

BASIC SKILLS DEFICIENCIES AT WORK: PERCEPTIONS OF SMALL AND LARGE EMPLOYERS*

Geralyn McClure Franklin
Stephen F. Austin State University

ABSTRACT

American business is faced with major problems due to the decline in basic work skills, yet many employers continue to ignore the threat of a proficiency gap in the workforce. This paper addresses the importance of basic work skills to business, especially small business. It also presents the results of a study comparing how small and large employers are screening for and dealing with workers who lack basic skills.

INTRODUCTION

Basic work skills have been the subject of much attention in the United States during the last few years. "Eye-opening" publications like Jonathan Kozol's *Illiterate America* (1985), the Hudson Institute's *Workforce 2000* (1987), the United States Department of Labor's and the American Society for Training and Development's *Workplace Basics: Skills Employers Want* (Carnevale, Gainer, & Meltzer, 1989), and the U.S. Bureau of Labor's statistical reports as well as studies from various private sector organizations have focused attention on the issue.

American employees are fortunate that a majority of workers are literate (i.e., they can read, write, and compute at acceptable skill levels). However, there are millions who cannot use these skills effectively (i.e., they cannot read, write, or think well enough to meet challenging job requirements). According to the Business Council for Effective Literacy (BCEL) (1987), 23 million or 20% of American workers read at no better than an eighth-grade level, yet, most of the reading material in the workplace is geared toward at least a ninth-grade comprehension level.

The United States Department of Labor (Hudson Institute, 1987) and BCEL (Zemke, 1989) estimate that 25 million to 27 million American adults (over the age of 17) are unable to read, write, perform simple calculations, or solve problems at a level adequate to enable them to cope with simple and fundamental tasks. In addition to these functional illiterates, an estimated 45 million to 47 million individuals are borderline or "marginal" illiterates (i.e., able to function but not proficiently). Their reading and writing skills need upgrading in order to improve their job performance and everyday functioning.

**Runner up for Distinguished Paper Award, presented at the 1993 National SBIDA Conference in San Diego. It was not reviewed by the JSBS Editorial Advisory Board.*

However, today's workplace demands more than competency in the three R's. Employers want a new kind of employee with a broad set of skills or at least a strong foundation in the basics in order to facilitate learning on the job (Carnevale, Gainer, & Meltzer, 1990). Exhibit 1 illustrates the skills today's employers need. Deficiencies in many of these basic skills are barriers to entry-level employees, experienced employees, and dislocated workers attempting to adapt to economic and technological change within organizations (Carnevale, Gainer, & Meltzer, 1990).

Exhibit 1

The Seven Skills Groups

LEARNING TO LEARN

3 R'S (READING, WRITING, COMPUTATION)

COMMUNICATION: LISTENING AND ORAL COMMUNICATION

CREATIVE THINKING/PROBLEM SOLVING

SELF-ESTEEM/GOAL SETTING—MOTIVATION/

EMPLOYABILITY—CAREER DEVELOPMENT

INTERPERSONAL/NEGOTIATION/TEAMWORK

ORGANIZATIONAL EFFECTIVENESS/LEADERSHIP

Note. From *Workplace Basics: The Essential Skills Employers Want* (p. 2) by A. P. Carnevale, L. J. Gainer, and A. S. Meltzer, San Francisco, CA: Jossey-Bass, 1990.

CONCERNS FOR BUSINESS

Business needs to be aware that deficient workplace skills contribute to low productivity, workplace accidents, poor product quality, costly errors, and lost management and supervisory time (BCEL, 1987; Gorman, Cannell, & Hallanan, 1988). It is estimated that illiteracy costs American businesses \$20 billion every year due to absenteeism, workplace accidents, lost profits, lowered productivity, reduced competitiveness, increased remedial training, lost customers, and reduced customer spending (Pilenzo, 1990). Additionally, the Business Council for Effective Literacy believes adult illiteracy costs American business and taxpayers \$225 billion annually in lost wages, profits, unrealized tax revenues, prisons, crime, and related social ills (Goddard, 1987; Pack, 1990).

For the first time in American history, employers face a proficiency gap in the workforce so great that it threatens the well-being of organizations both large and small. The smaller the business, the more important basic skills proficiency becomes.

Small businesses are the primary job generators in the United States economy, having created two-thirds of the new jobs between 1980 and 1986 (Szabo, 1990). Additionally, small business and self-employed entrepreneurs provide 56% of the nation's private employment and over 47% of the total output (Hudson Institute, 1987). Small businesses also hire the majority of young, older, minority, and female employees, groups that will continue to expand in the

future. If present trends prevail, disproportionate numbers of these workers will lack the necessary skills, and this will have a disproportionate impact on small businesses.

It appears that there will be intense competition for experienced and technically competent workers. Larger firms, typically with more financial resources, will be in a position to outbid smaller firms. Offering relatively lower salaries and less extensive benefits coverage than their larger counterparts, small businesses will be scrambling to compete in a tight market where qualified labor is at a premium (Berney, 1988).

Workers hired by small firms typically have less formal education than those working for larger companies. According to Jules H. Lichtenstein, chief of the applied policy branch of the United States Small Business Administration, small firms are more likely than large firms to hire and to train functional illiterates (Szabo, 1990). One study commissioned by the Department of Labor found that in firms with fewer than 500 employees, almost 4% of workers of the ages 20 to 25 had no more than an eighth-grade education. In large firms, however, employees in the same bracket and with that level of education accounted for under one percent of the workforce (Szabo, 1990).

When skills deficiencies affect the bottom line, employers respond with training or replacement. However, replacement is becoming less practical since the supply of workers is shrinking. Employers are forced to utilize training to make employees more productive instead of simply hiring productive employees. As a result there is increasing interest in providing training in basic work skills.

JUSTIFICATION FOR RESEARCH

A study of efforts in basic skills training by small business is needed, as evidenced by a review of the literature. To date, research has focused on the changing nature of the workforce and projecting the future impact of illiteracy on the workplace (Kozol, 1985; Hudson Institute, 1987; Beilinson, 1990; Askov, 1991; Sherman, 1991; Zalman, 1991). A significant amount of attention has been given to basic skills education programs in large businesses (employing more than 500 persons) (Ross, 1986; Fields, Hull, & Sechler, 1987; Berney, 1988; Carnevale, Gainer, & Meltzer, 1989; Goddard, 1989; Zemke, 1989; Lee, 1990; May, 1990; Szabo, 1990; Lamoglia, 1991; Petrini, 1991; Cunniff, 1992; Washburn & Franklin, 1992). Relatively little attention other than one major research project (cited by Carlson, 1992) and a few individual case studies (Saddler, 1988; Szabo, 1990; Petrini, 1991; Sixel, 1991; Carlson, 1992) has been given to small businesses.

The research in the area of basic skills and the effect on the workplace has been entirely descriptive. However, it has failed to address an important issue: does the size of the organization influence perceptions of applicant/employee basic skills deficiencies, employment procedures, or training programs? This study was designed to address these issues.

RESEARCH METHODOLOGY

The sample for the study was drawn from Texas businesses listed in Million Dollar Directory. To operationalize large versus small businesses, a cutoff point of 500 employees, as identified by the United States Small Business Administration (SBA), was utilized. The

SBA defines a small business as one with fewer than 500 employees or fewer than 100 employees, depending on its purpose (SBA, 1989). Since a diversity of industries was represented in the sample, it was determined that the cutoff of 500 employees was more appropriate.

The data were collected through the use of a mail questionnaire. A pilot study was conducted in a rural Texas county. Based on the responses and review of other research efforts, the final questionnaire was developed.

The questionnaire was divided into four sections (Sections A, B, C, and D). Section A contained nine questions pertaining to basic employment procedures. Section B consisted of seven questions related to training efforts. Section C was composed of five-point, Likert-scaled statements. Finally, Section D contained organizational and individual demographic questions.

Questionnaires were mailed to the personnel/human resource director in 900 businesses (450 small and 450 large). The overall response rate from the mailing was 40.67% (366 responses). Of these, 228 (62.3%) represented small businesses (fewer than 500 employees), while 138 (37.7%) represented large businesses (500 or more employees). Within the group of small businesses, 100 (27.3% of total respondents) have fewer than 100 employees, 87 (23.8% of total respondents) have 100 to 299 employees, and 41 (11.2% of total respondents) have 300 to 499 employees. Of the large businesses responding, 54 (14.8% of total respondents) have between 500 and 999 employees, 30 (8.2% of total respondents) have from 1,000 to 1,499 employees, and 54 (14.8% of total respondents) have more than 1500 employees. The responding companies represent a diversity of types of businesses (see Table 1).

Table 1*Respondents by Type of Business*

Type	Small businesses n = 228		Large businesses n = 138	
	Number	%	Number	%
Retail/wholesale trade	63	27.6	31	22.5
Manufacturing	55	24.1	30	21.7
Other services	37	16.2	19	13.8
Agriculture/fishing/ natural resources	32	14.0	14	10.1
Finance/insurance/real estate	27	11.8	19	13.8
Utilities/transportation/ communication	7	3.1	17	12.3
Computer/data processing	2	.9	3	2.2
Health care	2	.9	2	1.4
Government	3	1.3	0	0.0
Mining	0	0.0	3	2.2
	228	99.9	138	100.0

RESEARCH FINDINGS

The following findings describe perceptions of small and large employers to basic skills deficiency. Specific emphasis is given to employment procedures (particularly screening efforts) and training programs.

Applicant/Employee Basic Skills Deficiencies

Small business respondents (110 or 48.2%) indicated that "verbal communications skills" were the number one deficiency of job applicants. On the other hand, large businesses (79 or 57.2%) noted that "writing skills" were most often lacking in applicants. Significant differences existed between the responses of small and large businesses in regard to writing, job specific, and reading skills of applicants (see Table 2).

Table 2

Basic Skills Job Applicants and Current Employees Lack

Skills	Small businesses n = 228				Large businesses n = 138			
	Job Applicants		Current employees		Job Applicants		Current employees	
	No.	%	No.	%	No.	%	No.	%
Verbal communication	110	48.2	85	37.3	63	45.6	49	35.5
Computer	106	46.5	93	40.8	69	50.0	51	37.0
Writing	97	42.5*	85	37.3	79	57.2*	65	47.1
Job specifics	86	37.7*	51	22.4	70	50.7*	35	25.4
Math	85	37.3	58	25.4	59	42.8	31	22.5
Word processing	75	32.9	58	25.4	50	36.2	32	23.2
Reading	65	28.5*	43	18.9	56	40.6*	31	22.5
None	9	3.9	22	9.6	3	2.2	16	11.6
Others:								
Interpersonal	0	0.0*	2	0.9	0	0.0	2	1.4
Worth Ethic	1	0.4	0	0.0	1	0.7	1	0.7
Cross training	0	0.0	1	0.4	0	0.0	1	0.7
Safety skills	1	0.4*	0	0.0	1	0.7	0	0.0
Do not know	3	1.3	0	0.0	0	0.0	0	0.0

*Chi-square $p < .05$

Although no significant differences appeared relative to current employee deficiencies, small employers (93 or 40.8%) reported "computer skills" as most lacking followed by "verbal communication skills" and "writing skills" (85 or 37.3% each). Again, large employers (65 or 47.1%) noted "writing skills" as most lacking, followed by "computer skills" (51 or 37.0 percent) and "verbal communication skills" (49 or 35.5%).

Screening Mechanisms

Employers have long seen basic skills competency as a prerequisite for employment. Therefore, employers have focused on measuring the skills of prospective employees and screening out those unsuitable for employment.

Application forms. Two hundred twenty (96.5%) of the small businesses reported using an application form for screening purposes; eight (3.5%) responded negatively, yet only 103 (46.8%) indicated they required applicants to complete the forms in their facility. On the other side, 137 (99.3%) of the large businesses responding use an application form; one respondent did not answer the question. Seventy-four (53.6%) require application forms to be completed in the facility. These findings indicate that large businesses are more likely to use an application form than small businesses (Chi-square 6.56, p value $< .05$).

Educational requirements. The "ability to read and write" is the number one requirement of small (121 or 53.1%) and large (69 or 50.0%) employers. Table 3 summarizes the basic or minimal education requirements of respondents.

Table 3*Basic or Minimal Education Requirements*

Requirement	Small businesses n = 228		Large businesses n = 138	
	Number	%	Number	%
Ability to read and write	121	53.1	69	50.0
High School diploma/GED	106	46.5	63	45.7
Some college	16	7.0	8	5.8
College degree	11	4.8	10	7.2
Others:				
Depends upon position	18	7.9	18	13.0
Ability to perform assigned tasks	1	0.4	2	1.4
Common sense	1	0.4	1	0.7
Require no reading	1	0.4	1	0.7
Sixth-grade education	1	0.4	0	0.0
Abstract reasoning	0	0.0	1	0.7
No requirements	5	2.2	2	1.4

Respondents were also asked how they verify educational requirements (see Table 4). Both small (134 or 58.8%) and large (69 or 50.0%) businesses reported that verification was most often done "during the interview." Still, 71 small employers (31.1%) and 48 large employers (34.8%) stated they "do not verify" educational requirements. Significantly, large businesses are more likely to require a copy of a diploma for verification of education requirements than their smaller counterparts (Chi-Square 6.55, p value $< .05$).

Table 4*Verification Procedures for Educational Requirements*

Procedure	Small businesses n = 228		Large businesses n = 138	
	Number	%	Number	%
Verify during interview	134	58.8	69	50.0
Require testing	37	16.2	27	19.6
Require copy of diploma	18	7.9	20	14.5
Do not verify	71	31.1	48	34.8
No answer	4	1.8	6	4.3

*Chi-square $p < .05$

Testing procedures. What type of pre-employment testing is most often utilized? Significantly, drug/alcohol testing is the most utilized pre-employment testing procedure (see Table 5). Then too, large businesses are more likely than small ones to engage in drug/alcohol testing (Chi-square 8.69, p value $< .05$).

Table 5*Testing Procedures*

Applicants tested for	Small businesses n = 228		Large businesses n = 138	
	Number	%	Number	%
Drugs/Alcohol	110	48.2	88	63.8
Reading skills	49	21.5	34	24.6
Math skills	41	18.0	34	24.6
Writing skills	35	15.4	18	13.0

*Chi-square $p < .05$

Positions Available for Individuals with Basic Skills Deficiencies

Ninety-six (42.1%) small businesses and 49 (35.5%) large businesses responded there are "no positions available in the organization for individuals who lack basic skills." Thus, 128 (56.1%) small employers (four did not respond) and 87 (63.0%) large employers (two did not answer the question) indicated that their organizations might have positions available for individuals deficient in basic skills.

Why would you employ persons who lack basic skills? Interestingly, 91 (39.9%) small employers and 42 (30.4%) large employers said they "would not employ persons who lack basic skills" (see Table 6). Therefore, it appears that 128 (56.1%) small employers (9 did not answer the question) and 91 (65.9%) large employers (5 did not respond) might employ persons who lack basic skills. Of these, both small (91 or 39.9%) and large (69 or 50.0%) businesses cited "skills not needed for job" as the primary reason for employing those who lack basic skills.

Table 6*Reasons for Employing Individuals Who Lack Basic Skills*

Reason	Small businesses n = 228		Large businesses n = 138	
	Number	%	Number	%
Skills not needed for job	91	39.9	69	50.0
To give individual an opportunity	58	25.4	30	21.7
Skilled workers not available	9	3.9	42	30.4
Would not employ persons who lack basic skills	91	39.9	42	30.4
Others:				
Can train	4	1.8	4	2.9
To cut costs	1	0.4	0	0.0

Training Programs

Eighty-six small businesses (37.7%) offer basic skills training. On the other side, 67 (48.6%) of the large businesses reported they offer basic skills training. The resulting Chi-square statistic was 4.15 (p value < .05). Thus, large businesses appear to offer basic skills training more than small businesses (see Table 7).

Table 7*Types of Basic Skills Training Offered*

Type	Small businesses n = 86		Large businesses n = 67	
	Number	%	Number	%
Job specific skills	59	68.6	44	65.7
Computer skills	49	60.0	49	73.1*
Word processing skills	39	45.3	46	8.7 +
Writing skills	13	15.1	22	32.8 +
Verbal communication skills	13	15.1	20	29.9*
Math skills	9	10.5	9	13.4
Reading skills	8	9.3	9	13.4
English as a second language skills	7	8.1	13	19.4*

* Chi-square $p < .05$

+ Chi-square $p < .01$

The methods used for basic skills training were then addressed (refer to Table 8). Specifically, respondents were asked what sources are used to develop and implement basic skills training programs.

Table 8*Methods Utilized for Basic Skills Training*

Method	Small businesses n = 86 n = 67		Large businesses	
	Number	%	Number	%
In-house staff	67	77.9	62	92.5+
Outside consultants	24	27.9	30	44.8*
Community colleges/universities	33	38.4	30	44.8
Partnerships	8	9.3	18	26.9+
Community education	8	9.3	9	13.4
Trade schools	18	20.9	12	17.9
Volunteer tutors	3	3.5	3	4.5
Computers/videos	32	37.2	26	38.8
Traditional classroom	14	16.3	18	26.9

* Chi-square $p < .05$

+ Chi-square $p < .01$

Monetary Support for Training

One hundred eleven (48.7%) small employers and 93 (67.4%) large employers offer tuition assistance for training purposes (Chi-square 12.86, p value $< .01$). Thus, large employers are more likely to offer tuition assistance for training purposes. Of the 111 small businesses offering tuition assistance, 48 (43.2%) cover remedial or basic skills training. On the other side, 51 (54.8%) of the 93 large employers cover remedial or basic skills training.

Fifty-four (23.7%) small businesses and 51 (37.0%) large businesses provide overtime pay or other monetary support (like regular pay) for training purposes (Chi-square 8.36, p value $.05$). Thus, large businesses are more likely than small businesses to provide monetary support (i.e., overtime or regular pay) for training purposes. Seventeen (31.5%) of the 54 small employers and 25 (49.0%) of the 51 large employers provide such support for remedial or basic skills training.

Finally, 56 (24.6%) of the small employers reported they work with public programs such as publicly subsidized, on-the-job training, welfare department sponsored classroom training, the Job Training Partnership Act, and so forth. At the same time 64 (46.4%) of the large businesses indicated involvement with such programs. The Chi-square statistic was 18.95 (p value $< .01$). Ultimately, large employers are more likely to work with public programs than small employers.

ANALYSIS OF SIGNIFICANT RESEARCH FINDINGS

Basic work skills deficiencies are a growing problem for all businesses, particularly smaller organizations. Small employers perceived verbal communication skills to be most lacking in job applicants, while large employers perceived writing skills to be the primary deficiency.

With regard to current employees, small employers reported computer skills most lacking. Large employers, on the other hand, cited writing skills.

Screening procedures that enable unsuitable applicants to be identified should be of benefit to small employers, yet large employers are more likely to effectively screen prospective employees than small employers (i.e., use of an application form, Chi-square 6.56, p value $< .05$). Also, large employers require a copy of the diploma (or certificate) for verification of education requirements more so than small employers (Chi-square 6.55, p value $< .05$).

Effective screening of prospective employees will more than likely not be enough if demographic predictions prevail. Small employers will no doubt have to offer basic skills training opportunities to compete with larger firms and remain competitive in a global environment. However, this research effort discovered that larger employers are more likely to offer basic skills training programs than smaller employers (Chi-square 4.15, p value $< .05$). Larger firms are also more likely to provide tuition assistance (Chi-square 12.86, p value $< .01$) and monetary support (Chi-square 8.36, p value $< .05$) for training purposes than smaller firms. Then, too, larger organizations take advantage of publicly subsidized programs more so than smaller organizations (Chi-square 18.95, p value $< .01$).

CONCLUDING REMARKS

While it does require extra effort for businesses, especially smaller firms, to set up basic skills training programs, the positive results are numerous. According to Jerome Carlson, co-founder and co-owner of United Mailing, Incorporated, an organization in Chanhassen, Minnesota that has been participating in a workplace literacy program, "Small firms become known in their communities as employers who not only represent potential employment but also who offer training opportunities. The result is that more employees want to work for you" (Szabo, 1990).

Forrest Chisman, project director of the Southport Institute for Policy Analysis, states in a 1989 study, "There is no way in which the United States can maintain the health of its economy, fend off the competition, improve productivity, and in general maintain its standard of living unless we substantially increase the skills of the workforce" (Reiss, 1990). Improving basic skills is a challenge to the school system, government, and business to ensure that America's businesses continue to be a source of competitive strength.

How can smaller employers assist in improving basic skills? First, smaller firms can increase attention to the importance of a literate small business workforce in a competitive economy. Second, smaller employers can improve the understanding of basic skills concerns by becoming more involved in local school systems. This can include encouraging business-education basic skills partnerships. Third, smaller businesses should identify existing local and state adult literacy resources they can utilize. Also, successful basic skills programs in other smaller organizations should be identified. Ultimately small employers must work to improve public education to prevent future adult illiteracy.

REFERENCES

- Askov, E. N. (1991, Summer). Literacy: Impact on the workplace, family, and school. *Education* 111(4), 542- 547.
- Beilinson, J. (1990, October). Workforce 2000: Already here?. *Personnel* 67(10), 3-4.
- Berney, K. (1988, October). Can your workers read?. *Nation's Business* 76(10), 26-32.
- Business Council for Effective Literacy (BCEL) (1987). *Business council for effective literacy*, (brochure), New York, NY: BCEL.
- Carlson, E. (1992, June 26). Helping educate small firms' workers. *The Wall Street Journal*, B1.
- Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1989). *Workplace basics: The skills employers want*. Washington, D.C.: United States Department of Labor and the American Society for Training and Development.
- Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1990). *Workplace basics: The essential skills employers want*. San Francisco, CA: Jossey-Bass.
- Cunniff, J. (1992, January 21). Poor skills at heart of jobs crisis. *Houston Post*, A1, A6.
- Fields, E. L., Hull, W. L., & Sechler, J. (1987). *Adult literacy: Industry-based training programs*. Columbus, OH: The National Center for Research in Vocational Education.
- Goddard, R. W. (1987, December). The crisis in workplace literacy. *Personnel Journal* 66(12), 73-81.
- Goddard, R. W. (1989, March/April). Combatting illiteracy in the workplace. *Management World* 18(2), 8-11.
- Gorman, C., Cannell, M., & Hallanan, D. B. (1988, December 19). The literacy gap. *Time* 136, pp. 56-57.
- Hudson Institute (1987). *Workforce 2000: Work and workers for the 21st century*. Indianapolis, IN: Hudson Institute.
- Kozol, J. (1985). *Illiterate America*. Garden City, NY: Anchor Press.
- Lamoglia, J. (1991, October). Study: Training doesn't match skills need. *SHRM News* 10(10), 3.
- Lee, J. (1990, December). Amidst the presses. *American Printer* 208(3), 54-56.
- May, P. L. (1990, October). Back to basics. *Personnel Journal* 69(10), 63-69.
- Pack, W. (1990, March 5). The state's education challenge. *The Houston Post*, A-1, A-10.
- Petrini, C. M. (1991, February). Literacy programs make the news. *Training & Development Journal* 45(2), 30-36.
- Pilenz, R. C. (1990, February). Managing for survival in the 1990s. *Modern Office Technology* 35(2), 66.
- Reiss, A. H. (1990, April). Nonprofits tackle a nationwide crisis. *Management Review* 79(4), 30-33.
- Ross, I. (1986, September 29). Corporations take aim at illiteracy. *Fortune* 120, pp. 48-54.
- Saddler, J. (1988, November 3). Small companies are target of efforts to improve the literacy of employees. *The Wall Street Journal*, B1.
- Sherman, S. P. (1991, November 18). America won't win till it reads more. *Fortune* 125, pp. 201-204.
- Sixel, L. M. (1991, August 10). Basic training: Small firms focusing on need to teach workers skills. *Houston Chronicle*, B1, B6.
- Small Business Administration (SBA) (1989). *The state of small business: A report to the president*. Washington, D.C.: United States Government Printing Office.
-

-
- Szabo, J. C. (1990, February). Learning at work. *Nation's Business* 78(2), 27-28.
- Washburn, S. Z. & Franklin, G. M. (1992, January/February). A modern workplace in the face of an age-old problem: Illiteracy. *Industrial Management* 34(1), 2-4.
- Zalman, R. G. (1991, February). The 'basics' of in-house skills training. *HR Magazine* 36(2), 74-78.
- Zemke, R. (1989, June). Workplace illiteracy: Shall we overcome?. *Training* 26(6), 33-39.