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TITLE
Sharing Career Education Resources with Schools: An Exploratory Study of Employer Willingness.

INSTITUTION

SPONS AGENCY
National Inst. of Education (DHEW), Washington, D.C.

PUB DATE
30 Jan 80

NOTE
43p.; For a related document see ED 024 088

EDRS PRICE
MF01/PC02 Plus Postage.

DESCRIPTORS
*Business; *Career Education; Community Resources; Community Services; Cooperative Planning; Educational Research; Educational Resources; *Employer Attitudes; Employment; Industry; *Institutional Characteristics; Program Development; Program Planning; Questionnaires; *Resources; School Community Relationship; School Districts; *School Industry Relationship

ABSTRACT
To aid schools planning career education programs, a study (1) identified resources which organizations might be willing to share with schools, and (2) attempted to match available resources to easily observable characteristics of employment organizations. Produced through use of the Delphi technique, two lists of variables (organizational resources and organizational characteristics) formed the content of a questionnaire developed for administration to 778 members of twenty-seven service clubs (Exchange, Kiwanis, Lions, Rotary) in Delaware, New Jersey, and eastern Pennsylvania. A company's overall willingness to share resources was compared to eleven operating characteristics: current school assistance, formal recruitment program, formal staff/training program, management that encourages employee community service, hiring of skilled non-professionals, support of employee education, engagement in public service, public relations officer, student hiring, job openings, and apprenticeship program. Willingness to share each of sixteen resources was also compared to six other organizational characteristics. Responses were also analyzed for two open-ended questions: other resources business might be willing to share and other ways in which businesses would like to be involved in planning and implementing career education programs. The major conclusion was that the employer community is an underused resource available to schools. (YLB)

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SHARING CAREER EDUCATION RESOURCES WITH SCHOOLS: AN EXPLORATORY STUDY OF EMPLOYER WILLINGNESS

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January 30, 1980,

The preparation of this report was supported by funds from the National Institute of Education, United States Department of Health, Education, and Welfare. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred.
In 1971, U.S. Commissioner of Education Sidney P. Marland provided major impetus to career education, a reform movement directed at improving students' preparation for work. "Every young person in school belongs in career education] at some point, whether engaged in preparing to be a surgeon, a brick layer, a mother or a secretary."

Early in the movement, on the initiative of the U.S. Office of Education, the National Institute of Education funded Research for Better Schools, Inc. (RBS) and three other regional educational laboratories to develop "experience-based" career education models which would encourage schools to draw upon community as well as school resources in helping students to make the transition from school to adult roles.

Even while these models were being developed, school districts acting on their own initiative began developing career education programs to serve local needs. In Boston, for example, school administrators asked business leaders to assist in introducing a Flexible Campus Program in 14 (now 16) Boston high schools. Students in this program enroll in mini-courses taught at school by representatives of the business community and participate in work internships (i.e., non-paid, part-time work experience) five days a week for periods of from ten to fifteen weeks.

At the Winston Churchill High School in Potomac, Maryland, where 87% of the students go on to college, the career education program focuses on managerial and professional jobs. In this program, seniors spend from 10 to 20 hours a week "interning with sponsors." The employer "sponsors" include business people, lawyers, dentists, architects, and physicians. Students have been eager to participate in this program even though they receive neither pay nor school credit.

In Akron, Ohio, an entire school program has been built around career education. Decision-making skills, knowledge of self, and choice of an appropriate career cluster are the areas of concentration in 10th grade. In 11th and 12th grades, students explore different types of careers. These activities supplement rather than replace academic courses required for graduation.

Schools wishing to implement career education programs seem to have three alternatives: (1) adopt a model program or a program that has been developed for use in another school setting, (2) adapt an existing program to the local context, or (3) plan a new program to fit within the local context. Recent research suggests that the full-scale adoption alternative is unlikely; schools tend to adapt programs to the local situation. Research also suggests that successful program adaptation or planning requires that program architects understand the local context. One part of the local context for career education programs is the employer community. Though traditionally outside the realm of consideration of many school districts, the employer community can be a rich source of career education resources. This study is concerned with this part of the local school district context.
The study was undertaken to provide two kinds of assistance to schools which are planning career education programs. First, the study identifies a range of resources which may be available to schools. Second, since experience has shown that employers respond more positively to requests for specific resources than to general appeals for help, the study attempts to match available resources to easily observable characteristics of employing organizations.

Method

Variable Identification

The first task in this study was to identify (a) resources which organizations might be willing to share with schools and (b) observable organizational characteristics associated with employer willingness to provide these resources for career education programs. The identification of resources and characteristics was accomplished through a modified Delphi technique used with eight staff members of the Career Preparation Component of Research for Better Schools. Each of the participating staff members was experienced in planning, implementing, and evaluating career education programs.

The products of this Delphi process were two lists of variables, (1) resources which employers commonly share with schools, e.g., company-produced literature, speakers and equipment, and (2) easily observable organizational characteristics which might be useful in predicting an organization's willingness to share specific resources with schools, e.g., formal recruitment program for high school graduates, public service activity, and formal staff training programs. These variables formed the content of a questionnaire.
(see Appendix 2) developed for administration to employer representatives for the purpose of matching organizational characteristics to specific resources.

Since the purpose of the study was not to discriminate between willing and unwilling employers, but rather to match resources to characteristics of willing employers, it was decided to seek respondents from among those oriented to community service. Local service clubs seemed to be in a position to provide such respondents.

The questionnaire asked respondents to indicate:

1. resources that their company might share with local schools if asked to do so, and
2. characteristics of their company or place of employment.

Respondents also were asked in what ways they thought businesses would like to be involved with career education program planning and implementation in local school districts.

Data Collection

Data were collected from 27 local service clubs (Exchange, Kiwanis, Lions, Rotary) in Delaware, New Jersey, and eastern Pennsylvania. RBS tried to reach clubs which served communities in each of the U.S. Census categories in each of the three states. The locations of the various clubs are given in Figure 1.

Clubs serving the identified communities were located through local Chambers of Commerce. Direct contact with these clubs was made, approval of the survey by District Governors of the clubs was obtained when required.
Brandywine
Dover
Millsboro
Newark
Wilmington (suburbs)

New Jersey
Atlantic City (three clubs)
Hammonton
Newark
Paterson
Surf City
Vineland
Williamstown

Eastern Pennsylvania
Chester
Coatesville
Holmes
Lebanon (two clubs)
Paoli
Parksburg
Pottstown
Reading (two clubs)
Scranton (two clubs)
Upper Darby

Figure 1
Sites in Survey Sample

At regular meetings of the service clubs, RBS researchers discussed career education, explained the purpose of the study, and distributed the survey questionnaire to all members in attendance. Members were asked to complete the questionnaire and return it, anonymously, to RBS. A business reply mailing envelope was provided for that purpose.

The above procedure was followed in all but two of the listed service clubs. In the Coatesville and Parksburg clubs, the questionnaires were given to the club presidents for distribution.
Data Analysis

Frequency distributions were obtained for response alternatives on each structured response question. Cross-tabulations were used to compare responses to questions involving more than two possible response alternatives. The chi-square statistic was applied to test for statistical independence of responses. The phi-coefficient was used as a measure of the relationship between the presence/absence of certain company characteristics and a yes/no response to the question of willingness to share a particular resource.

These analysis procedures allowed for the identification of (1) general trends in the willingness of organizations to share resources and (2) the kinds of resources more likely to be shared by different kinds of organizations.

Answers to open-ended questions were compiled and consolidated in order to give clues to new areas of cooperative endeavor for schools and businesses in the area of career education program planning and implementation.

Limitations

This study has several limitations. First, RBS staff wanted to learn about experiences and perceptions of employers in various types of communities in the region. In deciding to use service clubs as the means for reaching respondents, participation in the study was limited to clubs whose leadership could be persuaded to support RBS' efforts.

Second, in deciding to approach service clubs, RBS staff limited the respondent population to active service club members. As a result, few women and black respondents had opportunities to participate in the study.
Third, in deciding to encourage the service clubs to distribute questionnaires to members, it became possible to obtain more than one completed questionnaire per employer. This weakens the assumption of independence of observations which is required to conduct the statistical tests used to detect relationships.

Fourth, in deciding to respect anonymity of respondents and their organizations, there is no way to match respondent characteristics with those of the general population of employers.

Results and Discussion

Respondents and Their Organizations

Responses were received from 178 individuals: 28 from Delaware, 59 from New Jersey, and 91 from Pennsylvania. Of the 178 respondents, 48% represented organizations located in urban areas, 33% in suburban areas, 13% in rural areas, and 6% in "other" areas. The employers represented several types of organizations: 75% were from private industry or business, 6% were practicing professionals, 6% represented public employers, 5% were from social agencies, 3% were from educational agencies, 1% represented religious agencies, and 3% listed themselves as from other kinds of companies.

The respondents represented a number of management positions. The five most frequently occurring titles of those responding were president (20%), vice-president (18%), manager (16%), owner (11%), and director (9%).

Twenty-five employers were principally involved in production, 53 in sales, 76 in service, 10 in health care, and 10 in "other functions." Four respondents did not list the type of work in which their organizations were engaged.
One hundred thirty respondents described the type of work done by a majority of young employees in their organizations as follows:

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled manual labor</td>
<td>35</td>
</tr>
<tr>
<td>Skilled manual labor</td>
<td>26</td>
</tr>
<tr>
<td>Office/clerical</td>
<td>46</td>
</tr>
<tr>
<td>Sales</td>
<td>7</td>
</tr>
<tr>
<td>Professional trainee</td>
<td>8</td>
</tr>
<tr>
<td>Professional work</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>130</td>
</tr>
</tbody>
</table>

The respondents also represented organizations which varied in possession of a number of operating characteristics, as shown in Table 1 (page 9).

Analysis could be approached in two ways; from a resource point-of-view or from an organizational characteristic perspective. From a resource point-of-view, it is possible to ask which organizational characteristics identify those companies most likely to share a particular resource. On the other hand, from an organizational perspective, one could inquire as to which resources are likely to be shared by an organization with a particular characteristic. The second approach is used here since it encourages school staff to think first about the company with which it is interacting.
<table>
<thead>
<tr>
<th>Company Operating Characteristic</th>
<th>Number and Percentage of Respondents in Organizations Possessing the Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has a management that encourages employees to become involved in community affairs</td>
<td>111 (62.4%)</td>
</tr>
<tr>
<td>Engages in public service activities in surrounding communities</td>
<td>103 (57.9%)</td>
</tr>
<tr>
<td>Employs high school students in either temporary or part-time positions</td>
<td>93 (52.2%)</td>
</tr>
<tr>
<td>Supports employee education by such things as tuition reimbursement, released-time or on-site courses</td>
<td>91 (51.1%)</td>
</tr>
<tr>
<td>Hires non-professional skilled employees other than secretaries, (e.g., technicians)</td>
<td>82 (46.1%)</td>
</tr>
<tr>
<td>Has a formal staff training program</td>
<td>62 (34.8%)</td>
</tr>
<tr>
<td>Assists schools in providing educational experiences for students</td>
<td>53 (29.8%)</td>
</tr>
<tr>
<td>Has a public relations officer</td>
<td>46 (25.8%)</td>
</tr>
<tr>
<td>Has an apprenticeship program</td>
<td>42 (23.6%)</td>
</tr>
<tr>
<td>Has a number of current job openings</td>
<td>27 (15.2%)</td>
</tr>
<tr>
<td>Has a formal recruitment program for high school graduates</td>
<td>18 (10.1%)</td>
</tr>
</tbody>
</table>

Table 1

Frequency of Occurrence of Company Operating Characteristics in Study Sample
**Overall Willingness to Share Resources**

Respondents varied in the resources which they predicted their companies would share, upon request, with schools. Results are found in Table 2 (page 11).

Table 2 shows that a school's probability of receiving a positive response to a request for resources is greater than 50% when that request is for:

- speakers for school career programs,
- field trips to work sites,
- individual student visitation,
- company-produced literature,
- school staff visitation,
- providing students with off-campus work experience, or
- providing representatives to participate in school district activities.

**Willingness Compared to Operating Characteristics**

Phi-coefficients were calculated between willingness to share each resource enumerated in Table 2 (page 11) and presence of each of the company operating characteristics listed in Table 1 (page 9). These phi-coefficients are presented in Table 3 (page 12).

While none of the relationships in Table 3 is strong, the moderate relationships which do exist can provide schools with clues as to which local companies might be more willing than others to provide specific resources.

Table 3 does provide clues to the kinds of resources that employers with various characteristics are likely to share with local schools. These indicators of possible resources are discussed in the following pages.
<table>
<thead>
<tr>
<th>Resource Possibilities</th>
<th>Number and Percent of all respondents whose companies would share resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing schools with speakers to discuss such things as the careers available within the company</td>
<td>144 (80.9%)</td>
</tr>
<tr>
<td>Allowing groups of students to tour facilities on field trips</td>
<td>130 (73.0%)</td>
</tr>
<tr>
<td>Allowing individual students to make scheduled visits to observe individual employees at work</td>
<td>127 (71.3%)</td>
</tr>
<tr>
<td>Providing copies of company-produced literature, posters, displays, etc. to local schools</td>
<td>111 (62.4%)</td>
</tr>
<tr>
<td>Permitting school staff visitation or staff exchange</td>
<td>103 (57.9%)</td>
</tr>
<tr>
<td>Providing individual students with the opportunity to work for a scheduled period of time as non-paid employees in order to provide students with the experience of working</td>
<td>97 (54.5%)</td>
</tr>
<tr>
<td>Participating in school district activities (such as planning, curriculum development, etc.)</td>
<td>93 (52.2%)</td>
</tr>
<tr>
<td>Providing tutors, advisors, or mentors to students either for a given period of time or for a single independent project</td>
<td>86 (48.3%)</td>
</tr>
<tr>
<td>Conducting workshops for teachers and counselors on such topics as the job market, labor problems, etc.</td>
<td>83 (46.6%)</td>
</tr>
<tr>
<td>Providing schools with training films or other company-produced audio-visual materials</td>
<td>74 (41.6%)</td>
</tr>
<tr>
<td>Providing competency assessment of student skills</td>
<td>74 (41.6%)</td>
</tr>
<tr>
<td>Conducting shows, demonstrations, etc.</td>
<td>72 (40.4%)</td>
</tr>
<tr>
<td>Loaning or donating equipment to schools</td>
<td>54 (30.3%)</td>
</tr>
<tr>
<td>Providing schools with space for instructional programs</td>
<td>51 (28.7%)</td>
</tr>
<tr>
<td>Donating money or raw materials for educational programs</td>
<td>50 (28.1%)</td>
</tr>
<tr>
<td>Providing transportation for students</td>
<td>19 (10.7%)</td>
</tr>
</tbody>
</table>

Table 2
Degree of Willingness to Share Resources
<table>
<thead>
<tr>
<th></th>
<th>Company Produced Literature</th>
<th>Films, AV Materials</th>
<th>Shows, Demonstrations</th>
<th>Instructional Space</th>
<th>Tours, Field Trips</th>
<th>Speakers</th>
<th>Equipment Loan or Donation</th>
<th>Faculty Workshops</th>
<th>Participation in School District Activities</th>
<th>Individual Student Observation</th>
<th>Donation of Money or Materials</th>
<th>Work Sites for Student Employment Experience</th>
<th>Assessment of Student Skills</th>
<th>Student Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps Schools Now</td>
<td>.26</td>
<td>.25</td>
<td>.26</td>
<td>.19</td>
<td>.16</td>
<td>.13</td>
<td>.16</td>
<td>.17</td>
<td>-.16</td>
<td>.16</td>
<td>-.16</td>
<td>-.21</td>
<td>-.21</td>
<td>-.21</td>
</tr>
<tr>
<td>Has Formal Recruiting Program</td>
<td>.21</td>
<td>.21</td>
<td>.18</td>
<td>.16</td>
<td>.16</td>
<td>-</td>
<td>-.15</td>
<td>.15</td>
<td>.15</td>
<td>.13</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
</tr>
<tr>
<td>Has Staff Training Program</td>
<td>.30</td>
<td>.34</td>
<td>.25</td>
<td>.30</td>
<td>.15</td>
<td>.22</td>
<td>.27</td>
<td>.27</td>
<td>.27</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
</tr>
<tr>
<td>Hires Skilled Non-professionals</td>
<td>.21</td>
<td>-</td>
<td>.17</td>
<td>.18</td>
<td>.22</td>
<td>-.25</td>
<td>-</td>
<td>-.25</td>
<td>-.25</td>
<td>-.25</td>
<td>-.25</td>
<td>-.14</td>
<td>.27</td>
<td>-.27</td>
</tr>
<tr>
<td>Supports Education of Employees</td>
<td>.15</td>
<td>.24</td>
<td>-</td>
<td>-.21</td>
<td>.20</td>
<td>-</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
</tr>
<tr>
<td>Does Public Service</td>
<td>.14</td>
<td>.18</td>
<td>.20</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
</tr>
<tr>
<td>Has Public Relation Officer</td>
<td>.14</td>
<td>.24</td>
<td>.22</td>
<td>-</td>
<td>-.17</td>
<td>-</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17</td>
</tr>
<tr>
<td>Hires High School Students for Part-time Jobs</td>
<td>-</td>
<td>-</td>
<td>.18</td>
<td>.18</td>
<td>-</td>
<td>-</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
</tr>
<tr>
<td>Has Current Job Openings</td>
<td>.14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
<td>-.14</td>
</tr>
<tr>
<td>Has Apprenticeship Program</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

Table 3

Phi = Coefficients between willingness to share 16 resources and 11 operating characteristics ('-' = not significantly different from zero at the .05 level of significance)
Currently Assists Schools

The best overall indicator of willingness to share resources is whether a company is already involved in helping schools to provide educational experiences for students. A company's current involvement with schools seems to be positively related to sharing the following resources:

- company produced literature
- shows and demonstrations
- audio-visual materials
- money or materials
- space for instructional programs
- tutors/mentors/advisors for students
- tours and field trips
- equipment loan or donation
- personnel to participate in school district activities
- speakers

Has Formal Recruitment Program

That a company actively recruits high school graduates through a formal program appears to be positively related to the sharing of nine resources. They are:

- company produced literature
- audio-visual materials
- shows and demonstrations
- tours and field trips
- space for instructional programs
- money or raw materials
- teacher/counselor workshops
- personnel to participate in school district activities
- opportunity for site observation by individual students

Has Formal Staff Training Program

Some of the strongest positive relationships between company characteristics and resources are found with those companies which have formal staff training programs. The nine resources related to this characteristic are:

- audio-visual materials
- company-produced literature
- space for instructional programs
- tutors, mentors, or advisors for student projects
- teacher/counselor workshops
- shows and demonstrations
- speakers
- opportunity for site observation by individual students
- tours and field trips

Management that Encourages Employee Community Service

A management that encourages employees to become involved in community affairs appears to be a characteristic of companies that may be willing to share several resources with schools. The nine resources positively related to this characteristic are:
- audio-visual materials
- teacher/counselor workshops
- tutors, mentors, or advisors for student projects
- personnel to participate in school district activities
- staff visitation or staff exchange
- speakers
- shows and demonstrations
- company-produced literature
- space for instructional programs

Hires Skilled Non-Professionals

That a company hires skilled non-professional workers other than secretaries (e.g., technicians) appears to be a characteristic that is related to a willingness to provide the following seven resources to schools:
- staff visitation or staff exchange
- equipment loan or donation
- tours and field trips
- company-produced literature
- space for instructional programs
- shows and demonstrations
- money or raw materials donation
Supports Employee Education

Over half the employers represented by the respondents in the survey support employee education by such things as tuition reimbursement, released time or on-site courses. Related to this characteristic appears to be a willingness to provide five resources to schools. These are:

- audio-visual materials
- speakers
- tutors, mentors, or advisors for student projects
- teacher/counselor workshops
- company-produced literature

Engages in Public Service

Employers who are active in public service in surrounding communities seem to be favorably disposed to providing four resources to schools:

- personnel to participate in school district activities
- shows and demonstrations
- audio-visual materials
- company-produced literature
Has Public Relations Officer

Those company representatives whose firms have a public relations officer responded more positively to four resource possibilities than those from firms which do not:

- audio-visual materials
- shows and demonstrations
- equipment loan or donations
- company-produced literature

Hires Students

Companies which hire high school students in temporary or part-time positions appear willing to provide schools with the following three resources:

- tours and field trips
- space for instructional programs
- site observation by individual students

Has Job Openings

Those company representatives who said that their firms had a number of current job openings also indicated a probable willingness on the part of their firms to provide:

- staff visitation or staff exchange
- company-produced literature to schools
Has Apprenticeship Program

Only one resource appeared to be a "best bet" from companies that had apprenticeship programs. Representatives from these firms indicated more of a willingness to loan or donate equipment to schools than to share other resources.

Willingness Compared to Other Organizational Characteristics

Willingness to share each of the 16 resources enumerated in Table 2 was compared to organizational characteristics other than the operating characteristics previously considered. These characteristics are referred to as organizational characteristics:

- Type of agency (business, educational agency, public agency, etc.),
- Primary function (production, sales, service, etc.),
- Company location,
- Majority of young workers employed full-time,
- Majority of young workers permanently employed,
- Type of work done by majority of young workers.

Each characteristic was cross-tabulated with company willingness to share each specified resource. Contingency analysis, using the chi-square statistic, was performed to detect possible relationships. Cross-tabulated data which show significant relationships ($\alpha = .05$) are presented in Appendix 1 to support the following discussion.

Type of Agency

Type of agency was divided, for analysis, into the following categories:

- Educational Agency
- Public Agency
- Religious Agency
- Social Agency
- Business or Industry
- Professional
- Other
This descriptor was found to be significant in cross-tabulations with company willingness to share the following resources:

- Providing individual students with non-paid work experience
- Providing space for instructional programs
- Providing transportation for students

As shown in Table A-1 (page 31), employers who describe their organization as an educational, religious, social or "other" type of agency appear to be more willing than employers in business or industry to provide students with opportunities to gain work experience as non-paid employees. Table A-2 (page 31) suggests that educational agencies are more willing than organizations placing themselves in the category of business or industry to provide schools with space for instructional programs. Finally, while transportation is a resource that few wish to provide for schools, Table A-3 (page 32) suggests the possibility that social agencies are the most likely candidates for sharing this resource.

Primary Function

Whether an organization's primary function is production, sales, service, health care, or "other" seems to make no difference for 15 of the 16 resources studied. Table A-4 (page 32) suggests, however, that schools may find companies involved in production to be particularly receptive to requests for contributions of money or raw materials for instructional purposes.
Company Location

An employer's location is seen to make a difference only in willingness to donate money or raw materials to schools for use in instructional programs. Table A-5 (page 33) shows that employers in urban or suburban industrial areas seem to be more disposed to contributions of money or materials than those in business districts. This finding is consistent with that given under Primary Function above, since production-oriented companies tend to be found in industrial areas.

Full-Time Status of Young Employees

An employer's willingness to provide unpaid work experience opportunities to students seems to be related to whether that employer's young workforce is made up primarily of full- or part-time workers. As Table A-6 (page 33) shows, the employers whose young workers are mainly part-time are more likely to provide unpaid student work experience than those whose young workers are full-time employees.

Permanent Status of Young Employees

The permanent or temporary status of a majority of an organization's young employees seems to be a discriminator for employer willingness to share four different resources:

- Providing individual students with non-paid work experience
- Providing shows or demonstrations for students
- Providing space for instructional programs
- Providing tutors/mentors/advisors to students
As shown in Tables A-7 (page 34), A-8 (page 34), A-9 (page 35), and A-10 (page 35), employers whose young work force is made up primarily of temporary workers appear to be more willing than those whose young workers are mostly permanent employees to provide (a) sites for non-paid student work experience, (b) shows or demonstrations for schools, (c) space for instructional programs, and (d) tutors/mentors/advisors for student projects.

Type of Work Done by Young Employees

The type of work done by a majority of an employer's young workers may provide information on the employer's willingness to provide non-paid student work experience and to provide for the assessment of student skills. Table A-11 (page 36) indicates that if most young employees of an organization do manual labor (skilled or unskilled) or clerical work, the employer is less likely to provide a site for student work experience than if young employees hold other types of jobs. On the other hand, Table A-12 (page 36) shows that employers whose young work force is mainly assigned to skilled or unskilled labor are more willing to provide student competency assessment than employers whose young workers hold other jobs.

Answers to Open-Ended Questions

The responses to the two open-ended questions on the questionnaire were collated, summarized and categorized for reporting purposes. The two questions were:
1. What resources, other than those listed on page 2 (of the questionnaire), do you think businesses might be willing to share with local schools?

2. In what ways do you think businesses would like to be involved in planning and implementing career education programs in local school districts?

Question #1

The responses to this question are organized within five categories and are provided below:

1. Sharing experiences
2. Providing services
3. Using associations
4. Offering suggestions
5. Stating problems

It should be noted that 120 of the 178 respondents left question #1 blank. Six respondents said, "I don't know", six said, "none", and one said, "no comment".

Sharing Experiences

- Willing to work with school guidance counselors to help develop programs in the business community where students could spend one day at a business site.
- Willing to have students on site to look at various careers within that particular workplace.
• Willing to share their knowledge of the economic sector with students.

• Willing to share their on-site activities with students.

• Willing to share their experiences in general with students.

Providing Services.

• Willing to support classroom talks by industry people on business, profit and sales technique.

• Willing to work with students on a one-to-one basis either on site or in school.

• Willing to provide a practical application of school-learned or acquired skills.

• Willing to provide "rap" sessions, lectures, and demonstrations.

• Willing to speak to students on a variety of subjects.

• Willing to sponsor work study programs.

• Willing to provide the educational system with teachers from the business community rather than educators that have never been in the world of competitive business.

• Willing to make presentations at career counseling days or on career counseling programs.

• Willing to teach a variety of trades.

• Willing to work with colleges that are presently providing services to high school students.
Using Associations

- Willing to become involved with associations that work with schools to help students, teachers and counselors learn more about industry.

Offering Suggestions

- Willing to provide a management training program for schools.
- Willing to help schools to overcome lack of:
  - basic skills
  - manual skills
  - enthusiasm

Stating Problems

- Foresee union opposition to business giving resources to schools.

Question #2

The survey responses to this question are organized and presented within the same categories as Question #1. Of the 178 respondents, 105 left Question #2 blank.

Sharing Experiences

- To show students and schools the importance of dependability, productivity, and pride in one's work.
- To provide schools with information concerning the number of people and skill requirements needed for future employment.
• To help with curriculum planning.
• To help structure career education courses.
• To help schools with assumptions and perceptions of how business
  operates in theory and how it operates in actual practice.
• To show schools and students what the reality of work is, why work
  is done as it is, and what is necessary to produce an item.
• To communicate to the young the expectations of industry in the
  world of work.

Providing Services
• To help train high school students at school.
• To provide on site apprenticeship and training programs.
• To donate equipment to schools.
• To offer part-time and summer jobs to students.
• To teach courses.
• To provide plant tours.
• To provide on-the-job training programs for students in business
  related activities.
• To teach practical skills of how to interview for a job.
• To provide cooperative extension programs allowing students
  exposure to on the job work experiences.
• To provide schools with speakers.
• To provide training films and audio-visual materials to schools.
• To provide the structure for assembly programs.
• To serve on trade committees.
Using Associations

- To participate on advisory boards integrated with school boards and professional associations.
- To work with manufacturers' associations or National Federation of Independent Businessmen to plan a management training program for schools.

Offering Suggestions

- To inform school districts of business and industry needs.
- To be asked directly by the local school board what it wants and/or expects from employers.
- To help get professional educators out of schools and get persons who understand and have had experience with the economic system involved in teaching.
- To help develop measurable accountabilities for administrators and teachers.
- To restructure public education to function with purpose and profitability.
- To develop industry-oriented career programs in vocational-technical schools.
- To help see students trained and exposed to actual working conditions so a realistic evaluation can be made by students before a definite career commitment is made.
- To initiate a program to have better contact with social studies teachers.
- To help schools contact local businessmen, to determine what programs and what subjects would better help students prepare for the job world.
- To help school districts become more aggressive in approaching business for help.
- To identify deficiencies in the educational product and offer constructive help to counter those deficiencies.
- To find some way to have counselors recommend vocational training programs rather than push for going to college.

Stating Problems

- Too interested in profits to help.
- Willing to help as little as possible.
- The federal minimum wage represses work study programs and hampers business involvement with youth.
- Business is limited in what it can do.
- Business should not meddle in curriculum development.
Analysis of the Answers to Open-Ended Questions

A review of the answers to the open-ended questions suggests that business and professional people see a gap between what schools teach about the world of work and the reality of that world. More importantly, people in the employer community are willing to work with schools to close that gap.

In working with schools, members of the employer community will share not only physical resources, but also their expertise and experience. To share experience and expertise with the schools, employers will open the workplace to students and school staff and will welcome the opportunity to go directly to the schools when invited. In addition to sharing physical resources and expertise, employers are willing to provide a number of specific services to students. These include, but are not limited to, on-the-job training, on-the-job work experience, and part-time and summer employment.

People in business appear to see a value in a concerted effort on their part to work with schools. Respondents have suggested not only cooperation between schools and individual employers but also collaboration between schools and business, trade, or professional associations.

The major implications here are that business and professional people have experiences they can share with schools, a strong knowledge base concerning who they are and what they do, and a wide variety of services and resources that schools can use. The employer community would like to participate rationally and realistically in helping educate young people for the world of work and is willing to work with schools to achieve that partnership. Schools must take advantage of these opportunities.
Conclusions

The major conclusion that must be reached from this study is that the employer community is a vastly underused resource available to schools in the education of young people. While 94% of the respondents to this survey indicated that they believe their organizations would, if asked, be willing to share at least one of the 16 listed resources, only 30% of the respondents said that their organizations were currently involved in helping schools. Not only does the business and professional community possess resources valuable to schools, but community members are also willing to share the resources with schools. This argues strongly for an active school-employer relationship, from which students can benefit through improved career education programs.

The results of the study suggest that an employer's willingness to share specific resources is not independent of the characteristics of the employing organization. Some resources are more readily shared by organizations with one set of characteristics than by another. The study only provides clues as to what those characteristics might be. These clues are meant to be of assistance to schools in enlisting the aid of the employer community.
Appendix 1

Cross-tabulations of Data
Showing Significant Relationships

<table>
<thead>
<tr>
<th>Type of Agency</th>
<th>Willing to provide work experience?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes (Row percent in parentheses)</td>
</tr>
<tr>
<td>Public Agency</td>
<td>2 (20%)</td>
<td>8 (80%)</td>
</tr>
<tr>
<td>Business or Industry</td>
<td>46 (40%)</td>
<td>69 (60%)</td>
</tr>
<tr>
<td>Professionals</td>
<td>4 (44%)</td>
<td>5 (56%)</td>
</tr>
<tr>
<td>Educational, Religious or Social Agency and Other Types of Employers</td>
<td>1 (6%)</td>
<td>15 (94%)</td>
</tr>
<tr>
<td>Total</td>
<td>53 (35%)</td>
<td>97 (65%)</td>
</tr>
</tbody>
</table>

Table A-1
Cross-tabulation: Willingness to provide work experience with type of employer organization ($X^2 = 8.375$, d.f. = 3)

<table>
<thead>
<tr>
<th>Type of Agency</th>
<th>Willing to provide space for instructional programs (Row percent in parentheses)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes (Row percent in parentheses)</td>
</tr>
<tr>
<td>Educational Agency</td>
<td>1 (17%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>Public Agency</td>
<td>5 (45.5%)</td>
<td>6 (54.5%)</td>
</tr>
<tr>
<td>Social Agency</td>
<td>3 (43%)</td>
<td>4 (57%)</td>
</tr>
<tr>
<td>Business or Industry</td>
<td>79 (71%)</td>
<td>33 (29%)</td>
</tr>
<tr>
<td>Professional</td>
<td>5 (62.5%)</td>
<td>3 (37.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>93 (65%)</td>
<td>51 (35%)</td>
</tr>
</tbody>
</table>

Table A-2
Cross-tabulation: Willingness to provide space for instructional programs with type of agency ($X^2 = 10.977$, d.f. = 4)
Willing to provide transportation for students? (Row percent in parentheses)

<table>
<thead>
<tr>
<th>Type of agency</th>
<th>No.</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Agency</td>
<td>3 (50%)</td>
<td>3 (50%)</td>
<td>6</td>
</tr>
<tr>
<td>Business/Industry</td>
<td>97 (89%)</td>
<td>12 (11%)</td>
<td>109</td>
</tr>
<tr>
<td>Professional</td>
<td>5 (71%)</td>
<td>2 (29%)</td>
<td>7</td>
</tr>
<tr>
<td>Educational, Public, Religious and Other Type of Group</td>
<td>16 (89%)</td>
<td>2 (11%)</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>121 (86%)</td>
<td>19 (14%)</td>
<td>140</td>
</tr>
</tbody>
</table>

Table A-3

Cross-tabulation: Willingness to provide student transportation with type of agency
($\chi^2 = 8.834$, d.f. = 3)

Willing to donate money or raw materials? (Row percent in parentheses)

<table>
<thead>
<tr>
<th>Primary function of company</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>5 (28%)</td>
<td>13 (72%)</td>
<td>18</td>
</tr>
<tr>
<td>Sales</td>
<td>34 (79%)</td>
<td>9 (21%)</td>
<td>43</td>
</tr>
<tr>
<td>Service</td>
<td>44 (68%)</td>
<td>21 (32%)</td>
<td>65</td>
</tr>
<tr>
<td>Health Care</td>
<td>7 (78%)</td>
<td>2 (22%)</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>4 (50%)</td>
<td>4 (50%)</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>94 (66%)</td>
<td>49 (34%)</td>
<td>143</td>
</tr>
</tbody>
</table>

Table A-4

Cross-tabulation: Willingness to donate money or raw materials with primary function of organization ($\chi^2 = 16.475$, d.f. = 4)
Table A-5
Cross-tabulation: Willingness to donate money or raw materials with location of company
($\chi^2 = 13.311$, d.f. = 3)

<table>
<thead>
<tr>
<th>Location of company</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban/Suburban Business-District</td>
<td>74 (74%)</td>
<td>26 (26%)</td>
<td>100</td>
</tr>
<tr>
<td>Urban/Suburban Industrial Area</td>
<td>7 (35%)</td>
<td>13 (65%)</td>
<td>20</td>
</tr>
<tr>
<td>Rural Area</td>
<td>10 (59%)</td>
<td>7 (41%)</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>3 (43%)</td>
<td>4 (57%)</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>94 (65%)</td>
<td>50 (35%)</td>
<td>144</td>
</tr>
</tbody>
</table>

Table A-6
Cross-tabulation: Willingness to provide work experience with full-time/part-time status of young employees ($\chi^2 = 10.098$, d.f. = 1)

<table>
<thead>
<tr>
<th>Majority of young workers employed full time?</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>5 (14%)</td>
<td>31 (86%)</td>
<td>36</td>
</tr>
<tr>
<td>Yes</td>
<td>33 (45%)</td>
<td>41 (55%)</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>38 (35%)</td>
<td>72 (65%)</td>
<td>110</td>
</tr>
</tbody>
</table>
### Table A-7

**Cross-tabulation: Willingness to provide work experience with permanent/temporary status of young workers**  
\( \chi^2 = 7.843, \text{d.f.} = 1 \)

<table>
<thead>
<tr>
<th>Majority of young workers permanent employees?</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>(13%)</td>
<td>26 (87%)</td>
<td>30</td>
</tr>
<tr>
<td>Yes</td>
<td>33 (42%)</td>
<td>46 (58%)</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>37 (34%)</td>
<td>72 (66%)</td>
<td>109</td>
</tr>
</tbody>
</table>

### Table A-8

**Cross-tabulation: Willingness to conduct shows or demonstrations with permanent/temporary status of young employees**  
\( \chi^2 = 4.255, \text{d.f.} = 1 \)

<table>
<thead>
<tr>
<th>Majority of young workers permanent employees?</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>7 (26%)</td>
<td>20 (74%)</td>
<td>27</td>
</tr>
<tr>
<td>Yes</td>
<td>38 (49%)</td>
<td>40 (51%)</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>45 (43%)</td>
<td>60 (57%)</td>
<td>105</td>
</tr>
<tr>
<td>Majority of young workers permanent employees?</td>
<td>Willing to provide space for instructional programs (Row percent in parentheses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>13 (45%)</td>
<td>16 (55%)</td>
<td>29</td>
</tr>
<tr>
<td>Yes</td>
<td>53 (66%)</td>
<td>27 (34%)</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>66 (61%)</td>
<td>43 (39%)</td>
<td>109</td>
</tr>
</tbody>
</table>

Table A-9

Cross-tabulation: Willingness to provide space for instructional programs with temporary/permanent status of young employees ($\chi^2 = 4.089$, d.f. = 1)

<table>
<thead>
<tr>
<th>Majority of young workers permanent employees?</th>
<th>Willing to provide tutors/mentors/advisors? (Row percent in parentheses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>4 (14%)</td>
<td>24 (86%)</td>
</tr>
<tr>
<td>Yes</td>
<td>32 (40%)</td>
<td>48 (60%)</td>
</tr>
<tr>
<td>Total</td>
<td>36 (33%)</td>
<td>72 (67%)</td>
</tr>
</tbody>
</table>

Table A-10

Cross-tabulation: Willingness to provide tutors/mentors/advisors with permanent/temporary status of most young workers ($\chi^2 = 6.171$, d.f. = 1)
Type of work performed by majority of young workers

<table>
<thead>
<tr>
<th>Type of work performed by majority of young workers</th>
<th>Willing to provide work experience? (Row percent in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled Manual Labor</td>
<td>No (41%)</td>
</tr>
<tr>
<td>Skilled Manual Labor</td>
<td>No (43%)</td>
</tr>
<tr>
<td>Office/Clerical Work</td>
<td>No (40.5%)</td>
</tr>
<tr>
<td>All Others</td>
<td>No (6%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>No (36%)</td>
</tr>
</tbody>
</table>

Table A-11
Cross-tabulation: Willingness to provide work experience with type of work assigned to young workers ($\chi^2 = 7.870$, d.f. = 3)

Willing to provide student competency assessment? (Row percent in parentheses)

<table>
<thead>
<tr>
<th>Type of work performed by majority of young workers</th>
<th>Willing to provide student competency assessment? (Row percent in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled &amp; unskilled manual labor</td>
<td>No (33%)</td>
</tr>
<tr>
<td>All other jobs</td>
<td>No (59%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>No (47%)</td>
</tr>
</tbody>
</table>

Table A-12
Cross-tabulation: Willingness to provide student competency assessment with type of work performed by majority of young workers ($\chi^2 = 6.739$, d.f. = 1)
Appendix 2

CAREER EDUCATION SURVEY

Research for Better Schools (RBS) is a Philadelphia-based educational research and development laboratory. We are conducting a survey of (a) the kinds of resources that various types of community organizations and businesses might be willing to share with schools, and (b) opinions about the adequacy of the current preparation of young people, ages 16 through 21, for work. RBS will use the information you provide to help schools more effectively prepare young people to enter the world of work.

Please complete this questionnaire and return it in the attached envelope anonymously to RBS. Your cooperation is greatly appreciated.

If your company, firm, or place of employment has more than one location, please consider only your location, branch, or division as you answer these questions.

Please answer the following questions about your company, firm, or place of employment by checking or filling-in the appropriate responses.

How would you describe your company or place of employment?

( ) An educational agency
( ) A public (i.e., governmental) agency
( ) A religious agency
( ) A social agency
( ) A business or industry
( ) Other (please specify: ___________________________)

What is the primary function of your company or firm?

( ) Production
( ) Sales
( ) Service
( ) Health care
( ) Other (please specify: ___________________________)

How would you describe the location of your company or firm?

( ) Downtown business district
( ) Urban industrial area
( ) Suburban business area
( ) Suburban industrial park
( ) Rural area
( ) Other (please describe: ________________________)

Approximately how many people are employed full-time by your company or firm?

Approximately what percentage of the employees of your company or firm are between the ages of 16 and 21?

( ) 0%  ( ) 1% to 10%  ( ) 11% to 20%  ( ) 21% to 30%  ( ) 31% to 40%  ( ) 41% to 50%  ( ) 51% to 60%  ( ) 61% to 70%  ( ) 71% to 80%  ( ) 81% to 90%  ( ) 91% to 99%  ( ) 100%

Are the majority of your 16 to 21-year-old workers employed full-time?

( ) Yes  ( ) No

Are the majority of your 16 to 21-year-old workers permanent (as opposed to temporary) employees?

( ) Yes  ( ) No

How would you describe the type of work done by the majority of your company's 16 to 21-year-old employees?

( ) Unskilled manual labor
( ) Skilled manual labor
( ) Office/clerical work
( ) Sales
( ) Professional trainee
( ) Professional work
( ) Other (please describe: ________________________)

37
Below is a list of possible ways in which a company or firm might share resources to help high schools better educate students for work. Consider each possible resource, then please indicate whether you think your company would share the resource with local schools. To answer, please circle the "X" in the appropriate column.

<table>
<thead>
<tr>
<th>Resource Possibilities</th>
<th>Do you think that your company or firm would, if asked, provide this resource to local schools?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing copies of company-produced literature, posters, displays, etc. to local schools</td>
<td>YES  NO</td>
</tr>
<tr>
<td>Allowing groups of students to tour facilities on field trips</td>
<td>X  X</td>
</tr>
<tr>
<td>Allowing individual students to make scheduled visits to observe individual employees at work</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing schools with space for instructional programs</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing schools with speakers to discuss such things as the careers available within the company</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing schools with training films or other company-produced audio-visual materials</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing individual students with the opportunity to work for a scheduled period of time as non-paid employees in order to provide students with the experience of working</td>
<td>X  X</td>
</tr>
<tr>
<td>Conducting shows, demonstrations, etc.</td>
<td>X  X</td>
</tr>
<tr>
<td>Loaning or donating equipment to schools</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing tutors, advisors, or mentors to students either for a given period of time or for a single independent project</td>
<td>X  X</td>
</tr>
<tr>
<td>Conducting workshops for teachers and counselors on such topics as the job market, labor problems, etc.</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing competency assessment of student skills</td>
<td>X  X</td>
</tr>
<tr>
<td>Donating money or raw materials for educational programs</td>
<td>X  X</td>
</tr>
<tr>
<td>Providing transportation for students</td>
<td>X  X</td>
</tr>
<tr>
<td>Participating in school district activities (such as planning, curriculum development, etc.)</td>
<td>X  X</td>
</tr>
<tr>
<td>Permitting school staff visitation or staff exchange</td>
<td>X  X</td>
</tr>
</tbody>
</table>

Now, please place a check-mark in the brackets to the left of any of the following characteristics that apply to your company, firm, or place of employment:

- Has a formal recruitment program for high school graduates
- Engages in public service activities in surrounding communities
- Has a formal staff training program
- Supports employee education by such things as tuition reimbursement, released-time, or on-site courses
- Hires non-professional skilled employees other than secretaries (e.g., technicians)
- Has an apprenticeship program
- Employs high school students in either temporary or part-time positions
- Assists schools in providing educational experiences for students
- Has a public relations officer
- Has a number of current job openings
- Has a management that encourages employees to become involved in community affairs

What is your title in your company or firm?

Do you participate in hiring, firing, or supervising employees who are between the ages of 16 and 21? ( ) Yes ( ) No
Now, please share your thoughts on the following two questions:

1. What resources, other than those listed on page 2, do you think businesses might be willing to share with local schools?

2. In what ways do you think businesses would like to be involved in planning and implementing career education programs in local school districts?