Employers have played an important role in the education reform movements of the 1980s and 1990s; they have been vocal about the education deficiencies of the people they interview. They have focused on what the schools can do to improve education, but there are things that employers can do. The first thing is to make achievement matter by taking the applicant's high school record into account. Employers can also work with the schools to enhance the achievement of young people they employ on a part-time basis as they go through school. Employers can promote experience-based education and strengthen the relationship between work and education. Teachers need to understand the needs of business and the skills their students need, and employers can educate teachers in these areas. Teachers need to see and experience the workings of business first hand. Businesses can also support programs that help students choose and plan for careers. Employers are in a position to take a lead role in promoting educational reform that will bring them employees with the skills they need. (Contains four figures.) (SLD)
Employers and Student Achievement

Employers have played an important role in the education reform movements of the 1980s and 1990s. They have been vocal about the education deficiencies of the people they interview for employment; they have participated in state-level efforts to raise teaching standards, require more-rigorous courses, and install accountability systems. To improve American education, businesses have joined with schools in partnerships of all shapes and sizes. Employers have been supportive of the national goals set by President Bush and the nation's governors at the Charlottesville Summit in 1989.

At the Education Summit in March of 1996, each governor was accompanied by a chief executive officer who took an active role in formulating the actions and policies that were announced. Business organizations have followed up, creating the Business Coalition for Education Reform that coordinates the work of 12 national business organizations, including the National Alliance of Business, the Business Round-table, the Chamber of Commerce, and the National Association of Manufacturers.

Business has focused on improving what the schools do. While this focus is certainly important, there are some critical things that employers can do, beyond influencing what happens behind classroom doors. One of the significant advances at the 1996 Education Summit was the recognition that employers could take actions very important to raising student achievement.

Making Achievement Matter

Adolescents — naturally anticipating the freedom and income of adulthood — are well aware of the two main gates to adult economic society: the gate of employment, and the gate of postsecondary education, a route to better employment opportunities. Paradoxically, in hiring high school graduates, employers are not asking these prospective employees anything about the kinds of courses they took in high school or the grades they received. On the one hand, American employers have been vocal in saying that American students are educationally deficient, that they are not prepared in the new basics required in the high performance workplace, that the young people who come to them for jobs do not meet their requirements. On the other hand, employers show no apparent regard for the applicant's high school record.

Employers at the Education Summit promised to turn this around. They said:...
...we will clearly communicate to students, parents, schools, and the community the types and levels of skills necessary to meet the work-force needs of the next century and implement hiring practices within one year that will require applicants to demonstrate academic achievement through school-based records, such as academic transcripts, diplomas, portfolios, certificates of initial mastery, or others as appropriate (emphasis supplied).

When students learn that academic achievement matters to employers, they will take it much more seriously. An example:

A serious effort in keeping with this summit policy statement is The HIRE ED program in Delaware. HIRE ED was created through the Business Industry Education Alliance. Employers look at high school records and also visit schools and talk to students. The Alliance has provided every public high school with a fax machine to help schools respond to requests from employers.

Starting Young

Some segments of industry, particularly food service and retail trade, have become heavily involved with students while they are still in high school. At any point during the school year, a half to two-thirds of students are working part-time. The rate of part-time work varies by gender, race/ethnicity, and socioeconomic status (see Figure 1). Over the course of the entire year, including the summer, most students will work at some time. These are students both at work and at school, but it is rare for the employer and the school to have any contact with each other regarding the

Figure 1
Percentage of Students Employed During the School Year, 1992

Working is widespread among high school seniors. The rate is highest for females, for White students, and for middle-class students.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>52%</td>
</tr>
<tr>
<td>Male</td>
<td>48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>54%</td>
</tr>
<tr>
<td>Asian</td>
<td>42%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>39%</td>
</tr>
<tr>
<td>Black</td>
<td>32%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socioeconomic Status</th>
<th>Percentage of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>53%</td>
</tr>
<tr>
<td>High</td>
<td>49%</td>
</tr>
<tr>
<td>Low</td>
<td>44%</td>
</tr>
</tbody>
</table>

educational progress of student workers, rare for the employer to take an interest in how the worker is doing with his or her studies, and rare for the school to know where and how much any individual student is working.

If employers of students took a real interest in the school side of their lives, pointed out where education can make a difference in employment success, and recognized effort in school, the message would get across early—the message that employers care about school achievement, and that it matters in employment success.

Employers can add “student of the month” awards to those for “worker of the month awards,” limit work hours for students with low grades, and inform schools of the kinds of education deficiencies students must remedy.

Experience-Based Learning

In a recent national survey of employer hiring practices, experience ranked highest in what employers are looking for. They know there is no substitute for learning at the workplace—that it is by being in the workplace that the culture of work is absorbed, and that appropriate knowledge can be developed and applied. Yet in the United States, the use of the workplace is not a standard part of a secondary education; only a relatively small percentage of students have opportunities for internships, youth apprenticeships, or cooperative education.

Nations competing with the United States have recognized the value of using the workplace in education. In Germany, for example, about 80 percent of all occupations are prepared for through “dual enrollment” programs, with students dividing their time between the workplace and the school room.

In such employer-involved education, employers help shape learning, impart the kind of learning most appropriate to the workplace, and develop future employees they have first-hand experience with. Surveys show that employers who have been involved with youth apprenticeship and cooperative education programs are satisfied with their experience and see the benefits of such programs.

Students also gain much (see Figure 2). They have an opportunity to apply what they learn in school, and to learn in context, rather than just through textbooks and lectures. They learn to cooperate and accept supervision; just as important, they learn the culture of the workplace and become accustomed to its requirements.

New efforts have been under way for three years, under the School to Work Opportunities Act, to use the worksite as part of secondary education. That act requires combining worksite and school site instruction with activities that connect the work and school experience. The objectives are to raise academic achievement, improve problem-solving and critical-thinking skills, and improve the transition from school to work.

However, this approach to learning cannot expand on substantial scale without the active participation of employers. They must work in partnership with the schools. In listing “immediate next steps,” the 1996 Education Summit called for

... reaching out to other governors and other business leaders to identify and adopt effective practices to improve achievement and look for opportunities where states and businesses can work together.

Most governors have initiated school-to-work programs since the new law was enacted, and all of these new efforts require the active participation of employers. An example of an “effective practice” to improve achievement is the school-to-work program at Dauphin County Technical School in Harrisburg, Pennsylvania, where about 800 students alternate a week of full-time work and a week of school during the 12th grade. Academic and vocational instruction is integrated. Such students can also earn credits at the community college while still in high school.
Students working in joint employer-school programs say they learn problem solving, the importance of a good education, and how to take responsibility.

Percentage who say the job...

- Helps in problem solving: 85%
- Teaches how to take responsibility: 80%
- Teaches the importance of a good education: 75%
- Helps me learn to do things well: 70%
- Teaches how to follow directions: 63%
- Helps me recognize subjects I like: 51%
- Teaches how to set priorities: 46%


Teachers Who Understand Business Needs

Teachers go to elementary and secondary school for 12 years, then go to college for four or more years, and then go into the classroom to teach for some period of years. People in business spend their professional lives in workplaces, and their contact with schools may amount to no more than the typical conferences with their children’s teachers. How would we expect that schools would be tuned into the needs of business? It is not surprising that miscommunication abounds.

American students do well in international comparisons when tested for reading comprehension of school texts and literature. However, both the 1986 and the 1992 nationwide assessments of literacy skills confirmed that students do poorly when they use print materials that direct them to carry out the kinds of real-world tasks employers require. An obvious lack of connection appears also in mathematics, specifically in the areas of problem solving and critical thinking.

Teachers need the opportunity to see and experience the workings of business first hand. They need to see what kinds of written materials employees must work with and produce. They need to see the kinds of quantitative problems they must deal with on the job. They need to see the differences between reading to do, and reading to learn in schools.
Such differences in the way schools and employers perceive achievement are illustrated in a national study that measured the reading skills of young adults on both school and real-world documents. Readers judged to be "adept" at school reading varied greatly in dealing with knowledge and skills required to locate and use information contained in job applications or payroll forms, bus schedules, maps, tables, indexes, and so forth (see Figure 3).

Chief Executive Officers at the 1996 Education Summit recognized this need when they and the governors declared that businesses and schools should arrange for teaching professionals to visit businesses throughout the states to help them develop a better understanding of the needs of employers.

An example:

In the Osceola School District in Arkansas, there is a program of summer internships for both secondary and postsecondary teachers to prepare them to help students connect learning in the classroom to their career goals. There are job-shadowing and internship plans operating in Boston, Massachusetts; Jefferson County, Kentucky; and Philadelphia, Pennsylvania.

**Figure 3**
Document Literacy of Young Adult "Adept" Readers*

Students who read well in school may not do well in workplace literacy tasks.

<table>
<thead>
<tr>
<th>Document Literacy Proficiency</th>
<th>Percentage of &quot;Adept&quot; Readers</th>
</tr>
</thead>
<tbody>
<tr>
<td>375+</td>
<td>3</td>
</tr>
<tr>
<td>350-374</td>
<td>9</td>
</tr>
<tr>
<td>325-349</td>
<td>17</td>
</tr>
<tr>
<td>300-324</td>
<td>24</td>
</tr>
<tr>
<td>275-299</td>
<td>24</td>
</tr>
<tr>
<td>250-274</td>
<td>13</td>
</tr>
<tr>
<td>225-249</td>
<td>7</td>
</tr>
<tr>
<td>Under 225</td>
<td>3</td>
</tr>
</tbody>
</table>

* Adept readers can understand complicated literary and informational passages, including material about topics they study in school. They can also analyze and integrate less familiar material and provide reactions to and explanations of the text as a whole. Performance at this level suggests the ability to find, understand, summarize, and explain relatively complex information.

Source: Unpublished data, Young Adult Literacy Study, Educational Testing Service.
Helping Students Choose and Plan

It is when students choose their curriculum and develop expectations about careers that they make implicit decisions about how high they will aim in academic achievement. If they know little about the job market they will face, and little about the educational requirements these jobs will have, they are more likely to choose the easy courses, watch TV at night instead of doing homework, or succumb to peer pressure not to do anything that will make them look like "nerds."

If students are to make intelligent choices, they must be well-informed about the consequences of those choices, and must have access to competent advisors. Yet counseling and guidance in these areas are sorely neglected in secondary education. Where resources exist, they go lopsidedly to helping college-bound students negotiate the college application process, as opposed to helping students find work after high school. Those unable to chart a clear path are most likely to be overlooked. Figure 4 documents this discrepancy.

Nothing has been said about the deficiencies in counseling and guidance in this 1990s education reform movement. In fact, nothing was said about it in the 1980s reform movement. The thick annual *Condition of Education* report issued by the National Center for Education Statistics of the U.S. Department of Education does not even list

### Figure 4
**Percentage of High School Seniors Receiving Various Guidance Services**

1992 seniors received little help finding jobs and a lot of help going on to college.

#### Help Finding Jobs

<table>
<thead>
<tr>
<th>Did vocational counselor help select job?</th>
<th>Yes</th>
<th>6%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>78%</td>
</tr>
<tr>
<td>School does not have</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did guidance counselor help select job?</th>
<th>Yes</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>84%</td>
</tr>
<tr>
<td>School does not have</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

#### Help Going on to School

<table>
<thead>
<tr>
<th>Did you get help with filling out school applications at high school?</th>
<th>Yes</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>53%</td>
</tr>
<tr>
<td>School does not offer</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did you talk to a high school teacher or guidance counselor about financial aid?</th>
<th>Yes</th>
<th>54%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>46%</td>
</tr>
</tbody>
</table>

Leading in the Community

Employers played a lead role in the 1996 Education Summit. And they urged employers to take the lead in their states.

Leadership activities may include organizing town meetings to build public support and engage parents and communities in improving student performance, . . . and “organizing a state-level Education Summit to design a state-specific plan for developing and implementing standards and assessments.”

A more detailed discussion of the role employers can play, with examples of good practices, is available from the Southern Regional Education Board’s “High Schools that Work” initiative. Its title is Employers and Schools Working Together to Improve Student Achievement. To order, call 404-875-9211, extension 236. It is 16 pages and costs $1.50 (or $1.00 each for 10 or more copies).
Recent Publications from the ETS Policy Information Center

All orders must be prepaid by check, money order, or credit card. Checks are to be made payable to ETS Policy Information Center. Write to ETS Policy Information Center (04-R), Rosedale Road, Princeton, NJ 08541. Please call (609) 734-5694 or write for more information.

Email: pic@ets.org. Visit us on the Web at http://www.ets.org.

ETS Policy Notes Newsletters

Vol. 7, No. 1, Summer 1996 - International Adult Literacy

Vol. 6, No. 2, Spring 1995 - Teaching for Diversity

Policy Information Reports

Captive Students: Education and Training in America’s Prisons, 1996, $9.50
This report examines the literacy levels of prisoners, looks at the role that education is currently playing in our nation’s prisons, and provides a discussion of the results.

Workbooks and Other Resources

Cooperative Education in High School: Promise and Neglect, 1996, $2.50.
The report reviews the history and purposes of cooperative education, enrollment trends, evaluations of effectiveness, steps that can be taken to improve it, and its relationship to the school to work transition.

Writing Skill Assessment: Problems and Prospects, 1996, $4.00.
This perspective provides a comprehensive review of writing assessment practices, new and old. The author describes the arguments for more authentic writing assessment, as well as the important issues of validity, reliability, comparability, and fairness that must be considered.

The second William H. Angoff Memorial Lecture was delivered by Bert F. Green. Dr. Green turns our attention to the key issues associated with the challenging task of setting performance standards.

A Perspective on Student Employment, 1996, $2.50.
This perspective suggests that the time has come to start to improve students’ job experiences and to better relate the work and school experiences. It starts with some background on student employment, suggests some goals we could strive for, and describes some emerging activities that are related.

ETS Policy Notes is published by the ETS Policy Information Center, Educational Testing Service, Princeton, NJ 08541-0001; (609) 734-5694.
Internet: pic@ets.org
http://www.ets.org

Director: ETS Policy Information Center: Paul E. Barton
Editor: Richard J. Coley
Copyright © 1996 by Educational Testing Service. All rights reserved. Educational Testing Service is an Affirmative Action/Equal Opportunity Employer.

Educational Testing Service, ETS, and ® are registered trademarks of Educational Testing Service.

9
NOTICE

REPRODUCTION BASIS

This document is covered by a signed “Reproduction Release (Blanket)” form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a “Specific Document” Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either “Specific Document” or “Blanket”).