

THE GROWING TREND OF INDUSTRY AND BUSINESS TRAINING *

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The core goal of vocational education in the United States is to prepare learners for jobs that are available in the labor market. Yet even with the years of vast funding for vocational education at the federal, state and local levels, most of the knowledge and skills held by the American work force have been developed through on-the-job training—not by vocational education. This should not be particularly disturbing to vocational educators. It would be unreasonable to think that vocational education could either compete with the richness of the country's work places and the rewards for learning that exist there or to be able to respond to all of the unique demands of individual companies.

Recently private sector training and development has been receiving a fair amount of attention from the public educational system (*Phi Delta Kappan*, 1980; *Journal of Industrial Teacher Education*, 1978). This is not a result of significant shifts in job training from the public to private sectors. Rather, the attention is based on an increase in the number of structured training programs being offered by industry and business, as compared to unstructured programs. Unstructured training may be characterized as "on-the-job" or "buddy-system" training; structured training is more formal and more closely parallels practices found in vocational education (Cullen, Sawzin, Sisson & Swanson, 1976).

The concerns for performance and accountability that have been a part of vocational education are often valued at an even higher level in the private sector training profession. The following definition of training, utilized by a major manufacturer's corporate training department, illustrates this point.

Training is the presentation of controlled information and practice resulting in performance of criterion behavior by the learner in a manner which allows evaluation. The definition implies both effectiveness and efficiency (Johns-Manville, 1976).

TRAINING IN INDUSTRY AND BUSINESS

While it may be impossible to determine precisely the numbers of trainees, training hours and dollars committed to training in industry and business, estimates are available. A 1977 survey by the New York Conference Board of 610 firms having 500 or more employees found that these firms spent

Contemporary Challenges for Vocational Education

over \$2 million on employee training in just one year (Lusterman, 1977). Tables 1 and 2 illustrate a breakdown of the training within the firms surveyed by the Conference Board. Beyond training their own employees, major employers are providing on-the-job work experiences for approximately 400,000 college and high school students annually (Lusterman & Gorlin, 1980).

A revealing comparison may be found by looking at expenditures for audiovisual training aids and materials. In 1978 educational institutions spent \$1.69 billion for audiovisual materials as compared to business and industry's outlay of \$2.5 billion (Ruark, 1979). The time and financial investment being made in industry and business training constitutes an impressive effort that has been referred to as this nation's shadow educational system (Goldstein, 1980).

A Many-Faceted Profession

Given the diversity of industry and business, the fact that training is a secondary objective of the organization and the range of human resource development concerns that each firm encounters, training must take on many faces in order to be responsive. Figure 1 illustrates the field of training in terms of types of training and the job roles within the profession. Any single cell or combination of cells within the matrix could constitute an individual trainer's total job.

Table 1
PREVALENCE OF EDUCATION/TRAINING PROGRAMS BY COMPANY SIZE

Company Size By No. of Employees	Percent of Companies Reporting Program			
	Tuition Aid After Hours	Other Outside Courses	Company Courses After Hours	Company Courses During Hours
10,000 or More	97	90	56	96
5,000-9,999	95	83	51	96
2,500-4,999	91	79	52	91
1,000-2,499	94	77	45	86
500-999	82	66	25	71
All Companies	89	94	39	55

Source: Lusterman, 1977

Table 2
TYPES OF COURSES GIVEN IN DURING-HOURS COMPANY PROGRAMS

Type of Course	Percent of Companies Providing Courses	Employees Involved (000)	Expenditures	
			Number of Total	Percent of Total
Management Development/ Supervisory	60	1,400	37	430
Functional/ Technical	54	2,300	61	1,340
Basic Remedial	8	30	1	15
Other	11	30	1	15
All Courses	70	3,760	100	1,800

Source: Lusterman, 1977

Figure 1
TRAINING IN INDUSTRY

Job Roles in Training	TYPES OF TRAINING		
	A Skills and Technical	B Management and Subject Matter	C Motivational
1 Instructor	1.A	1.B	1.C
2 Media Producer	2.A	2.B	2.C
3 Designer	3.A	3.B	3.C
4 Manager	4.A	4.B	4.C

Three types of training are identified in Figure 1. Skills and technical training deals with worker-machine interactions and most typically is given to hourly workers. Management and subject matter training deals with worker-worker or worker-idea interactions and most typically is provided to salaried employees. Motivational training deals with worker attitudes and is most widely used in sales, safety and team-building training.

Table 3
VOCATIONAL EDUCATION AND TRAINING PROFESSION: COMPARISON OF EXPERTISE ON R&D ISSUES

Dimensions of Training	Available Expertise	
	Selected R&D Issues	Training Equal Vocational
Overall Training Issues	1. Cost-Benefit of Training	X
	2. Goal Analysis of Total Organization	X
Types of Training	3. Analysis of Processes and Troubleshooting Behavior	X
	4. Analysis and Synthesis of Subject Matter	X
	5. Ethics of Attitudinal Training	X
Job Roles	6. Development and Evaluation Instructional Skills	X
	7. New High Technology Media-Communications	X
	8. Understanding the Training Design Process	X
	9. Training Needs Assessment	X
	10. Computer Managed Training	X

The job roles provide another view of the profession and the training specializations. The titles of instructor, media producer, designer and manager are not alien to vocational educators, but when pursued as jobs in themselves, a profession quite different from vocational education emerges.

Within the model of training in industry and business a recent analysis presented several major research and development issues facing the profession (Swanson, 1981). These issues provide one means of comparing the relative emphases and professional strengths of vocational education and private sector training. Table 3 lists the 10 research and development issues and an estimation of the present expertise of vocational education and private sector training in each.

At surface inspection, Table 3 contains several terms and issues uncommon to vocational educators. A more thoughtful inspection allows one to integrate private sector training and public sector vocational education into a larger conceptual structure of "education for work." Yet, several of the issues noted in Table 3 suggest different levels of concern. These include financial investment/return, learning efficiency/effectiveness and appropriate training. These issues and the resulting private sector organizational demands for responsiveness often make it difficult and/or impossible for trainers to work with traditional vocational programming methods.

All indications are that training in industry and business will continue to expand. If vocational education wishes to become a partner, it will need to analyze the issues facing private sector training and respond in new ways.

RECOMMENDATIONS FOR VOCATIONAL EDUCATION

The goals of vocational education and training are the same—to meet the labor needs of industry and business. The issue is not so much to debate differences, but to identify how to achieve this common purpose. Communication and understanding are required in order to meet needs through cooperative efforts. In this regard, private sector recommendations to vocational education focus on two issues: (1) the behavioral attributes of vocational graduates and (2) the establishment of training services in vocational schools.

Fully prepared individuals entering the labor market are rare. By and large, most companies require minimal, functioning persons who can be trained and then later developed for occupational career paths within the organization. Candidate screening and selection presently rely on rather subjective assessments or require a heavy investment in the development and administration of defensible employment tests. Instances where efforts must be undertaken to minimally qualify candidates or prepare them for on-the-job training are viewed as an unwanted burden on the organization's resources. The growth of the training profession, as discussed earlier in this chapter, is evidence that the private sector will generally invest whatever resources are necessary to compensate for ill-prepared employees.

Determine Behavioral Attributes

The success of an employee working in any company is dependent on behavioral attributes suited to the work place. Minimum industry and business expectations are that all employees have sufficient general work attitudes and skills to function in their environment. The private sector considers it grossly inefficient to provide specific job skill training for persons who lack even the basic work attitudes and skills. Therefore, it is fundamental that vocational education clearly define, validate and include in its programs those general behavioral attributes that lead to success in the work place.

Dismal reading and math achievement levels have been reported within our nation. As a result, employers would be happy if their newly hired employees simply could read and write the English language and perform mathematics at the junior high level (Berman, 1979). Vocational education should first of all be aware of the need to support and reinforce basic education in all of its programs. Without basic skills, students have little chance of success in achieving behavioral attributes demanded in the work place.

Behavioral attributes that fall within vocational education are those that predict successful job performance. They may include such characteristics as good attendance, productivity while on the job, loyalty, honesty and freedom from debilitating personal problems like drug and alcohol abuse. Other aspects might relate to sufficient interpersonal skills necessary to get along with fellow workers. The base-line response for vocational education should be to identify and define general behavioral attributes. Their validity must be established from the perspective of the work place and internalized as a part of all vocational education programs.

Reliable records and valid assessments identifying individuals' general job behavioral attributes would lead many employers to vocational education in search of candidates, regardless of the students' specific skill preparation. For example: take two graduates from a welding program, the first a highly proficient welder, the second only moderately skilled but possessing the previously mentioned attributes to a greater degree than the first. The second candidate is preferable simply because chances are that neither will remain a welder during the entire course of his or her employment.

Other Training Services

Literally thousands of private sector training programs are locally developed and delivered each year. Many duplicate existing work in the field. Generic training packages are regularly purchased at premium prices from producers throughout the country. As demand has grown, so has the business. Because its response time is often too slow, vocational education has captured little of this activity. Many industry and business manpower needs developed and disappear in shorter time frames than can be accommodated through traditional programming methods. Vocational education could expand its role by providing training services that would meet the more immediate requirements of the private sector. Specific changes or additions would be required in organization, staffing and facility utilization.

The first step would be to add a training coordinator or a small department with the specific responsibility of meeting the training needs of local companies. Job roles of the training instructor, media producer, designer and manager are largely transferable from educational disciplines such as teacher, audiovisual specialist and curriculum developer. Completely separate staffs and facilities are, however, neither necessary nor likely to be efficient.

This service function would be organized to coordinate vocational education resources and expertise with the identified training objectives of individual companies. Much of what exists in an area vocational school could be accessed and utilized on an as-needed basis to meet various project objectives. Vocational trainers would basically analyze needs, design programs, coordinate development and delivery resources and control (evaluate) projects. These services would have to be delivered in a cost-effective manner to satisfy the private sector.

Success of vocational training services would depend on the type of staffing employed. Vocational trainers would need to be open to constant interactions with private organizations, be geared to rapid changes in program content and offerings and be aware of their responsibility to satisfy project clients. Such trainers could not afford to insulate themselves from the workplace. They would have to demonstrate their ability to produce cost-effective results, synthesize the needs of several companies and maintain long-term working relationships with the local community.

Utilize Facilities Effectively

An aggravation for most companies is producing the right skills, in the right people, at the right time and in a convenient place. Private sector instructional space is expensive and its efficient utilization is a constant problem, especially for smaller companies. Empty rooms or two groups contending for one space at the same time opens training to criticism. Vocational training services could attenuate much of the problem by simply offering the physical space at the right time to deliver training. Classroom, seminar and laboratory space for groups and individuals already exists. Opening the doors, upgrading some instructional environments and charging for services could produce attractive returns on present vocational education facilities.

CONCLUSION

Training in industry and business and vocational education share common goals. An analysis of the current trends indicates that private sector training will be growing at a significantly higher rate than vocational education. Even so, it is reasonable to assume that together they still will not meet the true work place knowledge and skill demands in our nation. Within the mix, society will increasingly rely on private sector training to meet its manpower demands. In doing so training in industry and business will gain a greater portion of the recognition that vocational education has covered over the years.

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