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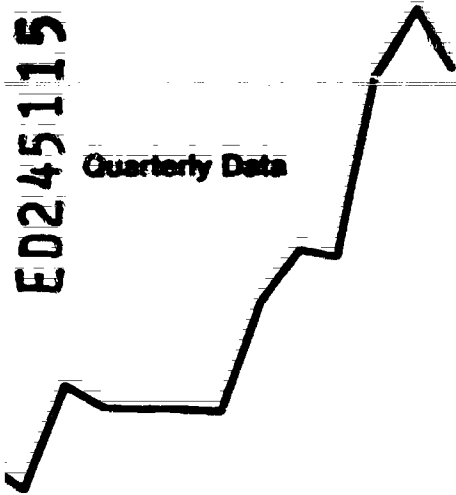
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**ABSTRACT**

A study analyzed the explicit and implicit behavior of employers in their assessment of young job applicants for entry-level clerical, retail trade, and machine trade jobs. In order to determine the influence of applicants' education and skills on employability assessments made by employers, the researchers analyzed data from almost 600 mail questionnaires that were returned by employers from across the nation. In general, employers tended to give preference to participants in relevant cooperative or experiential educational programs. Although part-time employment during school months appeared to confer a slight advantage to entry-level job applicants in the fields examined, data indicated that if part-time work during the school year jeopardized grades, it was not as advantageous from an employability perspective as was work during summers. As expected, employers preferred that job applicants have a high school diploma. In certain instances, however, work experience had certain advantages over school completion. To the extent that the researchers were able to control other variables, the personal characteristics of the application reviewer did appear to influence significantly the employability index assigned to an applicant. Based on these data, the researchers cautioned school administrators and policymakers to be aware of the emphasis that employers place on grades and to provide students with job search skills and some awareness of management principles. (Appended to this report are the survey instrument and survey response frequencies.)  
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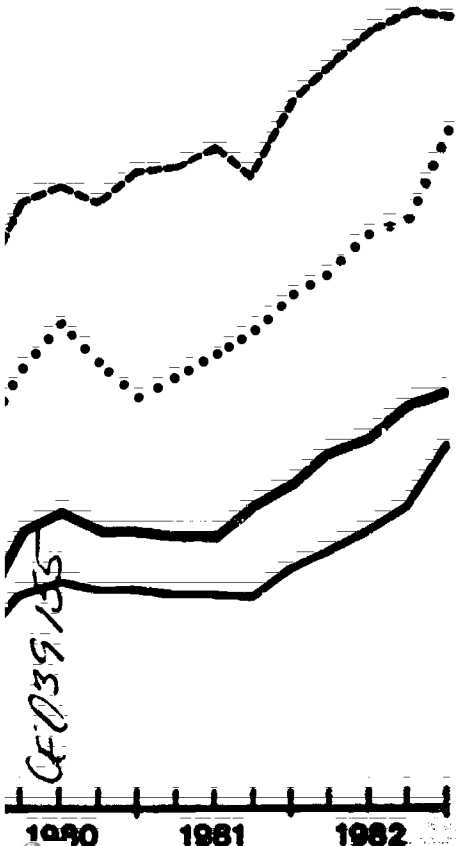
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# SELECTING YOUNG WORKERS: THE INFLUENCE OF APPLICANTS' EDUCATION AND SKILLS ON EMPLOYABILITY ASSESSMENTS BY EMPLOYERS

## EXECUTIVE SUMMARY



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 FOR RESEARCH IN VOCATIONAL EDUCATION  
 THE OHIO STATE UNIVERSITY  
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SELECTING YOUNG WORKERS:  
THE INFLUENCE OF APPLICANTS'  
EDUCATION AND SKILLS ON  
EMPLOYABILITY ASSESSMENTS BY EMPLOYERS

Executive Summary

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Prepared for

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## FOREWORD

An understanding of how youth develop employability skills and how firms make hiring decisions is needed to address the social concerns of high levels of youth unemployment, high job turnover among youth, and the specter of growing skill imbalance between job requirements and job seekers as the nation enters an age of high technology. This study analyzes the explicit and implicit behavior of employers in their assessment of youthful job applicants for entry-level clerical, retail trade, and machine trade jobs. If tradeoffs between various educational and work experience attributes are well understood, youth can make more informed decisions about investments in time and resources for developing employability skills.

Specifically, the study addresses questions such as (1) What is the relative importance of the attributes (signals) that appear in a typical job application? (2) How valuable is one or two years of postsecondary education versus a high school diploma? (3) Of what value, in terms of being hired, is a vocational education major versus a work experience program versus a cooperative education program? (4) How valuable is part-time work experience in high school versus no work experience? (5) Do employers value eligibility for subsidies such as TJTC in making hiring decisions?

This report presents the analyses of data collected by means of a survey mailed to almost 600 employers across the nation who reviewed and rated applications. We greatly appreciate the time and the insights that these very busy men and women contributed. The research would not have been possible without their cooperation and assistance.

We wish to express our gratitude to the National Institute of Education for sponsorship of this study and to Ronald Bucknam, Project Officer, for his guidance and support. We also wish to thank Robert M. Peterson, the Far West Laboratory; John Barron, Professor of Economics, Purdue University; and Robert Campbell, Allen Wiant, and John Bishop, the National Center for Research in Vocational Education, for insightful comments and critiques of this report.

Recognition is due to Kevin Hollenbeck, Research Specialist, for directing the study; Bruce Smith, Graduate Research Associate, for data processing and analysis; Cathy Jones for typing the report; and Judy Balogh for editorial assistance.

Robert L. Taylor  
Executive Director  
National Center for Research  
in Vocational Education

## 1. INTRODUCTION

In June, at the end of their school year, three young people applied for a clerical position at XYZ Corporation. Following is a brief summary of their qualifications:

Applicant 1: Eighteen years old. Graduated from Jeffersonville High School in an office education program with a 2.40/4.00 grade point average in high school. Worked the previous summer as an office helper in a large manufacturing company. Tested typing speed of 45 words per minute. Referred to the corporation by the Job Service. Eligible for a Targeted Jobs Tax Credit.

Applicant 2: Nineteen years old. Graduated from Central High School last June in a general education program with a 2.00/4.00 grade point average. Attended Franklin County Community College in a clerical program for 1 year but did not get a degree. Worked previously in two jobs. In the first job, during senior year of high school, worked in a boutique as a sales helper, but reported quitting after 2 months. In the second job, held during the summer after high school graduation, was as an office helper in a county government office. Tested typing speed of 52 words per minute. Referred to the corporation by the community college.

Applicant 3: Eighteen years old. Graduated from St. Mary's High School in a general education program with a 3.20/4.00 grade point average. Has no prior work experience. Tested typing speed of 60 words per minute. Referred to the corporation by a friend/acquaintance who works there.

How would these three applicants be rated by employers? Results from this study indicated that the three applicants would be rated identically. If any one of the applicants had had a higher grade point average in high school of 0.50, however, they would have been clearly preferred over the other 2. If any one of them had had a higher typing speed by 10 words per minute, he or she would have been clearly preferred over the other two. If either the first or last applicant had attended a community college, or if the second applicant had completed the postsecondary program, he or she would have been clearly preferred by employers. If the third applicant had had any prior work experience, he or she would have been clearly preferred.

The process of employability development for youth, defined as the activities individuals undertake that affect their career, or occupational choice, or that enhance their chances of gaining employment in the occupation of their choice, involves making decisions about investments of time and resources.

Youths could hold part-time jobs while in school, which means less time devoted to academic achievement or extracurricular activities. They could decide to enroll in a vocational program in a junior or community college after graduation from high school. They could enter the labor market directly from high school. The implications these kinds of decisions have for future earnings are important, but also important is the implication they have for the probability of getting a job. For example, the returns to intensive athletic participation while a youth are no doubt extremely high for professional athletes, but the probability of that payoff is slight.

Despite its seeming importance, relatively little research has been done on how characteristics, basic or vocational skill levels, and job experience affect the probability of getting a job. The purpose of this study is to describe and to analyze how employers respond to information presented to them on application forms when making hiring decisions for entry-level jobs. The approach of the study is to observe responses in a simulated hiring setting. Employers across the United States were sent a job description and asked to rate a set of fictitious application forms. The information on the application forms was intended to represent real-world applicants for such a job.

The empirical analyses of the data collected measure the relative weight that employers place on various attributes when making applicant assessments as well as the relative weight of the influence of employers' and firms' characteristics on those assessments. It should be recognized that the usefulness of the results derived from the survey data and reported in the remainder of this summary depends on the procedures used in the data collection and on the particular set of employers who responded. The survey procedures are documented in the companion technical report for this project. In the next section of this document, background data about the employers and their firms are presented. The results of the statistical analyses of the applicant rating process are given in chapter 3. An important part of the study was reviewing and analyzing the answers to an open-ended question about hiring and employing youths and about the influence of schools on employability development. Chapter 4 provides a systematic recounting of responses and opinions that the employers shared. Finally, chapter 5 presents findings from the research for youth, employers, and school personnel.

## 2. CHARACTERISTICS OF THE EMPLOYERS IN THE SURVEY

In this section, the data collected about each employer and firm are summarized. The appendix provides a copy of the questionnaire with frequency distributions for all of the items. A total of 592 employers responded to the Employer Hiring Decisions Study survey. These respondents are described statistically in this chapter.

### 2.1 Employer and Firm Characteristics

The first set of data to be described comprises the characteristics of the respondents and the firms that they represented. Because of the nature of the three occupations examined in the study—clerical, retail, and machine trades—the sample was judgmentally screened by industry. Table 1 shows the industrial composition of the firms that responded. In general, durable manufacturing firms reviewed machine trades applicants; the retail trade establishments and hotels and other lodging places reviewed applicants for the retail job; and the finance and insurance, business services, and health services sectors rated the clerical position applicants.

There was wide diversity in the size of the establishments, with the median size class comprising 100-199 full-time employees. Fifty-six percent of the respondents indicated that their establishment was situated within a multiestablishment firm. The median firm size as measured by total number of employees for these multiestablishment enterprises was 2,000 employees.

The median percentage of full- or part-time employees under the age of 25 was 20 percent. Slightly over 68 percent of the respondents were not unionized. However for those establishments that did report some nonsupervisory workers covered by collective bargaining, the median percentage of union coverage was 70 percent.

There was a fairly wide variation in the characteristics of the individuals who responded. Males constituted 69 percent of the sample; blacks 4.5 percent. In terms of respondents' age distribution, 15 percent were less than 30 years, 44 percent were 30 to 44, 23 percent were 45 to 54, and the remaining 18 percent were 55 years old or over. Educational levels were quite high with about 70 percent responding that they had had 4 or more years of college or training beyond high school. Only 6 percent reported an education of high school graduation or less. The employers who responded had a median of 6 years experience participating in the hiring decisions of their current establishments and a median of 10 years of experience in reviewing employment applications in any company.

In terms of their position within the firm, 286 out of 570 respondents (50 percent) reported being a manager or staff member of a personnel department. Slightly over 30 percent were the establishment's chief executive officer (CEO) or owner. Eighty-five percent of the respondents reported having

TABLE 1  
INDUSTRY DISTRIBUTION OF RESPONDENTS

SIC <sup>a</sup>	Industry	Occupation			Total
		Clerical	Retail	Machine Trades	
13	<u>Mining</u> Oil and Gas Extraction	1		2	3
17	<u>Construction</u> Special Trade Contractors	1		4	5
20	<u>Nondurable Manufacturing</u> Food and Kindred	2		1	3
23	Apparel and Other Textile	1		1	2
24	Lumber and Wood Products	1			1
26	Paper and Allied Products	1	1	2	4
27	Printing and Publishing	9	1	1	11
28	Chemicals	5		3	6
29	Petroleum Products	1			1
30	<u>Durable Manufacturing</u> Rubber Products			2	2
32	Stone, Clay, Glass Products			4	4
33	Primary Metal Industries	1		17	18
34	Fabricated Metal Products	1		78	79
35	Machinery, excluding Electronic	3		76	79
36	Electronic Equipment	6	1	9	16
37	Transportation Equipment	4		7	11
38	Instruments	1		5	6
39	Miscellaneous	1		3	4
40	<u>Transportation, Communication and Public Utilities</u> Railroad			2	2
44	Water Transportation	1			1
45	Air Transportation	2		1	3
48	Communication	7			7
49	Public Utilities	6		1	7
50	<u>Wholesale Trade</u> Durables	4	2	6	12
51	Nondurables	1	4		5
52	<u>Retail Trade</u> Building Materials and Garden		1	1	2
53	General Merchandise		8		8
54	Food Stores		5	1	6
55	Auto Dealers		5	2	7
56	Apparel Stores		6		6
57	Furniture		4		4
58	Eating, Drinking Establishments		5		5
59	Misc.		11		11
60	<u>Finance, Insurance, Real Estate</u> Banking	34			34
61	Credit Agency, excluding Banks	23	1		24
62	Security Brokers	3			3
63	Insurance Carriers	38			38
64	Insurance Agents	8	1		9
65	Real Estate	5	1		6
67	Holding Cos., Investment Offices	4			4
70	<u>Services</u> Hotels and other Lodging		15		15
73	Business Services	22	1	2	25
75	Auto Repair			1	1
76	Misc. Repair			2	2
78	Motion Pictures	1			1
79	Amusement and Recreation	1			1
80	Health Services	16	1		17
81	Legal Services	2			2
82	Education Services	2			2
83	Social Services	3			3
86	Membership Organization	6			6
89	Misc. Services				
90	Public Administration	2			2
	Unknown	11	1	5	17

<sup>a</sup> SIC is Standard Industrial Classification

hiring authority either on their own or shared with others. A somewhat smaller number (76 percent) reported having their own or shared authority to fire individuals.

## 2.2 Firms' Hiring Processes

The employers were asked to report what methods were used to attract applicants when there is an opening in an unskilled or semiskilled job. Of 569 responses, 22 employers (4 percent) indicated that they did not solicit applicants because they had enough unsolicited applicants. Of the remaining 547 responses, the rank ordering of the responses was as follows (employers could denote more than one method):

<u>Method</u>	<u>Rank</u>	<u>Percent of Responses</u>
Advertise in media	1	71.5
Announce to current employees	2	69.3
Ask for referrals from schools or vocational education institution	3	59.8
Ask for referrals from the state employment service	4	54.3
Ask for referrals from an employment agency	5	29.0
Make other efforts	6	17.0
Display Help Wanted sign	7	16.6
Ask for referrals from union	8	6.6

The way firms respond to telephone inquiries about employment, how often persons are allowed to complete an application, and what percentage of applicants are interviewed are all important aspects of a firm's hiring process. These policies also differ for many firms according to whether or not there is an opening. Thus, as can be seen in the appendix, questions were asked for periods when there was an opening and for periods when there was no specific opening in the firm. A large majority of employers encouraged telephone callers to come in and fill out an application when there was an opening in the firm. Fifty-three percent indicated that they encouraged callers to come in unconditionally, while 34 percent encouraged callers to come in only if they had required skills. When there was no specific vacancy, the employers were somewhat less encouraging. Only 33 percent invited callers to apply unconditionally, 22 percent invited callers to apply if skilled, and 36 percent of the employers generally discouraged callers when there was no opening.

Employers exhibited similar behavior in their policies for taking applications from individuals who came to their establishments without a referral. When there was a vacancy, 55 percent of the respondents indicated that they gave 95-100 percent of the walk-ins applications to complete and only 10 percent reported having given 0-5 percent of walk-ins applications. But when there was no specific opening, 27 percent of the employers did not give out applications to walk-ins (gave them to 0-5 percent) and only 27 percent gave out applications to 95-100 percent.

The percentages of persons who complete applications, and who are interviewed immediately change quite a bit when there is or is not an opening. Following are the responses to the questions about the percentage of persons who fill out an application and who are interviewed immediately:

Percentage of Applicants Interviewed When There Is an Opening		Percentage of Applicants Interviewed When There Is No Specific Opening	
	Percentage		Percentage
95-100%	31.1	95-100%	6.2
76-94%	10.4	76-94%	1.5
51-75%	10.1	51-75%	3.3
26-50%	7.3	26-50%	6.4
6-25%	12.2	6-25%	14.7
0-5%	28.7	0-5%	67.5

The respondents to this data collection effort reported a wide variation in the number of interviews per hire. The median response to the question of "on average, how many people are interviewed to fill an opening" was five. The responses ranged from 1 to 63.

A sizable portion of the respondents (72 percent) reported that they reviewed previously filed applications in making their decisions about whom to interview. Among the respondents who did consult their files, a median of 25 percent of all interviews were with individuals who had had applications on file, and 48 percent of the respondents indicated that half or more of such interviews resulted in a job offer.

### 2.3 Experience with Recently Hired Workers

Other information collected in the survey pertained to the experiences firms had with recently hired workers. Information such as age, sex, race, educational attainment, referral source for the job, wage rate, and productivity score was obtained for a sample of 5 individuals hired within the last 2 years: one had been promoted, one who was still employed but had not been promoted, one had been discharged, one had been laid off, and one had resigned voluntarily. When asked about retention/separation of workers, employers reported that a median of 10 percent of employees ages 16 to 25 hired 2 years ago would be discharged or induced to resign, a median of 18 percent would have voluntarily resigned, a median of 0 percent would be laid off (39 percent of employers reported having any workers currently laid off); and a median of 60 percent would still be employed at the firm. Of the (60 percent) workers still at the firm, employers responded that about 30 percent would have received a job promotion.

Approximately three-quarters of the sample responded to the questions about the characteristics of workers who were promoted and who were still at the firm but not promoted. Table 2 presents frequency distributions concerning the characteristics of these workers. The age of promoted workers tended to be higher than those not promoted. This occurred because the education/

TABLE 2  
 CHARACTERISTICS OF YOUNG WORKERS WHO WERE RETAINED BY  
 FIRMS FOR 2 YEARS AND WERE PROMOTED OR NOT PROMOTED

Characteristics	Promoted	Not Promoted
Age		
Less than 20	10.9%	25.9%
20-21	18.9	23.2
22+	70.2	52.9
Sex		
Male	49.3%	50.0%
Female	50.7	50.0
Race		
Black	13.7%	12.3%
Hispanic	14.1	13.0
White/other	72.2	74.7
Education		
Less than high school	4.4%	14.1%
High school graduate	56.2	60.8
Some college/training	29.2	18.3
College graduate	10.2	6.5
Relevant voc. ed. in high school		
Yes	50.6%	34.3%
No	49.4	65.7
High school GPA		
A	7.3%	4.2%
B	24.5	15.5
C	11.5	18.4
D	1.6	3.5
Unknown	55.1	58.4
Relevant voc. ed. in postsecondary		
Yes	43.0%	25.8%
NA/No	57.0	74.2
Postsecondary GPA		
A	4.9%	3.0%
B	16.0	8.3
C	5.1	8.0
D	.8	1.4
NA/Unknown	73.2	79.3
Years of relevant work experience (Part-time or full-time)		
None	15.9%	25.1%
Less than 1 year	16.6	24.0
1-2 years	37.4	35.3
More than 2 years	30.0	15.6
Did employee receive more training than average worker in job?		
More	8.1%	11.5%
About the same	86.8	85.6
Less	5.1	2.8
Did firm receive subsidy for hire?		
Yes	2.3%	2.8%
No	97.7	97.2
Median hourly wage	\$ 6.60	\$ 5.63
Median productivity score	90	75



training level of promoted workers was higher than that of workers not promoted (about 40 percent of the promoted workers had some education beyond high school, whereas only about a quarter of the nonpromoted individuals had some postsecondary schooling). Having taken some relevant vocational education in high school was also characteristic of workers who were promoted in comparison to those not workers who were promoted. Slightly over 50 percent of those promoted had taken a relevant vocational education class in high school, whereas only about 34 percent of those who were not promoted had done so.

The high school and postsecondary grade point averages that were reported confirmed the hypothesis that promoted workers tended to have higher grades. For workers that were promoted, when the respondent reported a high school or postsecondary grade point, over 70 percent had had a B average or better in high school and over 80 percent had had a post-high school B average or better. The comparable percentages for workers not promoted were 47 and 54 percent, respectively.

The years of relevant work experience (either part- or full-time) tended to be higher for workers that were promoted than for workers who were not promoted. Over two-thirds of the promoted workers were reported to have had more than a year of relevant work experience prior to being hired, while only half of the nonpromoted workers had that much relevant work experience.

The distribution of promoted and nonpromoted workers were virtually identical across the characteristics of sex, race, amount of training, and whether or not the firm had received a subsidy for hiring. As would be expected, the promoted workers' median current hourly wage and productivity score were significantly higher than for their nonpromoted counterparts.

A smaller percentage of the respondents provided data on a voluntary resignation (n = 386; 67 percent), a layoff (n = 257; 45 percent), and/or a discharge (n = 357; 62 percent). Table 3 provides frequency distributions for the characteristics of these individuals. In comparing these three types of separations, it can be seen that three out of five layoffs and discharges were males, whereas only half of the quits were males. Eighty percent of the quits were white/other, whereas only 70 percent of the layoffs or discharges were white/other. Of the nonwhite layoffs, half were black and half were Hispanic, but of the nonwhite discharges, two-thirds were black.

In terms of educational attainment, the voluntary resignees had slightly more schooling than individuals who had been discharged and in turn, those who had been discharged had more schooling than workers on layoff. Similarly, high school grades were higher for quits than for those discharged and high school grades for discharges were higher than for layoffs. Comparing only cases where grades were reported, the percentage of quits, discharges, and layoffs with a high school grade average of B or better were 57.7 percent, 39.1 percent, and 29.1 percent, respectively.

Almost 42 percent of the individuals who had voluntarily resigned had taken a relevant vocational education course in high school compared to 35.5 percent of those laid off and 30 percent of those discharged. Note that the

TABLE 3

CHARACTERISTICS OF YOUTHFUL WORKERS SEPARATED FROM THE FIRM  
WITHIN THE FIRST 2 YEARS

Characteristics	Voluntary Resignation	Layoff	Discharge
<b>Age</b>			
Less than 20	14.2%	16.7%	16.8%
20-21	24.1	27.6	22.1
22+	61.7	55.7	61.1
<b>Sex</b>			
Male	51.2%	61.2%	59.4%
Female	48.8	38.8	40.6
<b>Race</b>			
Black	11.3%	14.9%	20.5%
Hispanic	10.0	14.9	9.1
White/other	78.7	70.2	70.4
<b>Education</b>			
Less than high school	12.5%	18.5%	16.9%
High school graduate	57.8	64.3	60.5
Some college/training	21.1	10.8	16.3
College graduate	8.6	6.4	6.3
<b>Relevant voc. ed. in high school</b>			
Yes	41.8%	35.5%	29.8%
No	58.2	64.5	70.2
<b>High school GPA</b>			
A	4.8%	3.2%	2.3%
B	17.4	6.9	10.9
C	13.6	21.0	14.6
D	2.7	3.6	5.1
F	0.0	0.0	.9
Unknown	61.5	65.3	66.2
<b>Relevant voc. ed. in postsecondary</b>			
Yes	30.5%	24.8%	24.5%
NA/No	69.5	75.2	75.5
<b>Postsecondary GPA</b>			
A	2.3%	3.3%	1.0%
B	10.8	5.6	7.7
C	6.5	8.9	7.7
D	0.0	0.0	.3
NA/Unknown	80.0	82.2	82.6
<b>Years of relevant work experience (Part-time or full-time)</b>			
None	19.5%	19.3%	21.9%
Less than 1 year	23.2	26.9	21.9
1-2 years	35.5	33.3	34.3
More than 2 years	21.8	20.5	21.9
<b>Did employee receive more training than average worker in job?</b>			
More	9.1%	13.3%	18.2%
About the same	89.1	82.3	79.0
Less	1.8	4.4	2.8
<b>Did firm receive subsidy for hire?</b>			
Yes	2.4%	2.1%	2.2%
No	97.6	97.9	97.8
<b>Median duration before separation</b>			
	12 months	12 months	10 months
<b>Median hourly wage at separation</b>			
	\$5.75	\$6.00	\$5.50
<b>Median productivity 2 weeks prior to separation</b>			
	75	70	50

educational attainment of the individuals that had been laid off (in terms of amount of schooling and grades) was lower than that of individuals who had been discharged, but a higher percentage had taken a relevant vocational education course. This could partially explain why a higher percentage of the discharged individuals had received more training than the average worker in the same job, as compared to workers who had been laid off.

There was little difference across the three types of workers in terms of age, years of relevant work experience prior to being hired, whether or not the firms had received a subsidy, or duration prior to separation. It is interesting to note that although the individuals on layoff had the lowest educational attainment, lowest amount of prior relevant work experience, and second lowest amount of vocational education and productivity ratings, they were reported to have the highest wages. This is likely to be explained by occupational, unionization, and sex differences across the three types of separations.

The next section of the report presents the results from the estimation of various models used to explain the employability ratings of the applicants.

### 3. DETERMINANTS OF EMPLOYABILITY

#### 3.1 Development of the Job Applications and Questionnaire

For most employers, the completed job application provides the initial information on the applicant's abilities, skills, and experiences. The employer's evaluation of the application's content in conjunction with the duties of the open job position determine which applicants are interviewed and, subsequently, which are hired for the position. To simulate the employer's initial evaluation of prospective employees, job application information was generated that systematically varied the applicant's educational credentials and work experience.

Four general types of educational backgrounds were generated for the job applicants as follows:

- Type 1 - high school dropouts
- Type 2 - high school graduates
- Type 3 - 1 year postsecondary schooling
- Type 4 - 2 years postsecondary schooling, program completers

Figures 1 and 2 provide examples of the type 1 and type 3 applicants.

As can be seen in the two figures, the data that were presented on the applications were the following:

- Age
- High school attended
- Major/program in high school
- Grade average in high school
- High school diploma
- Postsecondary school attended
- Major/program in postsecondary school
- Grade average in postsecondary school
- Diploma or degree from postsecondary school
- Work history (0-5 jobs)
  - Employer
  - Starting and ending date
  - Position
  - Duties
  - Reason for leaving
- Typing speed (for clerical and retail sales)
- Machines operated (for machine trades)
- Referral source
- Eligibility for a Targeted Jobs Tax Credit

**\*\*EDUCATIONAL RECORD\*\***

SCHOOL ATTENDED: Jeffersonville H.S.  
 MAJOR/PROGRAM: CO-OP Machine Trades  
 DATES OF ATTENDANCE: 9/79-6/81  
 GRADE AVERAGE: 2.25/4.00  
 DIPLOMA/DEGREE: NO

POST SECONDARY SCHOOL ATTENDED:  
 MAJOR/PROGRAM:  
 DATES OF ATTENDANCE:  
 GRADE AVERAGE:  
 DIPLOMA/DEGREE:

**WORK HISTORY**

EMPLOYER: Fast Food Restaurant  
 POSITION: Food Service Worker  
 DUTIES: Prepared soft drinks, sandwiches, served food, cleaned/reset tables.  
 REASON FOR LEAVING: Left seeking a full-time job  
 EMPLOYED FROM: 04/81  
 TO: 05/83

EMPLOYER:  
 POSITION:  
 DUTIES:  
 REASON FOR LEAVING:  
 EMPLOYED FROM:  
 TO:

EMPLOYER:  
 POSITION:  
 DUTIES:  
 REASON FOR LEAVING:  
 EMPLOYED FROM:  
 TO:

EMPLOYER:  
 POSITION:  
 DUTIES:  
 REASON FOR LEAVING:  
 EMPLOYED FROM:  
 TO:

EMPLOYER:  
 POSITION:  
 DUTIES:  
 REASON FOR LEAVING:  
 EMPLOYED FROM:  
 TO:

MACHINES OPERATED:  
 Lathe, grinder, drill press, milling machine, boring mill, saw, shaper

REFERRAL SOURCE: Unknown/None

- FO' OFFICE USE: 1. TESTED TYPING SPEED: N/A  
 2. ELIGIBLE FOR TJTC: yes

HIRING PRIORITY INDEX			
0	50	100	150
WORST	AVERAGE		BEST
HIRED	HIRE		HIRED

YOUR SCORE  
 FOR APPLICANT

Figure 1. Sample job application for high school dropout applicant

**\*\*EDUCATIONAL RECORD\*\***

| SCHOOL ATTENDED: St. Mary's H.S.  
 | MAJOR/PROGRAM: General  
 | DATES OF ATTENDANCE: 9/77-6/81  
 | GRADE AVERAGE: 2.10/4.00  
 | DIPLOMA/DEGREE: yes

| POST SECONDARY SCHOOL ATTENDED: Franklin County Community College  
 | MAJOR/PROGRAM: Machine Trades  
 | DATES OF ATTENDANCE: 9/81-6/82  
 | GRADE AVERAGE: 2.97/4.00  
 | DIPLOMA/DEGREE: no

**WORK HISTORY**

| EMPLOYER: Service Station  
 | POSITION: Attendant  
 | DUTIES: Attended gas pumps, helped mechanics, did clean up work.  
 | REASON FOR LEAVING: Was laid off  
 | EMPLOYED FROM: 12/82  
 | TO: 03/83

| EMPLOYER: Service Station  
 | POSITION: Attendant  
 | DUTIES: Attended gas pumps, helped mechanics, did clean up work.  
 | REASON FOR LEAVING: Quit  
 | EMPLOYED FROM: 10/82  
 | TO: 10/82

| EMPLOYER: Service Station  
 | POSITION: Attendant  
 | DUTIES: Attended gas pumps, helped mechanics, did clean up work.  
 | REASON FOR LEAVING: Quit  
 | EMPLOYED FROM: 06/82  
 | TO: 07/82

| EMPLOYER: Large Manufacturing Firm  
 | POSITION: Machinist Helper  
 | DUTIES: Helped skilled operator, stacked materials, did clean up work.  
 | REASON FOR LEAVING: Quit  
 | EMPLOYED FROM: 11/81  
 | TO: 05/82

| EMPLOYER: Fast-Food Restaurant  
 | POSITION: Food Service Worker  
 | DUTIES: Prepared soft drinks, sandwiches, served food, cleaned/reset tables.  
 | REASON FOR LEAVING: Went back to school  
 | EMPLOYED FROM: 06/81  
 | TO: 08/81

**MACHINES OPERATED:**

**REFERRAL SOURCE:** School Counselor

**POB OFFICE USE:** 1. TESTED TYPING SPEED: N/A  
 2. ELIGIBLE FOR TJTC: NO

HIRING PRIORITY INDEX				
0	50	100	150	200
WORST	AVERAGE		BEST	
HIRED	HIRE		HIRED	

YOUR SCORE
FOR APPLICANT

Figure 2. Sample job application for applicant with 1 year of postsecondary schooling

For the type 1 and 2 applicants, the age of the job seeker was randomly set to be 17, 18, or 19. For the types 3 and 4, age was set to be 19, 20, or 21. To attempt to vary location and type of high school, three high schools were fictionalized--Central High School, a public, urban high school; Jeffersonville High School, a generic rural or suburban public high school; and St. Mary's High School, a private secondary school. The majors or programs of study in high school came from the following set:

- General
- Office Education
- Distributive Education
- Machine Trades
- College Preparatory
- Cooperative Office Education
- Cooperative Distributive Education
- Cooperative Machine Trades
- Occupational Work Experience (OWE)

The high school grade average was randomly chosen to lie between 1.40 and 3.60 on a 4.0 scale and was listed on the application like the following format: 2.69/ 4.00.

For the applicants with postsecondary schooling, one of four generic institutions was assigned. These were Franklin County Community College, intended to be a public institution; Lincoln Technical Institute, a public technical school; Acme Business College, a proprietary institution; and Acme Technical Institute, another private postsecondary school. Postsecondary majors were assigned from the following set: (1) Marketing, (2) Clerical, and (3) Machine Trades. Grade averages ranged from 2.00 to 3.50 on a 4.0 scale.

The algorithm used to assign the number, type, and duration of jobs held while in school was rather complex. The number of previous jobs ranged from 0 to 5, durations of a single job ranged from 1 month to 64 months, and total work experience ranged from 0 months to 68 months. The set of previous employers, positions, and duties for each of the jobs on the application form are shown in table 4. The variance that was introduced was intended to allow analysis of causal factors such as large or small establishments, public or private institutions, and whether or not the jobs were relevant. The reasons for leaving prior jobs came from the following set:

- Was laid off
- Quit
- Was temporary job
- Left for better job
- Left to look for full-time job
- Went back to school

For the clerical and retail sales position, the applications reported a tested typing speed. These were assigned randomly over the range of 40 to 60 words per minute. For machine trades, the application listed a set of up to seven machines operated by the job seeker. This set was as follows:

- None
- Lathe
- Grinder
- Drill
- Milling machine
- Boring machine
- Saw
- Shaper

TABLE 4

## EMPLOYERS, POSITIONS, AND DUTIES USED IN SIMULATED APPLICATIONS

Employer	Position	Duties
Large manufacturing firm Small manufacturing firm	Office helper <sup>a</sup>	Filed records, sorted and delivered mail, answered phones.
	Machinist helper <sup>b</sup>	Helped skilled operator, stacked materials, did clean-up work.
County government office <sup>a</sup>	Office helper <sup>a</sup>	Filed records, sorted and delivered mail, answered phones.
Large department store Boutique <sup>a</sup>	Sales helper	Stocked shelves, showed products to customers, put prices on goods.
City hospital Fast-food restaurant	Food service helper	Prepared soft drinks, sandwiches, served food, cleaned and reset tables.
Janitorial service <sup>a</sup> County government maintenance department <sup>b</sup>	Cleaner	Serviced restrooms, cleaned floors and windows, did minor repairs.
Service station <sup>b</sup>	Attendant <sup>b</sup>	Attended gas pumps, helped mechanics, did cleanup work.

<sup>a</sup>Used only on clerical and retail sale applications.

<sup>b</sup>Used only on machine trades applications.



The referral sources that were assigned randomly were (1) Job Service, (2) school counselor, (3) advertisement/sign, (4) unknown or no referral, and (5) friends/acquaintance at firm. Finally, half of the applicants were listed as eligible for a Targeted Jobs Tax Credit (TJTC).

Table 5 displays the job description used for each occupation. To obtain a measure of how the application content affects employer hiring decisions, respondents were asked to compare the job description and application information and then provide a hiring score ranging from 0 to 200 points. The directions employers were given for rating the job applications were as follows:

1. Review each job application independently and rate it as though you were going to fill a position similar to the one described above in your organization. If you would not hire a person because they seem overqualified, they should get a lower score than the one you would choose to hire.
2. Choose any score between 0 and 200 (e.g., 26, 72, 100, 128) based on the scale shown below:

HIRING PRIORITY INDEX				
0	.50	.100	.150	.200
Worst	Average	Best		
Hired	Hire	Hired		

YOUR SCORE FOR APPLICANT

- 50 points represents the worst applicant you ever hired (as perceived at the time of hiring, NOT what the new hire's performance actually turned out to be)
  - 100 points represents the average applicant you ever hired
  - 150 points represents the best applicant you ever hired (as perceived at the time of hiring, NOT what the new hire's performance actually turned out to be)
3. Assume you are reviewing the applications in June 1983. We are not interested in determining the effects of sex or race on hiring decisions, so assume all of the hypothetical candidates have the same sex and race.

Each of the employers was given 11 applicants to rate. The set of applicants was comprised of 2 type 1 applicants (high school dropouts), 5 type 2 applicants (high school graduates), 1 type 3 applicant (1 year of postsecondary schooling), and 3 type 4 applicants (2 years postsecondary, program completers).

TABLE 5

## JOB DESCRIPTIONS EMPLOYERS USED WHEN RATING DIFFERENT TYPES OF JOB APPLICANTS

Job Descriptions for Each Occupation					
Clerical		Retail		Machine Trades	
<u>% of Time Required on Job</u>	<u>Job Tasks</u>	<u>% of Time Required on Job</u>	<u>Job Tasks</u>	<u>% of Time Required on Job</u>	<u>Job Tasks</u>
50	Types invoices, letters, memoranda	75	Advises (sells) custom- ers products; prepares sales slips, and uses cash register	50	Operates a basic machine; feeds parts into automatic machine and transports (conveys) parts to next operator
25	Answers phone	25	Stocks and tends counters and shelves; packs and unpacks items	25	Assists skilled operator
25	General office duties-- copy materials, deliver mail; maintain files			25	Loads and unloads materi- als and cleans around work area

### 3.2 The Influence of Applicant Characteristics on Employability Ratings

The statistical analyses that were done were to estimate the parameters of a stochastic version of the following equation using regression analysis:

$$(1) \quad S_{ijk} = a_0 + b_1X_i + b_2Y_j + b_3Z_k + b_4Z_k \cdot X_i$$

where

$S_{ijk}$  is the hiring score given to the  $i$ th applicant by the  $k$ th rater at the  $j$ th firm

$X_i$  is a vector of characteristics of the  $i$ th applicant such as work experience, schooling, etc.

$Y_j$  is a vector of characteristics of the  $j$ th firm such as number of employees, amount of training, and so forth

$Z_k$  is a vector of characteristics of the rater such as age, education, sex, and so forth

$a_0, b_1, b_2, b_3, b_4$  are vectors of the influence of the applicant/firm/rater characteristics on the hiring score.

Three aspects of regression make it especially useful for the analysis of hiring scores. First of all, each estimate can be interpreted as the marginal influence of the associated variable. For example, the coefficient on being a high school graduate was 9.1, which meant that a high school graduate could expect to be rated 9.1 points higher than an otherwise identical individual who had not graduated. If a coefficient is estimated to be negative, then it means that that characteristic detracts from the hiring score, holding other things constant. A zero coefficient means that there is no effect.

The second aspect about the regression framework is that the estimated coefficients can be compared to each other, so it is possible to evaluate the effect of one characteristic vis-a-vis another by comparing the size of the appropriate  $b_i$  estimates. For example, the coefficient on typing speed in words per minute was estimated to be .40, so it can be said that a high school dropout must type 23 words per minute faster than an otherwise identical high school graduate to achieve the same predicted hiring score.

The third and perhaps most important aspect of regression is that hypotheses can be statistically tested to determine whether or not a parameter is zero; that is, whether or not it was simply a matter of chance that a characteristic seemed to affect the hiring score.

Equation (1) was estimated separately for each occupation since the hiring score is best interpreted when it pertains to a single occupation. Hiring standards might be such that an individual with a particular set of characteristics gets a high rating as a clerical applicant, but would get a low rating from machine trades employers. A discussion of the empirical findings follows.

## High School Characteristics

The high school grade point average had the strongest influence on employability ratings of any of the secondary school variables. In developing the applications, grade points were assigned randomly from a uniform distribution over the span [1.40, 3.60] of a 4.0 system. The marginal effect is quite consistent across all the occupations and in magnitude represents almost 15 percent of the mean employability rating. As might be expected, graduation from high school generally had a significant and large effect on employability ratings. However, the size of the coefficient was smaller than for a 1.0 difference in grade point average and was not significant for retail trade employers.

Several studies have attempted to examine the relationship between the quality of schooling and earnings or wage rates. This study examined the relationship between quality (as might be perceived from the fictitious name) of schools and employability. The findings show the type (or location) of high schools influenced employers' ratings of applicants for clerical jobs only; both urban and parochial high school attendance raised employability ratings. Urban and parochial school attendance had a negative (but statistically insignificant) effect for machine trades applicants.

Participation in a cooperative or experiential-type program (e.g., distributive education) had a relatively large, positive effect for retail applicants, but the relevance of the high school major or program and participation in an occupational work experience (OWE) program did not have significant effects in any of the other equations.

## Postsecondary school experience

Receiving a degree from a 2 year or technical postsecondary program was the only significant variate among post-secondary school experiences explanatory factors. The marginal effect of attending a postsecondary institution at all (degree or not) was quite large in magnitude (and was significant in some preliminary model specifications), but whether or not the institution was public or private and grade point average attained in the postsecondary school did not have significant marginal effects on employability ratings.

## Prior work experience

In the empirical examination of work experience, applicants who had worked prior to finishing their schooling were classified into two groups: (1) working during summers only and (2) working during the school year and summers. In terms of types of prior work experience, several variables were used to test hypotheses about relevant work experience and work experience in large firms or organizations, in fast-food establishments, and in public organizations. The hypotheses were that a larger share of work experience in relevant jobs or in jobs in large organizations would have a positive influence on employability ratings, and that a larger amount of time in public jobs or work experience in fast-food restaurants would have a negative influence on applicants' employability ratings. In prior work, employers reported that reasons for leaving jobs were important factors in assessing applicants, so the following two variables were used: (1) the number of times the reason for leaving a job was "Quit" and (2) the number of times the reason for leaving was "Was laid off."

Finally, if the applicant had worked, the applicant's unemployment status was measured by using the months since the last job ended. Expectations about the influence of this variable are ambiguous since a long period of unemployment could indicate that the applicant is not as employable as other applicants who have shorter spells of unemployment. On the other hand, it could indicate that the applicant is more eager or willing to work and thus might be a good hire. The last variable examined was the gaps in employment experiences (i.e., there was at least one month of not working between two prior jobs). Existence of a gap is typically thought to be a negative factor.

The results showed that having some work experience had a very large positive influence on employability ratings. The distinction between working only in the summer versus working at some time during the school year was not important though. Having either type of work experience had a significant, positive marginal effect on the ratings of about the same magnitude. The implication of the results is that working part-time (or full-time) during the school year does not provide an improvement in employability ratings over having work experience solely during summers. But, considering the large influence that high school grade point average has on employability ratings, if part-time work influences those grades negatively, it is clearly detrimental to overall employability rating relative to working in summers only.

Employers, particularly those assessing clerical applicants, reacted negatively to having held a large number of prior jobs. A large number of jobs can be interpreted as a signal of a high turnover propensity, which is presumably a negative trait. The total number of months working was not significant in any of the equations, implying that employers tend to count the number of prior jobs for which information is provided, but do not weigh the duration of those jobs heavily.

The relevance of the applicant's prior work experience was an important positive factor in determining employability ratings. If one of two otherwise identical job applicants had 40 percent of his or her job experience in relevant jobs, whereas the other had all prior work experience in relevant jobs, the former's predicted rating was lower by about nine points (which is approximately the same size effect as high school graduation). The relevance of the job experience variable was particularly important for retail applicants.

Work experience in large organizations was also confirmed to be a positive causal factor. Work experience in a public (or governmental) organization had a significant, negative marginal effect on employability ratings for machine trades. Work experience in a fast-food restaurant did not stigmatize youth as anticipated, and for retail employers, such work experience was one of the two strongest determinants of employability.

The results show that the number of quits was negatively associated with employability ratings. In terms of magnitude, two quits would more than offset the positive marginal effect of having any work experience. The number of times the applicant reported being laid-off had a large negative effect for machine trades employers, but not for the clerical or retail employers. This

may stem from the fact that firms in the machine trades sectors are more often unionized and tend to have formal layoffs; therefore, these employers were more sensitive to that information.

The number of months since the last job ended was a significant, positive variable for the machine trades employers, but did not influence the raters of the other occupations. Having a gap in the employment record inexplicably had a significant, positive effect on employability ratings.

### Skills and other factors

Two occupationally specific skill variables were shown on the application forms that were rated. For clerical and retail applications, the applicant's tested typing speeds were reported (this was randomly drawn from a range of 40 to 60 words per minute). For the machine trade applicants, the number and names of machines that could be operated were provided. Both of these skill variables were highly significant. For clerical applicants, results show that a typing speed of 10 words per minute higher improves employability as much as attending a postsecondary program.

A question of interest is how the source of referral affects the employer, and his or her assessment of an application. Past research has shown a strong proclivity on the part of employers to rely on informal methods of referral such as friends or current employees in making hiring decisions. Workers hired through informal channels had higher productivity and required less training time than workers on the same job who were hired through formal sources such as the Job Service, schools, or private employment agencies. Although there were interesting differentials in the signs of the coefficients across occupations, none of the coefficients were significant.

The Targeted Jobs Tax Credit (TJTC) is a program designed to subsidize the employment of disadvantaged workers. Because TJTC is a subsidy and because of its limited eligibility, theory suggests that employers will tend to substitute eligible applicants for noneligible applicants in their hiring decisions. Furthermore theory suggests that firms will expand their total employment because of the tax credit. It may be, however, that being eligible for TJTC stigmatizes workers and causes them to be at a disadvantage in the labor market. Firms may tend to avoid participation because of paperwork and auditing burdens. In the models reported here, these competing hypotheses were tested. The hypothesis that eligibility for TJTC stigmatizes an applicant was not borne out by the statistical results. In fact, such eligibility had a significant positive influence for clerical applicants.

### 3.3 The Influence of Firm and Rater Characteristics on Employability Ratings

#### Firm characteristics

Most of the results concerning characteristics of the firm confirmed prior expectations, although the behavior exhibited in the estimation of the machine trades equation was distinctly different from the behavior estimated for the other two occupations.

The first characteristic about a firm to be considered was its employment size. A hypothesis was the larger the firm, the more likely it is to have a formal personnel department which implies economies of scale in processing applicants. Larger firms can afford to interview and investigate more applicants; so at the application stage, they will be less discerning. Other things being equal, they will rate applicants higher. Employment size had the expected positive effect for clerical and retail applicants, but for machine trades, the coefficient was not significant.

Since the universe of applicants was comprised of youths, another characteristic of the firm's work force of interest would be the percentage of workers under age 25. If that percentage is relatively large in a firm, then youthful applicants such as those which are the focus of the study, who lack job experience, will be rated higher than in a firm with a smaller share of workers under age 25. One of the two largest effects among the firm characteristics (and one that was consistent across the sample) was that for the percentage of the work force under age 25. The marginal effect translated into an applicant receiving a higher rating at a firm where 50 percent of the work force was under age 25, than at a firm where only 10 percent of the employees were under age 25 almost comparable to the marginal effect for graduation from high school.

Whether or not a firm has a formal probationary period and the length of such a period, if it does have one may affect the care that raters exercise in assessing applicants. If there is a formal probationary period, employers can accept more risk and thus ratings may be higher. As the probationary period lengthens, the firm's investment in the new hire increases and so higher standards should be used; that is the sign of the marginal effect of the length of the probationary should be negative. The probationary period effects were an instance where machine trades employers behaved quite differently from the remainder of the sample. That is, having no formal probationary period was negative and significant both for the clerical and retail samples. That is, having no formal probationary period caused caution to be exercised for these employers. As anticipated, the sign of the length of the formal probationary period coefficient was negative (although not significant) in these equations. On the other hand, the marginal effects for the machine trades sample were positive for "no probationary period" and positive for the length of the probationary period, although neither coefficient was significantly different from zero. A potential explanation for the occupational differences is that the relatively higher proportion of unionization among machine trades employers causes the different behavior. No formal probationary period may be a proxy for nonunionization, and so the risk of a mismatch is lower when there is no formal probationary period.

Controlling for firm size, the number of vacancies that firms have should affect their assessments of job applicants as well. More vacancies imply that the firm will have higher costs in terms of lost production as jobs go unfilled, so they will tend to lower their hiring standards (i.e., ratings will be higher). Similarly, the employee separation rates that firms experience should influence applicants' employability ratings. Higher separation rates will mean higher employability ratings. Firms that have relatively high retention rates can afford to have tougher hiring standards, or the reverse causality may hold, tougher hiring standards lead to lower turnover.

The ratings of machine trades employers were particularly sensitive to the average number of vacancies that the firm had in a week, although neither the clerical nor retail employees had this sensitivity. The retention rate of firms (the percentage of workers hired 2 years ago who would still be with the firm) was negatively related to applicant ratings for employers of clerical workers as expected.

Finally, if the percentage of reasonably well-qualified applicants is treated as an outcome measure of the firm's referral and hiring policies, then the positive (and significant) marginal effect on applicant ratings that was found to be expected. The average applicant, other things being equal, is given a more positive rating at a firm that thinks it attracts well-qualified workers.

All in all, most of the hypotheses concerning firm characteristics and rating behavior were confirmed by the analysis, although distinct differences between machine trades employers and clerical or retail employers were noted.

### Rater characteristics

The final group of variables that was included in the model incorporated personal characteristics of the individual respondents. The data that were gathered included the following covariates:

- Age (less than 30, 30-44  
45-54, 55+)
- Education
- Sex
- Race
- Position in the firm
- Job duties
- Hiring authority
- Firing authority
- Tenure in job
- Tenure in establishment
- Hiring experience in any job

The different nature of hiring for machine trades jobs is (again) highlighted in the coefficient on whether or not the respondent is a member of the firms' personnel staff. Two hypotheses could be put forward as to why the rater's position in a personnel department would have a negative influence on applicant ratings. First of all, the personnel staff often processes a substantial number of applicants and may have to set tough standards with numerous signals in order to screen out undesirable applicants quickly. Furthermore, since their own job performance depends on how well applicants are received, they may have a direct incentive to set high standards. These hypotheses explain the size and significance of the negative effect of this variable found in the models estimated from samples of clerical and retail applicants. In the machine trades sample, however, being a member of the personnel staff had a positive relationship with employability ratings. Here it may be the case that the personnel staff is less familiar with the requirements necessary for the job, or that there is greater labor demand, or that personnel staff view their function as presenting line supervisors with a wide choice of applicants.

The race variable was significant (rater was nonwhite) only in the sample of retail applicants, although the sign of the effect was positive for all occupations which tends to confirm prior evidence that blacks rate applicants higher than whites (recall that the applicants were supposed to be of the same race, although it was not specified).



If the individual has full or shared responsibility for hiring staff, then tougher standards were applied, as might be expected. The reverse would be true for firing authority, since the respondent could bear the responsibility of any mismatches. This is the case for the machine trades sample, where the signs for the hiring and firing authority variables were opposite and both were significant.

The age of the rater had a positive effect on the employability ratings in the machine trades sample, whereas years participating in hiring processes (presumably highly correlated with age) had a significant, positive effect for clerical applicants. The educational attainment of the raters had essentially no influence on the applicants' employability assessments in the clerical and machine trades samples, but had a strongly negative relationship in the retail sample. The sex of the rater influenced ratings for clerical applicants (males rated applicants higher).

#### 4. EMPLOYER COMMENTS ABOUT HIRING YOUTH AND ABOUT EDUCATIONAL PREPARATION OF YOUTH

##### 4.1 Introduction and Overview of Comments

The final section of the questionnaire was intended to give employers an opportunity to report their opinions about the educational preparation of applicants and about what skills and competencies schools should be teaching. Furthermore, it asked for general comments about experiences in hiring youth for entry-level jobs. Approximately 85 percent of the respondents answered an objective question about the preparation of young job applicants in certain school subjects, and approximately 50 percent of the employers supplied answers to open-ended questions about experiences in hiring youth and about skills and competencies schools should be teaching.

Several impressions were formed after reading through hundreds of opinions from these employers from all across the United States. For the most part, the comments were critical of applicants and schools. The three major areas of concern were (1) inadequate preparation in basic skills, (2) poor attitudes and work ethics among youths, and (3) poor job search skills. The first impression was that the intensity of the remarks as well as their contents suggests considerable inefficiency in the hiring process (mismatches, high turnover), which could be reduced with improvements in schooling and with the teaching of job search skills.

A second impression was formed after classifying the complaints about basic skills deficiencies into two categories: (1) examples of deficiencies that affect job performance and (2) general opinions about inadequate basic skills. Examples of job performance effects mentioned were inability to make change, inability to write dollar figures, inability to compute sales tax, inability to alphabetize, and unfamiliarity with fractions less than one-fourth. These behaviors could be quite costly to firms, but what is more important, they could probably be corrected with more emphasis on basic skills in schools.

However, the impression is that there is "something to be read between the lines" of general opinions expressed concerning basic skills. It is difficult to interpret comments like, "Schools need to emphasize the basics," or "Teach the 3Rs" when it is not possible to probe further. It may be the case that these comments emanate from observing poor job performance as in the above examples. However, such comments may not really be addressing basic skills attainment per se. Basic skills achievement may be a signaling device for productivity or trainability and employers are concerned that declining trends in educational achievement may imply lower-quality job applicants. Employers may use basic skills attainment as a proxy for other less easily measured elements of employability. These latter types of interpretations are supported by a consideration of the carelessness, poor spelling, and poor

handwriting observed in the questionnaire responses.\* The question arises that if employers do not exhibit neatness or good grammar and spelling, can it be the case that basic skills are necessary for adequate work performance? A few of the employers even indicated that the entry-level jobs in their firm did not require basic skills. To the extent that basic skills are signals and do not affect job performance directly, more emphasis on basic skills in schools alone may not bring about improvements in the productivity of youthful workers, but rather other employability skills such as work maturity and interpersonal abilities might be what is needed.

A final impression that came from reviewing the employers' comments is that much of the disenchantment with youths' attitudes and work ethics could be overcome with more interaction between schools and firms. When such interaction was mentioned in respondents' opinions, it was invariably a positive experience. Cooperative or experiential-type education program participants were highly regarded. Work/study program participants had an advantage over other high school students in terms of employability assessment. Of course, numerous other examples of successful education-industry interaction which featured experiential learning in the workplace can be documented.

In the next section, data about the school preparation of youth are analyzed. The comments made by employers are then presented. While the comments have been organized in a particular fashion, they still represent a reasonably random sample of the comments received. For presentation purposes, they have been classified into the following categories: (1) comments about school experiences of youth, (2) comments about job search skills, and (3) comments about attitudes and work habits. Summary remarks conclude the chapter.

#### 4.2 Employer Opinion about the Educational Preparation of Youthful Applicants

Based upon their experience with youth, employers were asked to indicate which of the following areas of educational preparation applicants were typically well prepared or not well prepared:

- Science
- English-Writing Ability
- English-Verbal Ability
- Mathematics
- Business preparation (book-keeping, typing, etc.)
- Distributive or marketing vocational education
- Industrial vocational education (machine trades, wood working, auto mechanics, etc.)

The only subject in which more employers reported applicants were well prepared than were not well prepared was industrial vocational education. The worst preparation reported in this survey was in English-writing ability. Here, more than 10 times as many employers reported preparation was inadequate as compared to those employers who reported applicants were well prepared.

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\*Over 40 responses (approximately 15 percent of those that answered the open-ended question) contained misspellings. Conservatively estimated, about 3 times that many were "sloppy."

Tabulations of the responses to this question are shown in table 6. In interpreting this data, two factors need to be borne in mind. First, "not well-prepared" may mean students have been poorly educated, or it may mean students have not taken enough courses. Second, the young applicants which clerical and retail employers have seen have likely come from a variety of secondary school backgrounds, while the job seekers for machine trades jobs are likely to have predominantly trade and industrial vocational education backgrounds. Major conclusions from this table, then, are as follows:

- Science. Fewer than half of the employers gave an opinion about the preparation of the applicants in the field of science. Of those that did respond, there was little difference across occupations, with about three-quarters indicating applicants were not well prepared.
- English--Writing Ability. Most (87 percent) of the employers gave a response about preparation in English writing ability. There was little difference across occupations; approximately 10 times as many employers reported that applicants were not well prepared as reported applicants were well prepared.
- English--Verbal Ability. Respondents in the retail trade sample, where verbal ability is most important, were least critical of applicants' verbal ability. Among those respondents, over 30 percent indicated that applicants were well prepared and 45 percent indicated that applicants were not well prepared. For the other two occupations, the two percentages were approximately 20 percent and 60 percent, respectively.
- Mathematics. Mathematics preparation was rather severely criticized, with about 60 percent of the sample indicating that applicants were not well prepared, 20 percent that they were well prepared, and the remaining 20 percent providing no response.
- Business Courses. Preparation in business courses fared well compared to the more academic courses discussed above. For the total sample, a majority of employers felt applicants were poorly prepared in business courses (such as typing, bookkeeping, or accounting). But an examination across the three types of applicants demonstrated that the largest relative share of the negative opinions were from machine trades' employers, where applicants probably had no business course training. On the other hand, the employers in the clerical sample who reported applicants were well prepared outnumbered employers who reported that applicants were not well prepared by a five-to-three margin.
- Distributive Education. A large percentage (40 percent) of the employers did not respond to this question, but for those respondents who did answer, the number that thought that applicants were not well prepared outweighed those that felt that applicants were well prepared in all three occupations. Again, machine trades applicants were likely not to have taken any such courses.

TABLE 6

BELOWER OPINIONS ABOUT THE PREPARATION OF YOUTHFUL JOB APPLICANTS  
IN SEVERAL OCCUPATIONS

Occupation	Occupation											
	Clerical			Retail			Machine Trades			Total		
	Applicants Are Well Prepared	Applicants Not Well Prepared	NO Response	Applicants Are Well Prepared	Applicants Not Well Prepared	NO Response	Applicants Are Well Prepared	Applicants Not Well Prepared	NO Response	Applicants Are Well Prepared	Applicants Not Well Prepared	NO Response
None	22 (8.7%)	73 (29.0)	157 (62.3)	7 (9.5%)	26 (35.7)	41 (55.4)	28 (11.3%)	121 (49.0)	98 (39.7)	57 (9.9%)	228 (38.4)	296 (51.7)
Liberal-writing ability	19 (7.5%)	208 (82.5)	25 (9.9)	6 (8.1%)	56 (75.7)	12 (16.2)	16 (6.5%)	192 (77.7)	38 (15.0)	41 (7.2%)	456 (79.6)	76 (13.3)
Liberal-verbal ability	56 (22.2%)	166 (65.9)	30 (11.9)	23 (31.1%)	34 (45.9)	17 (23.0)	53 (21.5%)	145 (58.7)	6 (19.8)	132 (23.0%)	345 (60.2)	96 (16.8)
Arithmetic	61 (24.2%)	133 (52.0)	58 (23.0)	17 (23.0%)	43 (58.1)	14 (18.9)	45 (18.2%)	152 (61.5)	50 (20.2)	123 (21.5%)	328 (57.2)	122 (21.3)
Common sense	130 (51.6%)	82 (32.5)	40 (15.9)	21 (28.0%)	33 (44.6)	20 (27.0)	52 (21.1%)	187 (43.3)	88 (35.6)	203 (35.6%)	222 (38.7)	148 (25.8)
Initiative	51 (20.2%)	88 (32.9)	118 (46.8)	17 (23.0%)	27 (36.5)	30 (40.5)	24 (9.7%)	122 (48.4)	101 (40.9)	92 (16.1%)	212 (48.5)	349 (43.5)
Technical vocational education	64 (25.4%)	45 (17.9)	143 (56.7)	11 (14.9%)	20 (27.0)	43 (58.1)	112 (45.3%)	77 (31.2)	58 (23.5)	87 (32.6%)	142 (24.8)	244 (42.6)

Numbers in parentheses are row percentages for each occupation.

- Industrial Education. The preparation received in industrial vocational education courses was apparently well thought of by employers. As might be expected, a high percentage (57.1 percent) of clerical and retail employers did not respond to this category, but of the employers who did respond, more thought applicants were well prepared than not well prepared. For employers of machine trades, 24 percent did not respond to the question, but of the remainder, almost 60 percent felt that applicants were well prepared in schools in industrial vocational courses.

#### 4.3 Comments about School Experiences of Youth

In turning to the responses to the open-ended question about experiences with young people, first examine some statements where specific basic skills were mentioned (i.e., those referred to above as inadequacies that affect job performance):

*We've also tested persons having (they say) proofreading skills but they can't spell. In our business, mistakes are costly!!! A college education, in some cases, is a farce. For our entry-level jobs, a high school diploma is sufficient if they really desire to learn and work!!*

*We not only need people who know how to fix a leaky faucet, but we also need [for] those people to be able to spell properly on the bill which they present!*

*In a few jobs, staff must be able to write monetary amounts dictated by customers over the phone. Workers can't write amounts accurately. [This] can cost us vast errors and business.*

*Since the students have poor spelling and simple math skills, they cannot compute sales tax and sales discounts.*

*Schools should teach skills that have a practical application in the workplace. I find that 90 percent of the high school grads cannot measure fractions on a ruler smaller than 1/4 inch.*

*Most bad experiences have been when the youth cannot do simple mathematical problems like making change, converting feet to yards, etc.*

*Basic mathematics--use of fractions--conversions from decimal to metrics--inability to read a 12-inch scale divided by 1/64's--and yet they are graduated.*

General comments about deficiencies in basic skills were more common:

*Get young people to be competent at basic reading, writing, speaking, and math skills. We can teach them the rest. We find that many of the high school graduates are unable to spell correctly or use correct grammar. Many are lost . . . when adding more than  $2 + 2$  in math.*

Generally I am shocked at the lack of overall basic education; reading and writing skills are very poor in approximately 40 percent of all applicants [who came] in our door.

Young people entering the job market directly from high school are missing the basic fundamentals; we experienced this both in vocational training in machine shop and basic writing, reading, and math.

Many young people have not had the desire nor the urgency . . . to learn.

Reward young people for maintaining good attendance while in school; perhaps it (good attendance) will carry over into their business careers.

Get the educational system back to the basics. I feel strongly about the lack of knowledge young people have in simple subjects like math, English grammar, English composition, and spelling. I agree that industrial vocational classes are an important option but all students, no matter what career they choose, need to know the basics in math and communication skills just to fare well in society. Please do something to encourage more dedication in these subjects.

An interesting comment that buttresses the contention that employers' concerns may be with something other than deficiencies in basic skill attainment is the following:

My experiences with hiring youth definitely leads me to believe that far too many of them are graduated from school with very poor educations in just basic skills and fundamentals, namely, reading, writing, spelling, and math. It does not necessarily take these skills to handle a factory job such as ours, but it is disheartening to me to see kids coming out of school as graduates so poorly prepared.

Among the suggestions given by employers aimed at improving the educational process was that cooperation between school and business should be increased. This includes input into the school curricula from business and active support from business in the form of cooperative programs, (e.g. distributive education). Some of those comments follow:

We have a strong work-study program with a local school. We give input to curriculum and state our needs. [The] program is successful. Other youth of [the] city [are] less prepared.

[We are] very pleased with students from cooperative work programs and most of the time they stay on.

Our best young employees come from the distributive education [curriculum area].

Co-op training should be mandatory so they [students] have a needed skill when entering the job market.

Co-op education provides an excellent start for young candidates; also volunteer experience is helpful.

An employer in the machine trades occupation commented on vocational education and youth:

Youth should be encouraged to learn skilled trades versus attending college when the individual shows strong aptitude for skilled trade work. Secondly, it is imperative that high schools, in particular, redirect their thinking that industrial vocational education classes are for slow learners or under-achievers. I know many bright high school students who wanted to place major emphasis on taking shop classes in high school to learn a skill and were not encouraged to do so and were reluctant [to do so] due to the poor stigma attached.

#### 4.4 Interviewing and Application Preparation Skills

A complaint that many respondents felt schools could help correct was the poor performance of young people in filling out applications and in interviewing. These areas are important because, if unsuccessful at this stage, a young job seeker will be unable to display merit as an employee. Some comments were as follows:

Is there any way to teach interviewing skills? Most of the younger applicants are unable or unwilling to converse. Yes or no answers abound. Also, many dress improperly to work in a business environment.

My initial reaction to young applicants is one of enthusiasm until they appear with their shirt untucked and [wearing] tennis shoes. I would say 95 percent of the young applicants have never been instructed in interview etiquette. The simplest areas are overlooked (i.e., a handshake, thank-you note for the interviewer).

Applicants are not well trained in applying for positions as evidenced by their manner of approach and dress.

"I'm looking for anything" is a typical statement while the standard dress is jeans, cut especially short in the summer months.

Completion of applications also leaves much to be desired. Many items are omitted or partially answered. Handwriting often is difficult to read.

The interviewing phase could also be improved upon while [students are] in school, stressing direct pertinent answers and thoughtful, relevant questions.

They [youths] do not know how to fill out an application properly. They fail to present themselves positively in an interview and are poorly attired.

A legible, thoroughly completed application with no grammatical, punctuation, or spelling errors is crucial.



#### 4.5 Young Employee Attitudes and Work Habits

A large percentage of employers making comments about their experiences with young workers in entry-level jobs expressed concerns over the poor attitudes exhibited by young people while at work. These comments included references to poor employee work habits, motivation, and responsibility. These characteristics include problems with workmanship, customer interaction, absenteeism, and tardiness.

Comments of a general nature about employee attitude include the following:

The attitudes of many of the young employees cause the most problems--absenteeism, disregard for company policies concerning dress, personal calls, tardiness, etc. Even though the company pays up front and in full, tuition of industry-related seminars and at college of choice, few take advantage of the offer.

In general, today's youth are not prepared for the daily "realities" of the business world (e.g., the necessity to be punctual, minimal absences, following instructions, meeting deadlines, demonstrating initiative, grooming/dressing to fit the mode of a particular industry). Many want top earnings before they are adequately able to perform their assigned functions.

Unfortunately, more than 50 percent are not prepared for the work world. They are satisfied with mediocre performance, are not used to a structured, performance-conscious environment. Usually [they are] not self-starters--with very little self-motivation.

[The] problem is often a lack of maturity. Often they do not realize what will be expected of them in "making a living." [Youths] need better skills in [the] ability to think and reason for themselves.

I [had] rather that you sent me an open, eager, inquiring mind . . . than a body that had satisfied distributive requirements and X number of C.'s!!

Many employer responses that indicated dissatisfaction with young applicants mentioned policies or preferences they used to screen young applicants. Among these comments were the following:

We ~~must~~ prefer to hire young people with prior experience. Some of the stars are out of their eyes; they have made their initial job moves trying to find their "thing," and they have started to recognize a paycheck requires work.

Rather than specific job skills or educational training, we try to identify people who can be depended upon, [who are] willing to learn, [who are] not blind followers, and [who are] willing to accept responsibility. The school family environment does not instill these basic values, let alone [teach] the A, B, C's.

We look for enthusiasm and desire to work. Today, a young person can be outstanding by just wanting to work.

We look for people who want to work, have good work habits, get along with people, and appreciate a job. Honesty, loyalty, and responsibility we also must have.

Several employers in the sample mentioned that they do not hire young people or are reluctant to do so. The reason given had to do primarily with young employees' poor attitudes and work habits. Such comments were as follows:

We now generally avoid hiring young people. We have found that by hiring older workers who are desperately in need of jobs because they have families, financial responsibilities and are permanently laid off from companies that are closing or have closed their facilities, we can (1) avoid training costs, (2) avoid absenteeism costs, (3) select the best employees of closing companies through the cooperation of a personnel management network that exists in our area, and comes with very high recommendations, (4) avoid turnover since older workers stay with our company, looking for a good solid base [in which] to work until retirement, (5) avoid worker's compensation claims since our older workers tend to be more safety conscious, (6) avoid labor relations problems since older workers tend to respect authority more, desire job security, look toward retirement and a pension, and (7) gain from their experience and knowledge. Maturity and responsibility are worth dollars.

A number of employers expressed dissatisfaction with the absenteeism and tardiness of young employees on the job. In addition to those above, here are some additional comments:

The work ethics of present day youth seems unhealthy. Our younger employees seem to miss the most work for--

- "It was raining."
- "It was too hot."
- "I didn't feel good."
- "I didn't sleep well last night, so I won't be in today."

[Emphasis should be placed on] development of personal discipline (work ethic). The importance of being at work on time and daily.

In addition to the poor attitudes of young employees, several employers commented that they believe that young people should show more appreciation for the free-enterprise system and the employer's concept of the work ethic that is entailed. Specific comments are these:

People who realize [the] company must make a profit for all to succeed are also a plus.

Many do not seem to appreciate that we strive for a linear relationship between productivity and compensation. Many seem to anticipate "automatic" job security and wage increments.

Many of the youths in today's market are not willing to expend extra effort in performing job duties--always take the easiest way out. [They] don't understand responsibility to the employer.

Many youths have not learned the work ethics. They feel to show up and put in time is doing a satisfactory job. Many youths have not learned that rewards will come after you show you are worth it rather than "reward me, then I will produce."

Two employers, unlike almost all others, found the quality of young employees to be good although they even qualified their assessments:

Generally, the caliber of young people we hire is high. They seem to have taken advantage of educational opportunities offered them. Their commitments are not well established and sometimes tardiness and absenteeism are problems.

We have found young employees to be some of the best employees that we have. They are dependable, eager to learn and delightful to work with. The schools should be teaching them more of the three Rs. We have had some part-time 17-year-olds that do not even know the alphabet.

#### 4.6 Summary

The testimony of the employers in this survey thus seems to indicate that the three major problems with youthful applicants and workers are--

- poor work habits and poor work ethics,
- poor job search skills (completing application forms and interviewing), and
- poor attainment of basic skills.

Some specific suggestions for schools to pursue include--

- instruction in business practices (work situations),
- instruction in job search skills,
- more emphasis on basic skills, and
- higher performance standards.

The relatively positive comments about vocational education and employer/school joint efforts such as cooperative education programs indicate that these aspects of learning should be encouraged.

## 5. SUMMARY OF FINDINGS

The primary purpose of this study was to compare various educational and work experience characteristics that youths may possess in terms of their attractiveness to employers who hire entry-level clerical, retail trade, and machine trades workers. As such, most of the conclusions and findings are aimed at youths, parents, and guidance counselors. However, in the course of analyzing the data, findings relevant to employers and school administrators emerged, therefore, this chapter is organized into sections categorized by three audiences: youths, parents, and guidance counselors, employers, and school administrators and policymakers.

### 5.1 Findings Relevant to Youth, Parents, and Guidance Counselors

The results of this study confirm that market experience has resulted in employers who exhibit rather consistent behavior in their hiring decisions. Youths should be aware of this consistency, but beyond that, the parameterization of employer behavior estimated in this study can be used by youths in making choices about their use of time and resources.

Early in a youth's high school career (ages 14 to 15), choices are typically fairly limited and thoughts about the impact of these choices on one's career or concerning the ease or difficulty of entering a career are most likely not preeminent in the decision-making process. With this perspective in mind, the finding from this study that is most germane to these youths is that, among the educational characteristics that a youth may possess, high school grade point average is the strongest causal variable in influencing employability ratings. Grades in the early years affect the overall grade point average directly and also may influence curriculum choice and school performance in later years.

As youths progress through high school (ages 16 to 17), more educational and part-time work experience choices are made and the impacts of these choices need to be considered. In terms of curriculum choice, results from the study show that machine trades employers are influenced positively by an applicant's participation in a machine trades (vocational) program of study in high schools, but that employers of clerical or retail workers are not really influenced one way or another by an office or distributive education curriculum, vis-a-vis a general or college preparatory curriculum. On the other hand, all employers tended to give preference to participants in a relevant cooperative or experiential type educational program. Youths who have made a career determination and who have an opportunity to participate in a cooperative or experiential-type educational program in their area, are well advised to pursue that opportunity.

Youths in this age group also face the decision of whether or not to work part-time and/or during summers while in high school. Having no previous work experience to list on an application is a severe disadvantage for a youthful

job applicant according to results from this study. But, the findings indicate that working part-time during school months confers only a slight advantage as compared to a youth working during summers only. In making decisions about part-time work involvement, however, a high school student should be aware of how important grades are as a screening device used by employers. Thus, the findings indicate that, if part-time work during the school year jeopardizes grades, it is not as advantageous from an employability perspective as work during summers.

The place or type of previous employment was also found to be very important in determining employability ratings. The relevance of the applicant's prior work experience was an important positive factor in determining employability ratings. If one of two otherwise identical job applicants had 40 percent of his or her job experience in relevant jobs, while the other applicant had all prior work experience in relevant jobs, the former's predicted rating would be lower by about the same amount as the effect of high school graduation.

Work experience in large organizations also was a positive causal factor. Work experience in a public (or governmental) organization had a significant, negative marginal effect on employability ratings, and finally, work experience in a fast-food restaurant was one of the two strongest determinants of employability for retail employers. If a youth had weak prior job experience, employers suggested that he or she list baby-sitting or yard work experience to demonstrate past job responsibility.

Employers, particularly those assessing clerical applicants, reacted negatively to the number of prior jobs held. Having held a number of jobs can be interpreted as a signal of a high-turnover propensity, which is presumably a negative trait. The total number of months working was not significant in any of the equations, implying that employers tended to count the number of prior jobs for which information is provided, but did not weigh heavily the duration of the jobs.

Although in the qualitative data and in other studies employers reported preferences for training new workers on their specific equipment, this study found that having relevant vocational skills still adds significantly to a job applicant's employability. For employers searching for clerical workers, an increase in typing speed of 10 words per minute offsets a competitor's advantage of having attended a postsecondary school. Similarly, the number of machines an applicant can competently operate is a significant positive factor in the hiring decision.

Not directly tested in this study, but mentioned a number of times in the qualitative data collection is evidence that extracurricular activity involvement is used by employers as a positive signal in their assessments of job applicants. Again, youths need to consider the impact of such involvement on their grade performances, but they also need to realize that extracurricular activities are considered in a positive fashion by employers.

As youths get to the age of completing high school (ages 18 to 19), some may be considering whether or not to complete high school while others may be considering whether or not to attend a postsecondary institution. Completion of high school was found to be a key variable, as might be expected. However, the results reported here, and in Hollenbeck's work (1984) indicate that employers will consider hiring dropouts. Such individuals can overcome the disadvantage of lacking a high school diploma by demonstrating good work habits, relevant work experience, or high occupational skill levels. Quoting one employer,

*We prefer, of course, a high school diploma, but work experience has certain advantages over the completion of education.*

As far as postsecondary training is concerned, attending a postsecondary school is weighed positively by employers, but completion of a program and the relevance of the program are the key signals that employers use in assessing applicants. Grades and choice of institution were analyzed to be of far less importance, and in fact, attending a postsecondary institution, but pursuing a course of study not relevant to the job for which the applicant is applying reduces employability when compared to an otherwise identical high school graduate.

The final set of results of interest to youths concerns the job search process itself. First, the hypothesis that eligibility for TJTC stigmatized an applicant was not borne out by the analyses. In fact, such eligibility had a significant positive influence for, and thus, should be advertised by clerical applicants. Second, neatness on the application form (and in cover letters) is one of the most important variables that employers use in screening applications for interviews. Third, interview behavior is crucial in the job search process. Analyses of the data and discussions with employers indicate how easy it is for a young person to lose employability advantages that have been painstakingly earned through hard work in high school or part-time jobs by not being punctual, by dressing inappropriately, or by using inappropriate grammar in an interview. Signals of a bad attitude that employers noticed were negative comments about a previous employer or teacher or being overly ambitious--expecting rapid promotions or to own one's own business. Presenting a neat, full resume, and exhibiting appropriate behavior at an interview can be accomplished with minimal effort in time and resources.

## 5.2 Findings Relevant to Employers

In formulating their recruitment and hiring strategies, firms must make resource allocation decisions and be concerned about the profitability of their actions. Large firms and firms that have been in existence for a long time have made numerous hires and their decision-making process has withstood the test of the marketplace. In fact, an underlying assumption of this study is that employers' hiring decisions are consistent enough that we can generalize from the behavior of a small number of employers who were observed to a larger population. It is thus somewhat presumptuous to issue recommendations to employers. Nevertheless, this study and its predecessor study of employers in Columbus, Ohio, did produce some results that may be of use to some employers. Five such conclusions are as follows:

1. To the extent that we were able to control other variables, the personal characteristics of the application reviewer influenced significantly the employability index assigned to the applicant. Males, blacks, and older individuals tended to rate higher the youths they were asked to assess. This could be a problem in organizations where more than one individual screens applications.
2. With almost unanimity, employers who had experience with students in cooperative or experiential-type education were enthusiastic about the experience and if a hire ensued, were pleased with the outcome.
3. An interviewer's assessment of an applicant's work experience and education is partially determined by how the youth handles the interview. Two job applicants with identical prior employment histories and education will be perceived quite differently if they exhibit different interview behavior, and the value of the applicants' work histories and educational backgrounds will be perceived quite differently.
4. Despite protestations about the unreliability of and difficulty of getting reference checks, large percentages of employers reported making such checks. When one considers how little it costs to make a reference check and how expensive a hiring mismatch can be, it seems that pursuing them is an efficient and recommended personnel policy.
5. The starting wage, the cost of equipment that new workers use, and the difficulty that a firm faces in dismissing workers do not seem to effect the caution exercised in rating job applicants.

### 5.3 Findings Relevant to School Administrators and Policymakers

A secondary purpose of the study was to be a conduit for communications between employers and schools, particularly in the area of employability development. It is important for schools to take employer's opinions into account, for the economic success and job security of students are going to depend on the degree to which they are able to fulfill employers' expectations. As reported in the chapter presenting qualitative data, employers did have some positive suggestions. Most of these were along the lines of increasing employer and school involvement and cooperation.

School administrators should be aware of the emphasis that employers put on grades as a signal for productivity and the rising concern that the nexus between achievement and grades may be weakening. The numerous comments about deficient basic skills and poor work habits suggest that employers are strong advocates of educational movements toward improving basic skills and of tougher performance standards.

Two suggestions about curricula changes or improvements were that job search skills should be taught and that youths should come to the labor market with some awareness about business organizations and management principles.

In response to the adequacy of preparation in various subject areas, there seemed to be a desire for a broader education in marketing or distributive education classes. In general, there was employer support for vocational education courses, and in some cases, a desire for even stronger vocational programs.

The results from the study show that reputation or location of a school influences an employer's perception of a youth. Clerical and retail employers gave a rating advantage to urban and parochial school students in comparison to suburban (or rural) school students, while machine trades employers behaved in a precisely opposite fashion. This implies that school officials in urban (and parochial) schools may want to exert extra effort in finding cooperative or experiential-type work/learning situations for machine trades students, while smaller, suburban schools may want to target efforts in arranging such situations for office and distributive education students.

In short, school leaders need to be cognizant of employment outcomes of students as they develop and implement curricular, instructional, and organizational changes. A lack of awareness may result in their students entering the world of work at a disadvantage. The key questions to be addressed by educational policymakers and administrators are:

- Can work maturity skills be taught and/or strengthened in secondary and 2-year or technical postsecondary settings?
- If so, how can work maturity skill learning be implemented into the curricula, instructional methods, and contexts of high schools and 2-year or technical postsecondary institutions?



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APPENDIX

QUESTIONNAIRE AND RESPONSE FREQUENCIES

EMPLOYER HIRING DECISIONS STUDY

June, 1983

EMPLOYER DATA

10 Number		1	2	3	4	5
<b>1. Respondent Characteristics</b>						
1. Your age	<u>84</u> 1) Less than 30	<u>130</u>	3) 45-54			
	<u>249</u> 2) 30-44	<u>107</u>	4) 55+			<u>6</u>
2. Your education	<u>35</u> 1) High school graduate or less than high school graduate					
	<u>53</u> 2) 1 or 2 years of training beyond high school					
	<u>84</u> 3) 3 or 4 years of training beyond high school, but not a college graduate					<u>7</u>
	<u>181</u> 4) College graduate					
	<u>213</u> 5) 1 or more years of training beyond college graduation					
3. Your sex	<u>391</u> 1) Male					
	<u>179</u> 2) Female					<u>8</u>
4. Your race	<u>29</u> 1) Black					
	<u>2</u> 2) Hispanic					<u>9</u>
	<u>537</u> 3) White/Other					
5. Which of the following most closely represents your management title? (MARK ONE)						
	<u>201</u> 1) Personnel or human resource department manager					<u>10</u>
	<u>2</u> 2) Foreman					
	<u>85</u> 3) Staff member of personnel department					
	<u>15</u> 4) Supervisor (e.g., head clerk or cashier, unit chief, floor manager)					
	<u>43</u> 5) Department or division manager					
	<u>108</u> 6) Establishment executive (e.g., store manager, director, president)					
	<u>71</u> 7) Owner					
	<u>45</u> 8) Other: Specify _____					
6. Looking at a typical work week, what percentage of your time is spent on the following (PLEASE MAKE SURE THE COLUMN ADDS UP TO 100%)						
	Hiring employees	<u>5%</u>				(11-13)
	Training employees	<u>5%</u>				(14-16)
	Supervising employees	<u>20%</u>				(17-19)
	Job duties other than hiring/training and supervision	<u>50%</u>				(20-22)
		100%				
7. Do you have or share the authority to hire or fire persons for your company's entry level jobs?						<u>23</u> <u>24</u>
7A. Hiring authority—						
	<u>272</u> 1) Yes, I can hire on my own					
	<u>213</u> 2) Yes, but I share authority					
	<u>80</u> 3) No, but I participate in process					
	<u>6</u> 4) No					
7B. Firing authority—						
	<u>231</u> 1) Yes, I can fire on my own					
	<u>195</u> 2) Yes, but I share authority					
	<u>98</u> 3) No, but I participate in process					
	<u>39</u> 4) No					
8. How many years have you been employed in this establishment?						
		<u>7</u>				(1, 51)
		years				<u>25</u> <u>26</u>
9. For how many years have you worked in this establishment's personnel department or participated in the selection of new employees?						
		<u>6</u>				(0, 46)
		years				<u>27</u> <u>28</u>
10. How many years have you been in a position to participate in the hiring process in any company?						
		<u>10</u>				(0, 46)
		years				<u>29</u> <u>30</u>

**II. Firm Characteristics**

THE FOLLOWING QUESTIONS REFER TO THE ESTABLISHMENT AT WHICH YOU WORK (OR IF YOU ARE RESPONSIBLE FOR HIRING PEOPLE FOR MORE THAN ONE ESTABLISHMENT, THE ESTABLISHMENTS FOR WHICH YOU ARE RESPONSIBLE).

1. How many persons are employed full-time in your establishment at present?  
38 1) less than 10      47 4) 30-49      104 7) 200-499      31 32  
42 2) 10-19      72 5) 50-99      96 8) 500-1999  
45 3) 20-29      72 6) 100-199      57 9) 2000 or more
2. How many persons are employed part-time in your establishment at present?  
373 1) less than 10      28 4) 30-49      33  
42 2) 10-19      97 5) 50 or more  
28 3) 20-29
3. Approximately, what percent of your full and part-time employees would be classified in entry-level, non-managerial positions; that is with job descriptions similar to that given on page 1 for the rating of applicants?  
55 1) less than 1%      85 4) 10%-19%      34  
60 2) 1%-4%      62 5) 20%-29%  
74 3) 5%-9%      227 6) 30% or more
4. Of the management personnel in your establishment (foremen, supervisors, etc.), approximately what percent were first hired in an unskilled or semi-skilled position? \_\_\_\_\_ (35-37)  
 Median: 30%
5. Approximately what percent of the full-time and part-time employees are under the age 25? \_\_\_\_\_ (38-40)  
 Median: 20%
6. Roughly what percent of your non-supervisory workers are covered by collective bargaining agreements? 0% 376 100% 32 Conditional Median: 20% \_\_\_\_\_ (41-43)
7. During the last year, did the total number of employees in your establishment increase, decrease, or stay the same? 155 1) Increased by Median: 10% \_\_\_\_\_ (44-46)  
195 2) Decreased by Median: 15% \_\_\_\_\_ (47-49)  
213 3) Stayed about the same
8. Does your company have any divisions or subsidiaries in other locations which do their own hiring? \_\_\_\_\_ (50-51)  
319 1) Yes (Go to question 9)  
248 2) No (Go to Section III)
9. What would you estimate to be the total number of full-time and part-time employees in all divisions and subsidiaries of your company? \_\_\_\_\_ (52-53)  
 (include your own establishment).  
161 1) 1-49      33 3) 100-499      78 5) 2000-9999  
162 2) 50-99      62 4) 500-1999      83 6) 10,000 or more

**III. Establishment's Hiring Process**

THESE QUESTIONS CONCERN YOUR ESTABLISHMENT'S GENERAL HIRING PROCESS FOR ENTRY LEVEL, NON-MANAGERIAL POSITIONS FOR A TYPICAL OR AVERAGE WEEK. WE ARE INTERESTED WITH A JOB DESCRIPTION SIMILAR TO THE ONE GIVEN ON PAGE 1. (IF YOU DO NOT HIRE FOR THAT TYPE OF JOB, PLEASE ANSWER THE FOLLOWING QUESTIONS FOR A SIMILAR JOB AND WRITE A DESCRIPTION OF THE JOB IN THE MARGIN.)

1. When your establishment has an opening in an entry level, non-managerial position which cannot be filled from within the firm, which of the following methods are used to attract applicants? (MARK ALL THAT APPLY)  
297 1) Referrals from the state employment service      \_\_\_\_\_ 55  
137 2) Referrals from employment agency      \_\_\_\_\_ 54  
47 3) Referrals from a union      \_\_\_\_\_ 55  
391 4) Advertise in media      \_\_\_\_\_ 56  
91 5) Display help wanted sign      \_\_\_\_\_ 57  
379 6) Announce to current employees that there are openings      \_\_\_\_\_ 58  
327 7) Ask for referrals from schools or training institutions      \_\_\_\_\_ 59  
93 8) Other      \_\_\_\_\_ 60  
22 9) Don't solicit applications      \_\_\_\_\_ 61
2. On average, how many vacancies for such jobs open up during a week? (if less than one per week, mark here  and estimate vacancies for a year.) \_\_\_\_\_ (62-65)  
 \_\_\_\_\_
3. How many phone inquiries about employment in such jobs are received in a week? \_\_\_\_\_ (66-68)  
10 Median \_\_\_\_\_  
 \_\_\_\_\_

0 2  
79 80

4. How are these telephone inquiries about employment treated--

4A. When there is an opening

- 293 1) Callers are encouraged to come in and fill out an application
- 186 2) Callers are encouraged if they have skills
- 20 3) Callers are generally discouraged
- 53 4) NA because we have few phone calls

4B. When there is no specific opening (Check one)

- 176 1) Callers are encouraged to come in and fill out an application
- 118 2) Callers are encouraged if they have skills
- 195 3) Callers are generally discouraged
- 53 4) NA because we have few phone calls

6 7

5. About how many people come to your establishment in a week looking for an entry-level position similar to the one described--

\_\_\_\_\_ (8-10)

5A. When there is an opening? Median: 15 5B. When there is no opening? Median: 5

\_\_\_\_\_ (11-13)

6. Typically, what percentage of people that come in a week were--

6A. Referred by an organization or individual (employment service, employment agency, union, school) that had screened the individual for you? 0% 202 Median: 5%

\_\_\_\_\_ (14-16)

6B. Not referred but came in response to an advertisement, sign, or other solicitation? Conditional Median 10%

25%

\_\_\_\_\_ (17-19)

6C. Were unsolicited?

30%

\_\_\_\_\_ (20-22)

100%

7. About what percentage of people who come to your establishment without a referral looking for a position similar to the one described complete an application--

7A. When there is an opening?

- 302 1) 95-100%
- 96 2) 76-94%
- 38 3) 51-75%
- 36 4) 26-50%
- 22 5) 6-25%
- 54 6) 0-5%

7B. When there is no specific opening?

- 149 1) 95-100%
- 78 2) 76-94%
- 59 3) 51-75%
- 54 4) 26-50%
- 58 5) 6-25%
- 145 6) 0-5%

25 24

8. What percentage of persons who fill out an application are interviewed immediately--

8A. When there is an opening?

- 170 1) 95-100%
- 57 2) 76-94%
- 55 3) 51-75%
- 40 4) 26-50%
- 67 5) 6-25%
- 157 6) 0-5%

8B. When there is no specific opening

- 36 1) 95-100%
- 8 2) 76-94%
- 20 3) 51-75%
- 35 4) 26-50%
- 80 5) 6-25%
- 368 6) 0-5%

25 26

9. Does your hiring process involve having people return to your establishment for an interview or do you make job offers based on the completed application?

- 464 1) Have interviews later
- 87 2) No interview after application and immediate interview, if any

27

10. Which of the following best characterizes how your firm selects new hires for the type of entry-level, non-managerial positions described above? (MARK ONE)

- 500 1) A number of applicants are interviewed before a decision is made and then the best is selected.
- 48 2) Applicants are interviewed sequentially with the job offer decision usually made before the next interview is arranged.
- 14 3) Other

28

11. On average, how many people are interviewed to fill one opening for an entry-level, non-managerial position? Median: 5 range: (1,63)

29 30

12. In what percent of your hires for such a position was the last (or only) person interviewed the one actually hired? Median: 20%

\_\_\_\_\_ (31-35)

13. Of those interviewed for a position, what percent are called in based on information obtained from a review of previously filed applications?

\_\_\_\_\_ (34-36)

Median: 10% (IF 0% GO TO QUESTION 15) 0% 156

Conditional Median: 25%

14. Of those interviewed for an entry-level, non-managerial position based on a previously filed application, what percent end up being offered the job?

37

- 13 1) All 95-100%
- 46 2) Most 61-94%
- 128 3) Half 40-60%
- 154 4) Few 6-39%
- 465 5) None 0-5%

15. What percentage of all of the people who have completed written applications for an entry-level, non-managerial job in your establishment do you feel are reasonably well-qualified for employment in your firm? Median: 30%

\_\_\_\_\_ (38-40)

6 2  
79 80



IV. Firm's Training Process

THIS SET OF QUESTIONS REFERS TO THE JOB FOR WHICH THE APPLICATION RATING HAS JUST BEEN CONDUCTED. (IF YOU DO NOT ACTUALLY HAVE THOSE TYPES OF JOBS PLEASE ANSWER THE FOLLOWING QUESTIONS FOR A SIMILAR JOB AND WRITE A DESCRIPTION OF THE JOB IN THE MARGIN.)

	DURING THE FIRST MONTH (160 HOURS)?		DURING THE NEXT 11 MONTHS (1840 HOURS)		DURING THE 2ND YEAR	
	Median	Mean	Median	Mean	Median	Mean
1. What percent of new employee's work time is spent in each of the following: (CLASSIFY SO THAT PERCENTAGES ADD TO 100%)						
1A. Formal training by specialized training personnel	<u>0%</u> (6-8)	<u>9.6%</u>	<u>0%</u> (9-11)	<u>4.7%</u>	<u>0%</u> (12-14)	<u>3.5%</u>
1B. Reading manuals or self-paced learning programs	<u>2%</u> (15-17)	<u>6.5%</u>	<u>0%</u> (18-20)	<u>5.3%</u>	<u>0%</u> (21-23)	<u>4.8%</u>
1C. Receiving instructions from a supervisor or coworker (Both individuals are fully devoted to the instructional activity)	<u>20%</u> (24-26)	<u>25.5%</u>	<u>10%</u> (27-29)	<u>15.9%</u>	<u>5%</u> (30-32)	<u>12.4%</u>
1D. Learning the job by watching coworkers do the job at their work stations	<u>10%</u> (33-35)	<u>13.5%</u>	<u>5%</u> (36-38)	<u>9.9%</u>	<u>0%</u> (39-41)	<u>7.1%</u>
1E. Learning the job by doing it while a supervisor or coworker devotes 100% of his/her time to supervising or advising the new worker	<u>10%</u> (42-44)	<u>21.2%</u>	<u>5%</u> (45-47)	<u>11.9%</u>	<u>0%</u> (48-50)	<u>9.8%</u>
1F. Learning the job by doing it while another employee watches progress out of the corner of their eye	<u>10%</u> (51-53)	<u>16.4%</u>	<u>10%</u> (54-56)	<u>27.4%</u>	<u>5%</u> (57-59)	<u>26.8%</u>
1G. Production activities or breaks that lack a training component	<u>0%</u> (60-62)	<u>8.9%</u>	<u>0%</u> (63-65)	<u>19.4%</u>	<u>5%</u> (66-69)	<u>30.5%</u>
				<u>584.5</u>		
	<u>100%</u>		<u>100%</u>		<u>100%</u>	<u>0</u> <u>79</u> <u>3</u> <u>80</u>

THE NEXT SET OF QUESTIONS IN THIS SECTION ASKS ABOUT THE PRODUCTIVITY OF A TYPICAL EMPLOYEE. PLEASE RATE A TYPICAL EMPLOYEE'S PRODUCTIVITY ON A SCALE OF ZERO TO 100, WHERE 100 EQUALS THE MAXIMUM PRODUCTIVITY RATING ANY OF YOUR EMPLOYEES HAS OR CAN ATTAIN AND ZERO IS ABSOLUTELY NO PRODUCTIVITY BY YOUR EMPLOYEE.

	DURING THE FIRST DAY OF EMPLOYMENT		AT THE END OF THE FIRST MONTH		AT THE END OF THE FIRST YEAR	
	Median	Mean	Median	Mean	Median	Mean
2. What productivity score would you give to a typical new employee?						
a. When not engaged in any of the training activities described above	<u>5</u> (6-8)		<u>50</u> (9-11)		<u>85</u> (12-14)	
b. When being trained or supervised by a line supervisor or management staff	<u>20</u> (15-17)		<u>60</u> (18-20)		<u>90</u> (21-23)	
c. When being trained or supervised by coworkers	<u>15</u> (24-26)		<u>50</u> (27-29)		<u>85</u> (30-32)	
3. What is the current starting hourly wage for the job for which you answered question 2?					Range	
					<u>\$ 5.00</u> per hour (2.11, 20.50)	<u>35</u> <u>36</u>
4. What is the current hourly wage for people in this job who have been at the firm slightly more than one year?					<u>\$ 6.00</u> per hour (2.11, 20.50)	<u>37</u> <u>38</u> <u>39</u> <u>40</u>
5. How many years of relevant job experience does the typical new employee have?			Mean:	<u>1.86</u>		<u>31</u> <u>42</u>
				years		



6. Has the typical new employee in this job received training from a school or a previous employer?	a) School? If yes, estimate how much training. <u>252</u> 1) Yes--> <u>12</u> FTE months <u>248</u> 2) No	<u>43</u> <u>44</u> <u>45</u>
	b) Previous employer? If yes, how much? <u>324</u> 1) Yes--> <u>12</u> FTE months <u>120</u> 2) No	<u>46</u> <u>47</u> <u>48</u>
7. How many of the skills learned by new employees in this job are useful outside of your company?	<u>114</u> 1) All 95-100% <u>238</u> 2) Most 61-94% <u>99</u> 3) Half 40-60% <u>64</u> 4) Some 6-39% <u>24</u> 5) Minimal 0-5%	<u>49</u>
8. Focusing on the skills that are useful outside your company, how many other companies in the local labor market have jobs that require these skills?	<u>33</u> 1) Less than 5 <u>83</u> 2) 5-15 <u>198</u> 3) 16-100 <u>211</u> 4) Over 100	<u>50</u>
9. If it were purchased today what would be the cost of the most expensive machine people in entry-level jobs, like the ones described, work on or with?	<u>88</u> 1) Under \$2,000 <u>138</u> 2) \$ 2-\$ 10,000 <u>170</u> 3) \$10-\$ 50,000 <u>86</u> 4) \$50-\$200,000 <u>37</u> 5) \$200,000 up	<u>51</u>
10. How many weeks does the probationary period for these jobs last? Conditional Median:	<u>106</u> 1) No probationary period <u>12</u> 2) Weeks	<u>52</u> <u>53</u>
11. (After the probationary period is over,) How much documentation or paperwork is required to fire an employee?	<u>224</u> 1) A great deal <u>176</u> 2) Some <u>71</u> 3) A little <u>53</u> 4) No paperwork	<u>54</u>
12. If your company were to temporarily layoff one-third of its entry-level employees for a period of three months what would be the basis for selecting which employees would be laid off?	<u>109</u> 1) Solely seniority <u>108</u> 2) Mainly seniority <u>131</u> 3) Mainly productivity <u>37</u> 4) Solely productivity <u>138</u> 5) Half seniority, half productivity	<u>55</u>
13. Let us imagine your firm hired a group of new employees between the ages 16 to 25 in this job exactly two years ago, what percent of these would you imagine would now be in each of the following states?	Discharged or induced to quit Voluntarily resigned Currently on lay off Still employed at the firm Total	<u>10</u> % <u>18</u> % <u>0</u> % * <u>60</u> % <u>100</u> % (56-58) (59-61) (62-64) (65-67)
14. Of those still at the firm what percent would have received a promotion (e.g., has been given noticeably upgraded job responsibilities involving a higher rate of pay) before two years are up?	Percent of those still at the firm that would be promoted	<u>30</u> % (68-70)
		<u>0</u> <u>79</u> <u>4</u> <u>80</u>

\* 0% 342  
Conditional Median: 15 %

**V. Firm's Experience with Young Employees**

OF YOUR CURRENT EMPLOYEES AGE 25 AND UNDER WHO WERE HIRED IN THE LAST TWO YEARS, PLEASE SELECT TWO: ONE WHO HAS BEEN PROMOTED AND ONE WHO HAS NOT BEEN PROMOTED. (IF MORE THAN ONE PERSON FITS A PARTICULAR CATEGORY, SELECT THE PERSON WHO WAS HIRED CLOSEST TO EXACTLY 18 MONTHS AGO.)

	NOT PROMOTED		PROMOTED					
1. Employee's age	104 1) Less than 20 101 2) 20-21 230 3) 22 +		401 1) Less than 20 83 2) 20-21 309 3) 22 +		6	7		
2. Sex	216 1) M 216 2) F		212 1) M 218 2) F		8	9		
3. Race/Ethnicity	53 1) Black 56 2) Hispanic 322 3) White/Other		59 1) Black 61 2) Hispanic 312 3) White/Other		10	11		
4. Education	62 1) Less than high school 262 2) High school graduate 79 3) Some college/training 28 4) College grad		19 1) Less than high school 242 2) High school graduate 126 3) Some college/training 46 4) College grad		12	13		
5. Did employee have relevant voc. ed. or major program in high school?	148 1) Yes 284 2) No		211 1) Yes 206 2) No		14	15		
6. High school grade point average	18 1) A 66 2) B 78 3) C 15 4) D 5) F 248 6) Don't know		31 1) A 104 2) B 49 3) C 7 4) D 5) F 234 6) Don't know		16	17		
7. Relevant voc. training or college course work	110 1) Yes 316 2) No		181 1) Yes 240 2) No		18	19		
8. Post high school point average	11 1) A 30 2) B 29 3) C 5 4) D 5) F 287 6) Don't know		18 1) A 59 2) B 19 3) C 3 4) D 5) F 270 6) Don't know		20	21		
9. Did employee have any part-time or full-time job experience prior to hire?	321 1) Yes 108 2) No		366 1) Yes 6 2) No		22	23		
10. How many years of relevant part-time or full-time job experience prior to hire?	108 1) None 103 2) Less than 1 152 3) 1-2 67 4) More than 2		69 1) None 72 2) Less than 1 162 3) 1-2 130 4) More than 2		24	25		
11. Did employee receive more training than average employee in this position.	50 1) Received more 374 2) About the same 12 3) Received less		35 1) Received more 376 2) About the same 22 3) Received less		26	27		
12. Did firm receive subsidy for hiring individual?	12 1) Yes 416 2) No 9 3) Don't know		10 1) Yes 420 2) No 63 3) Don't know		28	29		
13. When was individual hired?	month / year		month / year		30	31	32	33
					34	35	36	37
14. Current hourly wage Median \$	5.63		6.60		38	39	40	41
					42	43	44	45
15. What productivity score (0 to 100) would you give employee now?	75		90					
								(46-48)
								(49-51)
					0	5		
					79	80		

**VI. Firm's Experience with Young Employees who Have Separated from the Firm**

OF THE EMPLOYEES AGE 25 OR UNDER WHO WERE HIRED IN THE LAST TWO YEARS BUT WHO ARE NOT CURRENTLY WORKING FOR YOUR ESTABLISHMENT, PLEASE SELECT THREE: SOMEONE WHO RESIGNED VOLUNTARILY, SOMEONE LAID OFF AND NOT REHIRED, AND SOMEONE DISCHARGED OR INDUCED TO RESIGN (IF MORE THAN ONE PERSON FITS A PARTICULAR CATEGORY PLEASE SELECT THE PERSON WHO WAS HIRED CLOSEST TO EXACTLY 18 MONTHS AGO. IT DOES NOT MATTER WHETHER THE PERSON LEFT SHORTLY AFTER BEING HIRED OR ONLY AFTER BEING THERE FOR ALMOST A YEAR.)

	VOLUNTARY RESIGNATION			LAY OFF			DISCHARGE OR INDUCED QUIT			
1. Employee's age	55 93 238	1) Less than 2) 20-21 3) 22 +	43 71 143	1) Less than 20 2) 20-21 3) 22 +	60 79 218	1) Less than 20 2) 20-21 3) 22 +				(6-8)
2. Sex	198 189	1) M 2) F	153 97	1) M 2) F	208 142	1) M 2) F				(9-11)
3. Race/Ethnicity	43 38 298	1) Black 2) Hispanic 3) White/Other	37 37 175	1) Black 2) Hispanic 3) White/Other	72 32 247	1) Black 2) Hispanic 3) White/Other				(12-14)
4. Education	48 222 81 33	1) Less than high school 2) High school graduate 3) Some college/training 4) College grad	46 160 27 16	1) Less than high school 2) High school graduate 3) Some college/training 4) College grad	59 212 57 22	1) Less than high school 2) High school graduate 3) Some college/training 4) College grad				(15-17)
5. Did employee have relevant voc. ed. or major program in high school?	158 220	1) Yes 2) No	86 156	1) Yes 2) No	99 233	1) Yes 2) No				(18-20)
6. High school grade point average	18 51 230	1) A 2) B 3) C 4) D 5) E 6) Don't know	8 52 162	1) A 2) B 3) C 4) D 5) E 6) Don't know	8 51 232	1) A 2) B 3) C 4) D 5) F 6) Don't know				(21-23)
7. Relevant voc. training or college course work	113 257	1) Yes 2) No	58 176	1) Yes 2) No	79 243	1) Yes 2) No				(24-26)
8. Post high school point average	7 21 262	1) A 2) B 3) C 4) D 5) F 6) Don't know	7 19 175	1) A 2) B 3) C 4) D 5) F 6) Don't know	3 23 247	1) A 2) B 3) C 4) D 5) F 6) Don't know				(27-29)
9. Did employee have any part-time or full-time job experience prior to hire?	303 73	1) Yes 2) No	186 56	1) Yes 2) No	260 81	1) Yes 2) No				(30-32)
10. How many years of relevant part-time or full-time job experience prior to hire?	74 88 135 83	1) None 2) Less than 1 3) 1-2 4) More than 2	48 67 83 51	1) None 2) Less than 1 3) 1-2 4) More than 2	77 77 121 77	1) None 2) Less than 1 3) 1-2 4) More than 2				(33-35)
11. Did employee receive more training than average employee in this position.	35 341 7	1) Received more 2) About the same 3) Received less	33 206 11	1) Received more 2) About the same 3) Received less	64 278 10	1) Received more 2) About the same 3) Received less				(36-38)
12. Did firm receive a subsidy for hiring individual?	9 369 3	1) Yes 2) No 3) Don't know	5 233 3	1) Yes 2) No 3) Don't know	7 317 5	1) Yes 2) No 3) Don't know				(39-41)
13. Months at firm before separation Median:	12 months		12 months		10 months					44 45 46 47
14. Hourly wage at separation	\$ 5.75 (48-51)		\$ 6.00 (52-55)		\$ 5.50 (56-59)					
15. Productivity score two weeks prior to separation	75 (60-82)		70 (65-85)		50 (66-88)					



**VII. Comments**

1. Based upon your experience with young people, in which of the following areas of educational preparation are your applicants typically well-prepared and not well-prepared?

<u>Well-Prepared</u> (Mark all that apply)		<u>Not Well-Prepared</u> (Mark all that apply)	
<u>57</u>	a) Science	<u>220</u>	<u>69</u>
<u>41</u>	b) English-Writing Ability	<u>456</u>	<u>70</u>
<u>132</u>	c) English-Verbal Ability	<u>345</u>	<u>71</u>
<u>123</u>	d) Mathematics	<u>328</u>	<u>72</u>
<u>203</u>	e) Business Preparation (Bookkeeping, typing, etc.)	<u>222</u>	<u>73</u>
<u>92</u>	f) Distributive or Marketing Voc. Ed.	<u>232</u>	<u>74</u>
<u>187</u>	g) Industrial voc. ed. (Machine trades, woodworking, auto mechanics, etc.)	<u>162</u>	<u>75</u>
<u>7</u>	h) Other: _____	<u>67</u>	<u>76</u>

2. Do you have any general comments about your experiences hiring youth for entry-level jobs? Do you have any opinions about what skills and competencies schools should be teaching youth? Other comments which you think might be relevant for our study.

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THANK YOU

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