Factors listed here appear to personnel in industry to be those that must be addressed if cooperative programs between schools and industry are to be improved.

Both educational institutions and business and industrial concerns are complex organizations that operate in relatively clearly defined domains. Although in most cases these are distinct domains there are numerous examples of interaction and the influence of one group upon the other. Much of this interaction is informal and indirect, and specific instances of intensive cooperative efforts involving sharing of responsibility for developing and operating educational programs are not common. One approach to determining why this condition exists would be to select a topic for which intensive cooperation could reasonably be expected and then contact personnel in business and industry to learn, through interviews and questionnaires, what factors industry considers obstructions to cooperation.

As a focus for this type of investigation the topic of career education seems to meet all of the desired requirements. In the past few years there has been renewed interest in the role of the schools in preparing students for employment. Career education has become a term representing a consideration for re-analysis of existing curriculum offerings in the secondary schools. Professional attention along with the leadership and support of the U.S. Office of Education and the state departments of education have led to changes in existing programs and the establishment of new course offerings. There has always been a commitment to career related education in the schools and many dedicated technical, vocational, and business teachers have done much to meet the employment needs of students. However, with the recent shift in emphasis toward career goals, new possibilities exist to support long desired improve-

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ments and to initiate new programs in all areas of the curriculum.

Industries are also facing a new era with regard to their own training and job related education programs. The amount of training required to keep up with technological advances is constantly increasing. In addition, the present state of the economy is creating pressures on industrial trainers to reduce the costs of their programs at the same time as it is increasing the value of the output of these programs. In the present economy, with constantly increasing materials costs, employee productivity takes on increased importance. The current high rate of unemployment is also affecting management's attitudes toward selection of personnel for training programs. To preserve employee morale, at a time when employment opportunities are scarce, more attention is being given to retraining and preparing people for new job assignments (5).

The climate certainly seems right for both industry and the schools to take a closer look at the potential for cooperative development of career related programs. Extensive investments are tied up in the training programs which are offered by many different groups. Public schools, private companies, and labor unions all have programs which seem to have overlapping components. Some training programs are not highly visible. A large amount of industrial training, especially in small companies, consists of on-the-job learning under the supervision of an accomplished employee. Even though somewhat hidden, the costs of such training are not insignificant. In some of the larger corporations and unions training is a very visible enterprise. A permanent staff of four or five with up to fifteen temporary instructors and between three and four hundred students is not unusual. The resources required for such programs along with tax monies and various subsidizing grants supporting the parts of public education earmarked for specific career related training constitute a strong base for cooperative program development. The schools, labor, and industry all have something to contribute and something to gain from cooperation and the potential for such programs is great (1).

Industry demands for employees fluctuate and unions are wary of flooding the job market especially with skilled workers. Neither group wants to get cast in the role of employment agency. Nor do they wish to have to make commitments to students about future jobs.
Examples of Cooperation

There has always been some degree of cooperation between industry and the schools. Certainly industry personnel have been as involved as any other citizen group in working as school board members and taking an active part in school organizations. The Man/Society/Technology Forum Project represented cooperative effort involving leaders in labor, industry, and education in the process of critical analysis of the goal of industrial arts programs (4). Project 70, a large scale cooperative program in Los Angeles, provides career information, tutoring, aid to school administrators, and teacher and counselor training (2). In Wyoming, the Husky Oil Company, Northwest Community College, and the Cody Public School District formed an educational consortium in which industry personnel served as instructors, students were involved in work experiences and received public school credit. The program was cited as satisfying the oil company's need for seasonal personnel (3). In addition, business and industry have provided other forms of support such as field trips, speakers and consultant assistance, vocational literature, sample kits of raw materials, scholarships, etc. Some schools have also established close ties with local businesses and industry for assistance with programs in Distributive Education, Junior Achievement, Cooperative Education, and Work Experience.

Most of the examples mentioned with the exception of the Wyoming consortium, while very important and worthwhile, do not seem to represent an intensive form of cooperative program development. Industry is often asked to donate resources but not asked to follow up with any involvement in the use of these resources in the schools. In addition, industry continues to operate independent training programs. On the other hand, the schools are asked to prepare students for employment but not to provide educational expertise to assist industry in devising their own programs for specific job training. As long as such parallel program development in industry and the public schools exists there is reason to question or look for factors which hinder further cooperation.

In order to get some specific data regarding industry's view of the nature of the factors which hinder further cooperation with secondary schools the authors conducted a survey using both questionnaires and interviews. The questionnaires were sent to a stratified random sample of companies in the state of Louisiana listed in Dunn and Bradstreet's directories. Regional interviews with purposively selected companies and labor unions were used to probe and expand on some of the questionnaire findings. After establishing the present amount of cooperation and the extent of industry's training for entry level jobs for which high school students could qualify, the following questions were posed: Why did you set up your own training program? Why don't you work with the schools to develop a cooperative training program? The following list represents the responses of business, industry, and labor union personnel regarding the factors which hinder cooperative program development.

Factors Hindering Cooperation

1. Industry and labor unions involved in training need some sort of influence over students to increase the probability that those who complete the program will continue or enter into the employ of the program sponsors. Training, especially skill training, is extremely expensive and represents an investment upon which a return must be realized. Retention is a very serious problem even in specialized job training programs provided by industry and the risk of loss of potential employees is even greater. Therefore the industrial sponsor of cooperative programs can't afford to lose a significant amount of influence over students.

2. On the other hand, if the problems of retention are solved, the problem of guaranteed employment must be faced. Industry demands for employees fluctuate and unions are wary of flooding the job market especially with skilled workers. Neither group wants to get cast in the role of employment agency.
Nor do they wish to have to make commitments to students about future jobs.

3. School plans for innovative programs are too subject to change. The departure of a principal or even a teacher can result in the elimination of a whole cooperative job training program in the school. Industry needs more assurance that the commitment of the public school to such programs extends beyond the interest of one or two individuals and represents institutional commitment. Guaranteed continuity of training programs in the school is a must if industry is to reconsider its own training and eliminate areas of duplication.

4. Just as changes in schools present problems for cooperative development of programs so also do changes in employment needs of industry. Such needs are subject to economic and technological factors often external to the industry and therefore not easily anticipated. At the present time the economic situation is greatly limiting the needs of industry and causing much doubt about the accuracy of long range predictions.

5. School personnel do not know enough about the needs of industry or the abilities of business and industry personnel. As a result requests for assistance from the schools are often vague or incomplete. In some areas, such as knowledge of specific job needs, this could be expected, but school personnel do not seem to have a clear idea of the capabilities of industry personnel or of what role these individuals could play in cooperative program development.

6. There are many legal restrictions and insurance problems involved in bringing students under 18 to industrial sites for training.

7. The training required for some jobs is very technical and beyond the capabilities of high school students.

8. Many training needs are very situation specific and peculiar to a given plant or office. Even similar jobs in the same industry but at different sites require different training programs.

9. Industry wants more control over the selection of training instructors. There is a general reluctance to accept instructors who do not have practical on-the-job experience.

10. Industry and business, even those companies with similar needs and overlapping concerns, do not have enough of a united front to work effectively with the schools. Although there are some industrial associations, even these organizations can't wield the power to unite industry in continuing effort with the schools.

11. Finally, a consistent comment was made to the effect that no one is really pushing the idea of cooperation with the schools. There seems to be a lack of advocates for cooperation both in the schools and in industry.

The presentation of these factors should not be taken as an implication of the impossibility of cooperative program development. Perhaps one of the most important blocks to such efforts is the failure to recognize that both industry and the schools have vested interests that must be respected. If programs are not designed to support the concerns of all parties the potential for cooperation will not be great. The factors listed represent some of the specific issues that industry personnel feel must be addressed for programs to be productive. They represent some views which educators can learn from business and industry.

References


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