs, 1997 to 2000.



the regression model to distinguish between the attributes of employers who reported having any school involvement and those who reported having none. The establishments that are more likely to have any involvement with their local schools tend to be from the retail and business services industries; to be part of larger corporations; to have rising skill requirements; to offer more employee benefits; to experience fewer layoffs; to have workforces with lower levels of education; to hire more minority employees; and to pay front-line workers lower wages. Employers from the manufacturing industries, in particular, are less likely to be involved in any school support or work-based learning programs.

Comparisons can also be made between employers with some involvement and those with substantial involvement, as measured by the number of school-to-work practices and the number of activities in which they are engaged. In general, those with higher rates of participation share many characteristics with the establishments reporting any involvement: their workplaces require higher levels of skill; they pay lower wages to front-line workers; and they are part of larger corporations.

The resulting patterns by industry also remain the same. Employers with greater involvement are in the retail and business services; those with less are from the manufacturing sector. Establishments that are more involved also tend to be part of larger corporations, while those that are less involved tend to have only one location.

However, a number of new characteristics emerge in this analysis. Establishments with higher levels of involvement tend to be large them-

selves, to be unionized, to have lower quit rates, to use fewer temporary and contingent workers, and to make greater use of teamwork, job rotation, and total quality management practices.

The regression results suggest that the establishments involved in formal school-to-work programs and with schools in general are more likely to find use for hiring students or recent graduates. They are employers in service industries, in which jobs can be filled by entry-level workers with solid basic skills. Manufacturing jobs, by contrast, may require higher technical and work-based skills that demand longer training periods.

The bad news is that establishments reporting greater involvement with schools have workforces with lower levels of education and offer lower-wage jobs, other things being equal. The good news, on the other hand, is that they also experience lower turnover rates and layoffs, their skill requirements are rising, and they use more recent work organization practices—especially those associated with “high-performance” work systems—that give employees more opportunities for participating in decision-making.

The increase in employer engagement with schools may well be driven by an interest in hiring students, but the employers who are involved seem to be those with more progressive practices—those that offer substantial benefits and better options for young employees being introduced to the world of work. Ultimately, these profiles of engaged employers serve as ideal places for an educational institution’s first stop when looking for willing, as well as responsible, partners.

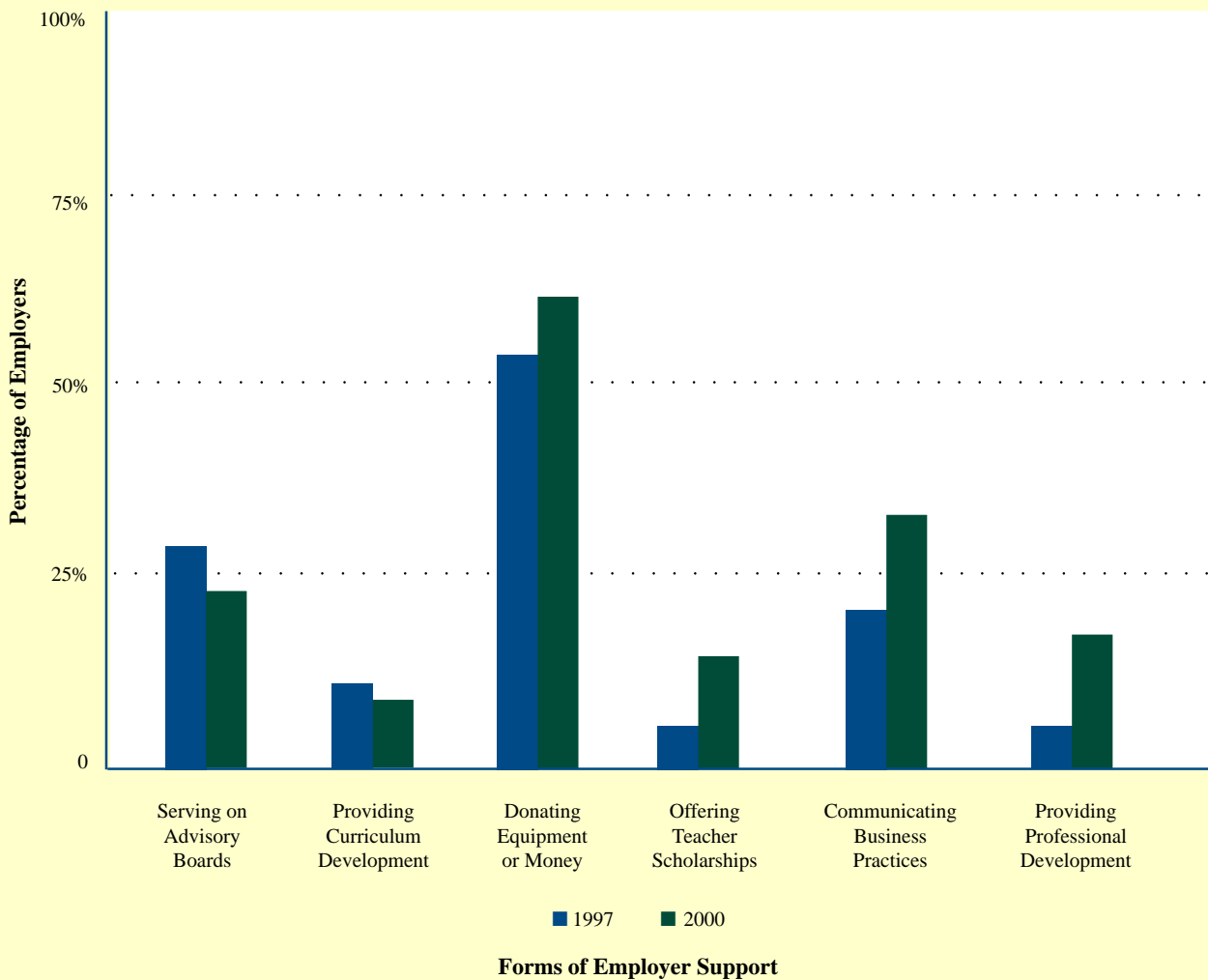
**Stakeholder Perspectives:
A Postscript**

Once again, a set of postsecondary education’s stakeholders has let four-year colleges and universities off the hook. In a booming economy with higher skill requirements and a tighter labor market, the perceived value of their college credential gets ratcheted up.

In fact, the relationship is monotonic. A four-year baccalaureate degree becomes the sought-after

credential in the labor market—accepted without reservation, examination, or criticism. The certificates and degrees of two-year institutions, particularly community colleges, are less well-regarded than those granted by four-year institutions, but they are still considered valuable signals of work preparedness for new hires. High schools, at the lower rungs, receive the brunt of the criticism. And while the nature of employers’

**Chart 13.
Employer Involvement in General Support for Schools, 1997 to 2000.**



complaints has less to do with the academic skills of recent high school graduates—a shortfall more commonly cited in reports such as *A Nation at Risk*, *Workforce 2000*, and *America's Choice: High Skills or Low Wages!*—criticism has now shifted to more directly work-related skills such as comportment, motivation, attitude, and occupation-specific skills.

Looking back at the three reports that constitute *A Report to Stakeholders on the Condition and Effectiveness of Postsecondary Education*—capturing the perspectives of recent graduates, the general public, and employers—one solid theme emerges: perceptions of the U.S. educational system shift with economic winds. As conditions and labor market requirements change, so does the perceived value of the education provided at various levels in the system.

For the recent graduates we queried, who overwhelmingly chose occupations in the business field early in their careers, the link between the pursuit of a higher education, the institution they attended, and economic security is a given. For the general public, all would seem to be well—as long as students are finding gainful employment that maintains or improves their socioeconomic status and covers the borrowed cost of attendance. For employers, in

particular, economic conditions dictate the pool of applicants from which they can hire, placing a higher premium on baccalaureate and advanced degrees and even driving the nature and extent of their participation with colleges and schools.

What can colleges and universities gain from this information, if their public image is so subject to external conditions over which they have little or no control? There are two possible answers. The first is to take solace from the past, knowing that when the inevitable economic downturn occurs and higher education's stakeholders again grumble about processes and outcomes, higher education can be assured that this, too, will pass.

The second answer is to begin planning now for anticipated change. If we have learned anything as a nation over the past few months, it is that vigilance and preparedness should be a constant concern. Rather than waiting to fix only what breaks later—when reform could happen too late to address the very crisis that spurred it—higher education might begin to take a longer-term view of itself and the services it provides to its stakeholders. Put simply, higher education could engage now in the preventative maintenance that keeps a system's machinery running smoothly under any conditions. □