

The Benefits to Bridging School and Work

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Abstract

In this paper, the authors use the 1997 National Employer Survey to examine the benefits that result from an improved articulation between the nation's economic and educational systems. Specifically, they demonstrate that there are real and substantial benefits to be gained by individual employers that participate in activities related to school reform and the educational process. While the realization of such rewards does not seem to mitigate the current disconnect between employers and schools, those establishments that do engage in school-relevant activities more positively assess the ability of local secondary schools to prepare students for the world of work.

Introduction

To a remarkable extent, the reform of K-12 education in the U.S. has focused on the capacity of that system to adequately prepare students to become productive young workers. As Cappelli, Shapiro, and Shumanis point out elsewhere in this issue (“Employer Participation in School-to-Work Programs”), a predominant strategy that developed in the United States during the 1990s was to exploit the educational experiences already occurring at places of work in order to retain and motivate students who were not responsive to traditional pedagogical techniques. This strategy was given both official sanction and administrative reality with the passage of the 1994 School-to-Work Opportunities Act.

While these and related activities that ease the transition between school and work may be beneficial overall and in the long run, it is still not clear what role work itself can play in transforming education or whether engagement in such activities is in the immediate interests of any particular employer. Cappelli et al. lay out a summary of those factors that would both encourage or discourage employers from participating in work-based learning activities. A similar set of factors could be generated for other types of activities that engage employers, ranging from sponsoring before- or after-school programs, to working on curriculum development, to engaging in the current debates around K-12 reform.

The fundamental question that any employer wants answered relates to the bottom-line: “Is my investment in time and resources going to pay off?” While individuals may act upon some philanthropic or moral imperative, employers writ large will not act without a more tangible return. The development of large-scale social policy needs to reflect that reality. If the benefits resulting from improved articulation between the nation’s economic and educational systems can be realized by participants and non-participants alike, why would any particular firm commit time and resources, since it would reap the rewards in any case?

In this paper, we use the 1997 National Employer Survey to examine these questions. Specifically, we show that there are real and substantial benefits to be gained by individual employers that participate in activities related to school reform and the educational process. While the realization of such rewards does not seem to mitigate the current disconnect between employers and schools generally, establishments that regularly work with schools report that their local high schools do a better job of producing work-ready graduates.

The National Employer Survey

The National Employer Survey (NES) was designed by the Institute for Research on Higher Education and administered by the U.S. Bureau of the Census as part of the U.S. Department of Education's research interest in the educational quality of the American workforce. First administered in 1994, the NES shed new light on the practices and expectations of employers in their search for a skilled and proficient workforce. More specifically, the 1994 NES documented a fundamental disconnection between employers and schools: although they discounted schools and measures of student performance when making hiring decisions, in the long run, those establishments that hired more educated workers had more productive workplaces.

The 1997 administration of the NES explored this disconnection further. In addition to capturing longitudinal information on many of the employers first surveyed, the 1997 NES posed new questions to calibrate the link between work and school and to relate employers' impressions of schools and the quality of their graduates. As in 1994, the sampling frame for the 1997 NES included all private establishments with 20 or more employees (excluding corporate headquarters). The 1997 response rate was 78 percent, representing responses from more than 5,400 establishments.

School Participation and Youth Turnover Rates

One of the key additions to the 1997 NES was a section in which employers were asked about the different ways in which they worked with local schools. Table 1 displays employer responses to these items, along with the percentage of establishments that reported participating in each activity. (Those activities with participation rates above 20 percent are highlighted.) Although donating materials to schools represents the most common activity by far, the most interesting findings highlight the substantial rates at which employers are engaging in K-12 reform, either through industry associations, advisory committees, community forums, local media outlets, or corporate communications functions.

In order to gauge the effects of relatively weak versus extensive participation, we split the 1997 NES sample into four, roughly equal groups according to the number of activities in which an establishment reported participating. The bottom quartile of establishments participated in one or fewer of the above activities. Those that participated in two, three, or four activities were placed in the second quartile. Establishments that participated in five, six, or seven activities were placed in the third quartile, and those that participated in eight or more in the top quartile.

When comparing the annual quit and fire rates of young workers (aged 18 to 25) to this school participation quartile, we were struck by the strong relationship that emerged. Employers who actively participate with local high schools (in eight or more activities) have a young worker turnover rate that is *half* the youth turnover rate for employers that do not actively participate with high schools (Figure 1, page 13). By actively engaging their local education systems establishments may be helping to generate a future labor force that is more stable, more work-ready, and presumably better-matched to the workplace of the future.

Table 1. Percentage of Establishments Reporting Participation in Various School-Related Activities

Type of Activity	Percent of Participating Establishments
Employees Visit Students in School	28%
Students Visit the Worksite	34%
Employees Tutor Students	9%
Employer Sponsors Before, or After, School Programs	12%
Employer Sponsors Youth Clubs	10%
Employer Sponsors Student Scholarships	24%
Employees Teach in Classroom	10%
Employer Assists School-Based Enterprises	8%
Employer Assists with Professional Development for School Personnel	6%
Employer Assists with Curricular Development	9%
Employer Assists in Communicating Business Practices	19%
Employer Donates Materials to Schools	53%
Employer Sponsors Teacher Scholarships	6%
Works on K-12 Reform through Industry Associations	28%
Works on K-12 Reform through Advisory Committees	23%
Works on K-12 Reform through Community Forums	30%
Works on K-12 Reform through the Local Media	31%
Works on K-12 Reform through Company Communications	35%
Works on K-12 Reform through other methods	2%

The Continuing Disconnect: Disregard and Neutrality

Despite the benefits employers receive through substantial and active participation, the disconnection between schools and employers persists. When asked once again to rank the factors involved in making hiring decisions, the 1997 responses were virtually identical to those given in 1994 (Table 2). Employers continue to ignore schooling factors when hiring youth; in fact, one factor—the reputation of a job applicant’s school—actually fell in importance.

Table 2. Relative Ranking* of the Importance of Various Factors in Making Hiring Decisions

Characteristics	1994 Ranking	1997 Ranking
Applicant’s Attitude	4.6	4.6
Applicant’s Communication Skills	4.2	4.1
Previous Employer References	3.4	3.9
Previous Work Experience	4.0	3.8
Industry Based Credentials	3.2	3.2
Years of Completed Schooling	2.9	2.9
Academic Performance	2.5	2.5
Score on Tests Administered as Part of the Interview	2.5	2.3
Teacher Recommendations	2.1	2.0
Experience or Reputation of Applicant’s School	2.4	2.0

***(1 = Not at all important; 5 = Essential)**

The 1997 NES also asked employers to evaluate their local high schools using criteria that reflects the school’s performance in producing work-ready graduates. An exploration of employer perceptions reinforces the perennial disappointment they express concerning the quality of local high schools—the best way to summarize these attitudes is “middling” satisfaction.

When employers were asked to rate how well local high schools prepared their graduates for work, based on the establishment's experiences with hiring these graduates, they overwhelmingly place their answers in the middle of the scale (Figure 2, page 14):

- 62 percent of establishments rate high schools' preparation of their students for work as "adequate."

The remaining employers are split almost evenly on either extreme:

- 20 percent report that high schools' preparation of students is outstanding or more than adequate; and
- 19 percent report that it is barely acceptable or unacceptable.

Overcoming Ambivalence: Employer Engagement and Local Context

When we looked at the factors influencing employer attitudes, however, an interesting story emerged regarding the "triangular" relationship among employers, schools, and young workers. Several factors relating to three general categories—employer's participation with schools, the nature of the employer's workforce, and the nature of the labor market in which the employer operates—are associated with more extreme opinions of graduates' work readiness.

We used logit models to examine the characteristics that tended to "pull" employers out of the central ("adequate") position. The results of those models are presented in Tables 3 and 4. Table 3 examines the factors associated with establishments that believe high schools are doing an admirable job in preparing students for the world of work. Table 4 examines the factors associated with establishments that view high schools as inadequate in this respect. In both models, negative signs indicate a poorer view of high schools' performance. The characteristics that appear in *both* models are highlighted in bold. The academic experience variable may require definition: it is a composite variable that includes of the importance of school reputation, grades, and courses taken to the establishment when making hiring decisions.

Table 3. Logit Analysis Predicting the Likelihood of Rating Local High Schools as “More than Adequate” or “Outstanding”

Variable Label	Parameter Estimate	Standardized Estimate	Pr > Chi-Square
Ratio of Young Hires to Total Permanent	-0.204	-0.488	0.030
Establishment is Growing	-0.423	-0.114	0.001
September 1997 Local Unemployment Rate	-0.118	-0.112	0.004
Weeks to Fill Production Job	-0.077	-0.105	0.007
Number of Candidates for Prod. Job	0.029	0.090	0.005
Transcript Important Information Source	0.144	0.093	0.006
Turnover Rate	0.009	0.156	0.000
% 18+ with at most HS Diploma	0.029	0.161	0.000
Self ID as High Productivity	0.665	0.183	0.000
High Level of School Participation	1.188	0.296	0.000
Front-line Schooling	0.459	0.316	0.000

Table 4. Logit Analysis Predicting the Likelihood of Rating Local High Schools as “Unacceptable” or “Less Than Adequate”

Variable Label	Parameter Estimate	Standardized Estimate	Pr > Chi-Square
Manufacturing Dummy	-1.111	-0.252	0.000
% Front-line Workers Use Computers	-0.014	-0.310	0.000
September 97 Local Unemployment Rate	-0.174	-0.165	0.000
% 18+ with at Most HS Diploma	-0.019	-0.107	0.008
Weeks to Fill Production Job	-0.064	-0.088	0.005
Turnover Rate	-0.005	-0.079	0.016
Establishment is Growing	-0.287	-0.078	0.024
Number of Candidates for Prod. Job	-0.019	-0.061	0.043
Academic Experience	0.098	0.164	0.000
Self ID as High Productivity	0.693	0.191	0.000
High Schools Important Applicant Source	0.326	0.242	0.000

To better identify the relationships among these variables, we superimposed the significant factors pulling establishments away from an “Adequate” rating onto the employer ratings displayed in Figure 2. The result is presented in Figure 3 (page 15). Which factors are most likely to be associated with a more positive view of high schools’ performance in preparing students for work? The establishment characteristics fall in three general categories:

1. *Employers’ participation with schools:*

- The establishment is more likely to work with schools
- The establishment considers transcripts as important sources of information when evaluating job characteristics

2. *The nature of the employer’s workforce:*

- The establishment is more likely to have front-line workers with more education
- The establishment is more likely to claim that it has highly productive employees
- The establishment has a higher turnover rate

3. *The nature of the labor market in which employers operate:*

- The establishment’s local labor market has more workers with just a high school education
- The establishment has to interview more job candidates before making a front-line hire.

Which characteristics are more likely to be associated with a more negative view? These attributes only fall along two dimensions:

1. *The nature of the employer’s workforce:*

- The establishment has more front-line workers using computers
- The establishment has a higher turnover rate
- The establishment is growing

2. *The nature of the labor market in which employers operate:*

- There is a high local unemployment rate
- The establishment's local labor market has more workers with just a high school education
- It takes longer for the establishment to fill a front-line job
- The establishment has to interview more job candidates before making a front-line hire

Disappointment with young high school graduates is associated with factors that are limited to the nature of the firm and the context in which it operates: its skill needs, its hiring needs, and the conditions of the local labor market. Ironically, these establishments look much like the ones that tend to rate high school graduates' work-readiness more positively, with a few minor differences. They have increasing skills needs for front-line workers, have increasing need to hire these workers due to both expansion and high turnover, and are situated in a labor market that is insufficient to satisfy their requirements. In fact, three of the characteristics appear on both sides of the divide:

- The establishment's local labor market has more workers with just a high school education
- The establishment has a higher turnover rate
- The establishment has to interview more job candidates before making a front-line hire.

The most obvious difference is that no school participation dimensions are associated with a more negative assessment of high schools' preparation of students for the labor market. What does this finding imply? These establishments—which are representative of employers across the nation—are facing the same constraints regarding increasing skill needs, even for their front-line workforces, but are having difficulty identifying and retaining qualified employees. Where they diverge is in their approach to the problem: employers who actually engage schools and use transcripts to make hiring decisions are happier with the employees they recruit.

Toward Clearer Connections

Given the cross-sectional nature of the NES, one can not draw a causal arrow between participation with local schools and a decrease in youth turnover. Does the experience of working with schools change establishment practices so that young hires are better matched to their jobs? Does a positive experience with the youth labor force encourage employer participation with schools? Is it possible that both factors—working with schools and having a low youth turnover rate—are the result of some third attribute not examined in the current analysis? Further research may shed light on these questions.

Regardless, the 1997 administration of the NES demonstrates a key connection where none was observed before: when an establishment participates substantially in school activities, it is more likely to have lower youth turnover and better experiences when hiring high school graduates. Not only does this finding provide a clear incentive for employers to engage their local schools, it suggests that such participation may actually contribute to students' work-readiness, as well as to the fit between a young worker and his or her job—the underlying goal of efforts to connect school and work.

Figure 1
Youth Employee Turnover vs. Employer School Participation

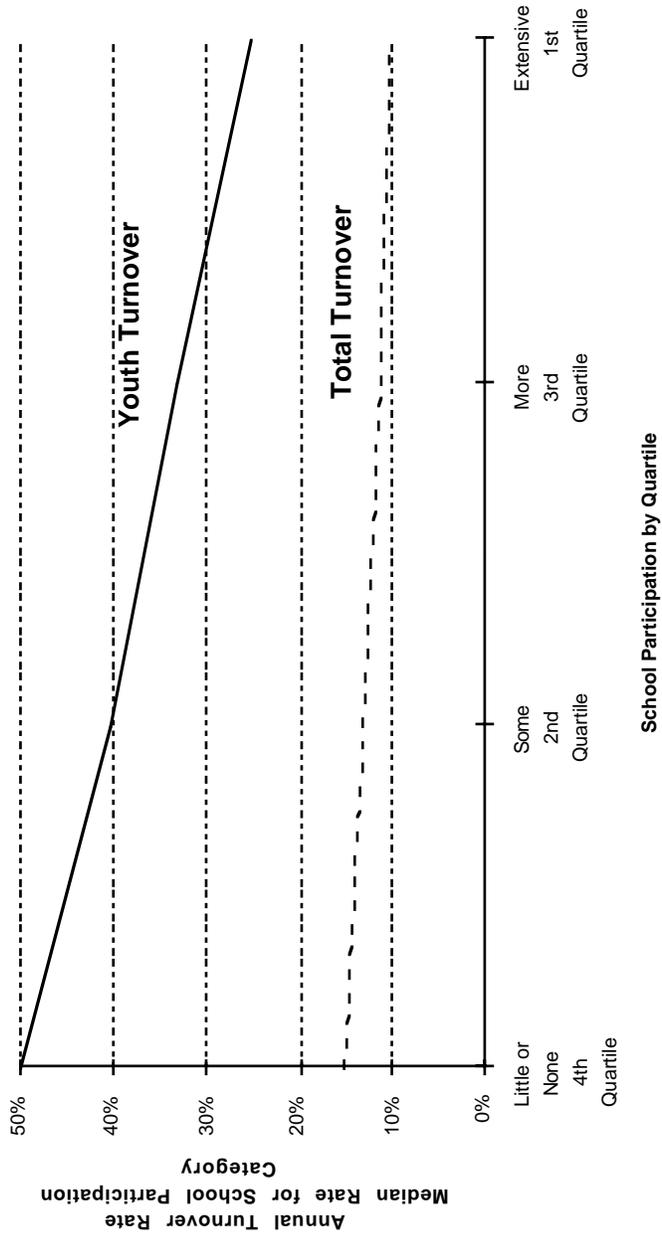


Figure 2
Employer Ratings of Local High School Graduates' Work Readiness

Question: Based on your experience with hiring their graduates, how would you rate your local high schools' overall performance in preparing students for work in your establishment?

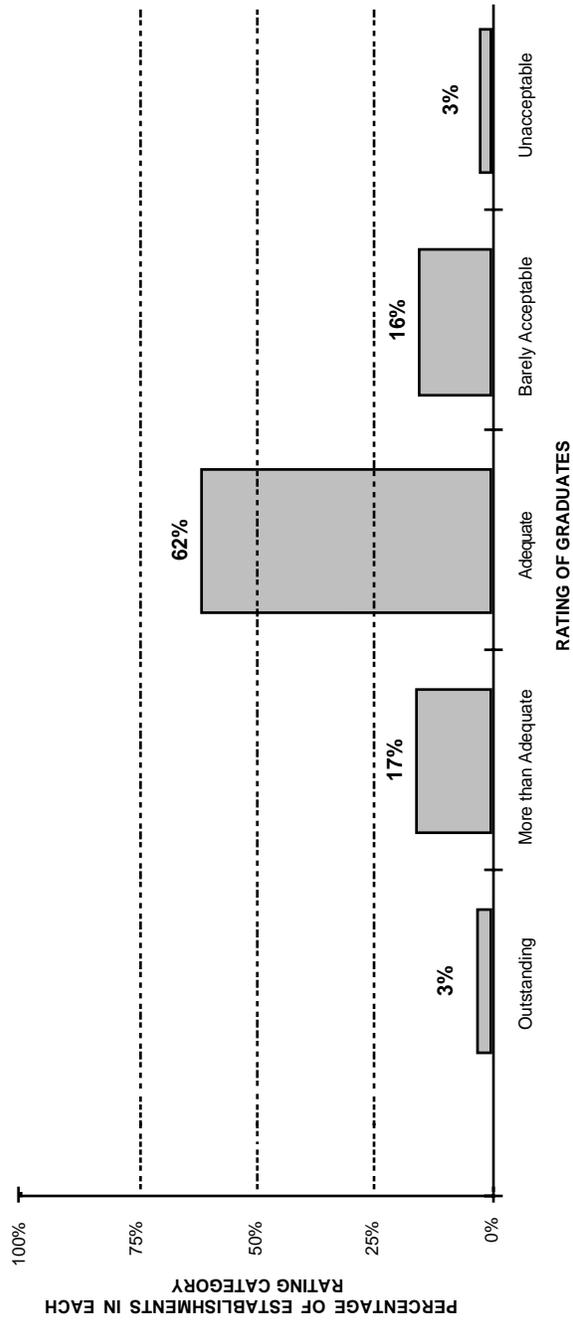


Figure 3
Employer Ratings of Local High School Graduates' Work Readiness

