A representative group of 14 recent surveys of employers' expressed needs was examined to consider the evidence they presented about the demands for worker education. The strongest trend in the results of these studies was the importance that employers placed on employee attitudes. A second theme was the emphasis on basic skills as opposed to job-specific skills. Employers were particularly interested in communication and problem-solving skills.

Two general weaknesses were apparent in the studies that should be addressed in further studies of employer needs: (1) the studies lacked a clear conceptual basis for asking about employee characteristics; and (2) sampling strategies were typically developed with more attention to the convenience of the investigation and less to the representativeness of individual respondents. One study detailed four perspectives that may explain the hiring decisions of employers: technical, control, institutional, and political. (A list of 24 references is included.) (YLB)
Do We Know What Employers Want in Entry-Level Workers?

by Gary Natriello

INTRODUCTION
In the 1980s the needs of employers for qualified entry-level workers have become a critical issue in the United States for business, political leaders, and educators, as the public grows more aware of our economic opportunities as a nation depend upon a quality workforce. Increasing interest in providing educational services useful to firms in the American and world economies has led to surveys of the expressed needs of employers for certain qualities in workers, particularly at the entry level. Although the concept of employer surveys is familiar, in recent years a much wider audience than usual has been considering such surveys. The research on which this summary is based examines a representative group of fourteen recent surveys of employers' expressed needs and considers the evidence they present about the demands for worker education (Natriello, 1989).

EMPLOYER NEEDS, GOVERNMENT RESPONSE
The most direct and concrete expressions of the needs and educated workers have come from employers themselves who are in search of qualified individuals to fill entry-level positions. The demands of these beginner positions have the most direct implications for school because candidate qualifications are, obviously, more related to school performance than to previous work experience. Business leaders have long voiced their concerns about the adequacy of the preparation for work available to students in U.S. schools (Kantor, 1986), and, recently, political leaders and educators have become particularly sensitive to the needs of employers of a skilled workforce.

The research
Many studies of employer needs are never circulate widely or published. However, in recent years many such studies have received attention because of the growing emphasis on the role of education in economic development. Although it is not possible to review all of the studies of this type, examining a representative group of fourteen recent studies of employers' expressed needs provides sufficient evidence for considering the quality of their evidence.

Data Collection Methods
Studies of employer needs have been conducted in a variety of locations with particular purposes in mind. The basic format is generally the same: employers are asked to express their needs for personnel. The studies considered include data collected from surveys (e.g., Baxter & Young, 1982; Wilms, 1983), interviews (Chatham, 1982; Gustafson & Groves, 1977), public hearings (Illinois State Council, 1983), and hiring simulations (Gordon, 1985). Should such a variety of collection methods reveal similar patterns of results, we might have more confidence in them.

Respondents. Some of the studies identify individuals in particular positions to respond to the interview or survey questions, such as personnel administrators (Junge, et al., 1983), personnel officers and first-line supervisors (Chatham, 1982). Others simply note that respondents were "employers" (e.g., Baxter & Young, 1982). Obviously, hirers in different positions will have different degrees of exposure to entry-level workers and their performance. We might place more confidence in findings from studies involving individuals with access to the performance of entry-level workers and, less confidence in findings from studies involving individuals who may simply be expressing a general opinion.

Questions Asked. The studies also used several different formats to solicit information. Some asked employers to rate the importance of certain characteristics for entry-level employees (e.g., Wilms, 1983), others asked employers to rate the importance of characteristics and to identify deficits in characteristics among their young workers (Committee for Economic Development, 1984; Junge, et al., 1983), and still other studies employ other methods. Baxter and Young (1982) asked employers to report on their current evaluation criteria. Brown (1976) asked respondents to identify the reasons for rejecting applicants and for terminating employees. These different questioning techniques may result in different patterns of responses; for example, the reasons for terminating employees may not be the same as the general characteristics desired in new employees.

Most of the studies asked respondents to comment on entry-level positions in general (e.g., Hulsart & Bauman, 1983), and few provided a more concrete point of reference. Crain (1984) asked respondents to answer questions about recruitment and hiring for a specific job held by a subject in the 1972 National Longitudinal Survey (NLS). Gordon (1985) involved respondents in simulated hiring decisions for a particular position, and Wilms (1983) asked respondents to identify a job in their company and respond in terms of that job. Responses connected to particular jobs provide much more specific information on the needs of employers and are more apt to reflect reality than philosophy.

Some of the studies asked respondents to comment on the characteristics required for entry-level positions (e.g., Wilms, 1983), while others asked respondents to focus on the basic skill requirements for such positions (e.g., Junge, et al., 1983). Studies limited to basic skills data cannot provide information on the relative importance of basic skills and other employee characteristics. In view of the prominence of non-cognitive traits in studies inquiring about a broad range of characteristics, studies focusing solely on basic skills are likely to overstate the relative importance of such skills.

Some studies focused on the educational experiences of entry-level workers, particularly those with vocational education (e.g., Owens, 1983). It may be important to distinguish between responses regarding vocational education and those pertaining to schooling in general.
Since the aims of vocational education, and the population of students and employers served, are different from those for schooling in general, patterns of employee responses may be influenced by the specific school experiences they are asked to consider. Moreover, asking employers to comment on entry-level employees in terms of the workers' vocational education or general schooling may lead employers to think of deficiencies in the educational process when considering problems with entry-level workers. Studies that do not state or imply a connection between education of any kind and the performance of entry-level employees may find that employers attribute problems with entry-level employees to institutions other than the school, such as the family or the community.

STUDY RESULTS

Despite the limitations described above, it is still possible to assess the overall trends in the studies.

Attitudes. The strongest trend in the results of these studies is the importance that employers place on employee attitudes. The only studies in which attitudes were not cited focused entirely on basic skills.

Positive traits included: dependability, respectfulness, productivity, trustworthiness, pride in work, flexibility, appearance, cooperativeness, self-confidence, punctuality, desire to learn, interest in serving clients, and desire to advance.

Negative traits, listed in contexts in which employees were terminated or counseled for improvement, were low interest, job hopping, absenteeism, and lack of career goals.

Basic Skills. A second theme in these studies is the emphasis on basic skills as opposed to job specific skills.

Employers were particularly interested in communication and problem-solving skills. Terms occurring repeatedly in these interviews and questionnaires are: thinking, linguistics skills, computational skills, oral and written communication, money handling, and good work habits.

Technical skills, psychomotor skills, and competence at handling office technology were also mentioned, although not with the frequency of basic skills. Technical changes were often described as having little impact on skill requirements for entry-level jobs.

Skill deficits specifically listed were inability to write standard English sentences, difficulty in generalizing skills for which the workers were trained, and lack of job skills and knowledge.

Finally, employers also placed emphasis on an understanding of the work or business environment. They particularly wanted workers with realistic expectations about job content, wages, and skills, and with an understanding of the business environment. A negative observation which reinforces the same point came from a respondent who commented that many young people come from homes where no one got up and went to work in the morning.

SURVEY DEFICIENCIES

The results, cited above, of these studies of employer needs for entry-level workers are rather clear and consistent. However, it is important to consider both the technical quality of these studies and the possible interpretations of their results.

The quality of the studies varies dramatically. Some are directed at carefully drawn, representative samples of respondents, identified by position and asked to comment on the characteristics desired of employees for specific positions (e.g., Crain, 1984). Others use local convenience samples of non-specific respondents commenting on the needs for employees in general (e.g., Gustafson & Groves, 1977). In fairness to the authors of these studies, the design problems tend to reflect the original impetus for the studies and the resource limitations under which they were administered. For our present purposes, they all suffer from certain deficiencies.

Two general weaknesses apparent in the studies should be addressed in further studies of employer needs.

First, these studies lack a clear conceptual basis for asking about employee characteristics. There appear to be no developed rationales for considering the characteristics included on the lists given to employers for comments. While the inclusion of basic skills alone, or basic skills plus others, is the more notable arbitrary decision about which traits to include, none of the studies employs a comprehensive set of traits tied to any developed conceptual framework. Conclusions phrased in terms of what employers find most problematic in new workers may have as much to do with the traits they were asked to comment on as with their true needs.

A second weakness that must be addressed in studies of employer needs is the sampling process used. Sampling strategies have typically been developed with more attention to the convenience of the investigator and less to the representativeness of individual respondents. Key sampling decisions must consider the kinds of positions held by respondents, the economic sectors and industries in which the respondents are based, the regions in which they are located, and the positions and tasks upon which respondents are being asked to comment. These sampling decisions must be made explicit if investigators wish to develop a sampling strategy that can be used to link the results of their studies to the appropriate domain of applicability.

Addressing the problem of a conceptual framework in studies of employer needs will require development of a classification of work-related characteristics that might be associated with education. Building such classifications into studies of employer needs would make the results more useful to employers and educators alike. Until such a consistent frame of reference is incorporated into employer surveys, the results obtained from them may be partial and misleading.

ACTUAL HIRING CRITERIA

The interpretations derived from studies of employer needs must be approached with caution. In most cases, the authors of these studies treat their results as expressions of the needs of employers based on the technical nature of the jobs for which they seek employees.
Following this line of reasoning, we would assume that a change in the technical nature of certain jobs might lead to a corresponding change in the nature of the desired employee characteristics. The surveys of employer needs would then lead to changes in educational policies and practices designed to produce students/ workers to fill those needs.

But, as Cohen and Pfeffer (1986) observe, hiring criteria consists of more than just technical requirements. They detail four perspectives that might be employed to explain the hiring decisions of employers.

A technical perspective suggests that hiring decisions reflect the intellectual and technical complexity of the job. However, analyses by Collins (1979), Berg (1970), and Peaslee (1969) suggest that the connections between the skill requirements of work and educational requirements are not strong.

A control perspective suggests that hiring standards are used to select employees on the basis of their general reliability and dependability, and on the basis of norms and values desired by the organization. Analyses by Bowles and Gintis (1976), Edwards (1976), and Collins (1979) support this perspective.

An institutional perspective argues that hiring standards are simply an accepted part of standard personnel practices. Such practices are seen as ways to communicate to the external world that the organization is operating in socially acceptable ways (Meyer & Rowan, 1977; Meyer, 1980).

A political perspective holds that hiring standards are the result of the interplay of organizational actors and their relative power and interests in certain practices. For example, the personnel department of an organization would have an interest in the establishment of certain hiring practices (Baron, Dobin & Jennings, 1986).

Each of these perspectives might be helpful in explaining and interpreting the patterns of results in the studies of employer needs. If technical factors were the only influence upon employer needs, we might expect employers to ask for individuals trained in specific technical skills for specific jobs. But the control perspective may explain the emphasis on proper employee attitudes that in most cases overshadows concern with skills. The political perspective might explain the emphasis on general skills as opposed to specific skills if personnel departments removed from the direct supervision of technical work have considerable influence in establishing hiring standards. Finally, the institutional perspective might explain the consistency in the patterns of results from various studies conducted in different locations and industries if employers are all subject to the same national norms for hiring practices.

Thus, studies of the expressed needs of employers for entry-level workers may tell us less about the connection between certain skills and attitudes and employee productivity than they do about the factors leading employers to come to express such needs.

CONCLUSIONS

Employers’ human capital needs, whether reflecting technical, control, institutional or political forces, are quite real and have implications for hiring decisions. However, it is not clear that these needs have a strong objective connection to productivity. The relationship between employers’ statements of their needs and productivity depends on the extent to which technical, control, institutional, or political forces influence their responses to questions about their human capital requirements. Not all of these forces are strictly related to the qualifications that people need to be more productive on the job. To the extent that these other influences underlie the expression of employer needs, meeting them will not necessarily have the effect on productivity that the public discussion of this issue would imply.

In other words, we need to be cautious in using the results of these surveys to direct school reform efforts, if our objective is to improve our economic growth. This review suggests that many questions have to be answered before we can take such action confidently. At the present time, surveys of employers’ human capital needs, while effective at capturing headlines in the daily newspapers, are flawed for providing reliable information about what employers really need in entry-level workers to improve the firms’ productivity.

ENDNOTES

1. The studies included here were selected from the ERIC data base. As a result, each of these studies has been prepared either as a journal article or as a research report or paper for wider distribution.

2. While it seems advisable at this point in the development of studies of employer needs to specify the positions respondents are being asked to comment upon, Cohen and Pfeffer (1986) have found that hiring standards across positions within an organization tend to be correlated.

3. Typologies such as those suggested by Dunnette (1983) are a step in the right direction.

4. Wilensky and Laurence (1979) note that employers increasingly hire not for entry level jobs, but for promotion paths.

5. Cohen and Pfeffer (1986) note that education and training requirements are set by more than just the technical requirements of specific jobs; they are also affected by the general technical nature of the work being done in an organization and by other political factors such as the presence of a personnel department.
REFERENCES


