Since little attention has been given to defining a role for industry in the professional development of educators, the need exists for an administrative structure that facilitates jointly-sponsored in-service education with planning to identify participants, determine individual objectives and work stations, to supervise work experience, and to arrange for academic credit. One example of a strategy used to bridge the communication gap that often exists between education and industry is a series of seminars called "Economics in the Classroom," which was part of a teacher professional development model that combined the resources of public schools, business/industry, organized labor, state/local community organizations, teacher organizations, and local colleges/universities. The successful formula used for the design and implementation of these seminars could serve as a model for structuring professional development programs for vocational teachers. The key element seems to be the responsibilities of the groups comprising the steering committee. Also central to the success of a collaborative relationship is the involvement and initiative of the local plant manager. Staff development is necessary for vocational educators to continue to improve their performance and keep up-to-date in their fields. The private sector should play a direct role in the design of the program, hosting some of the conferences, providing instructional personnel and facilities, and assisting in the evaluation of the training. (BM)
ROLE AND RESPONSIBILITY OF INDUSTRY
IN THE PROFESSIONAL DEVELOPMENT OF
VOCATIONAL EDUCATORS

By

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If I understand my assignment today, it is to articulate my perception of the "Role and Responsibility of Industry in the Professional Development of Vocational Educators." A proper treatment of that topic requires an understanding of the current interests of industry in training and education. The motivation for industry results from a business need for human resource development. The development of human resources has been actively pursued in this country for a number of years. As late as 1955 we learned that more than one-fifth of the growth in our GNP was attributed to education and training.

The concern is reflected in the phenomenal growth of inhouse education within industry. The private sector through an ever increasing number of in-house education programs has become a significant part of the nation's education system. This involvement in education and training results from a business need to improve the performance of employees in their present jobs and to maintain competency in the face of changing technology. Changes in technology and the labor market are occurring at such a rapid pace that it emphasizes the need to anticipate future manpower needs and employment patterns. The rational for industry involvement and the interests of educators in professional development results from a commonality of interests. The compelling conclusion is that not only do we need one another, but in we nurture one another.
According to a 1975 survey of 610 companies by the Conference Board, the projections indicate that the nation's 7500 largest companies spend more than $1.6 billion annually on in-house education. This independent research organization's figures did not include a $220 million expenditure for tuition refund programs and $180 million for other outside courses taken by employees. A spot check of companies surveyed indicated a rise in spending in 1977. It is estimated that 3.7 million of 32 million employees working for major corporations were taking in-house courses during working hours. What we observe happening in industry is a legitimate response to the learning needs of employees.

However, what education and industry are doing seldom bears any relationship to what is needed--comprehensive educational process which embodies the acquisition of updated skills by occupational teachers.

An increasing amount of attention is being focused on the "Role of Industry in Education" and the linkage of education and the world of work in preparation of youth for a productive role in work and society. There is a little doubt that if properly implemented such linkages can result in mutual benefits, yet it is amazing that so little attention has been given to the educators' need, to define a role for industry in the professional development of vocational educators. The extensive network of advisory councils for vocational education has seemingly not addressed this question. I would suggest that they are not structured to respond to the need, though
they have served well the current needs of occupational education programs through the involvement of businessmen and industrialists working with educators to identify local goals and objectives.

One of the primary reasons that an industry-education partnership, which could result in the professional development of occupational teachers has not occurred is due to the lack of an administrative structure for in-service education and/or internship opportunities for vocational teachers.

The need exists for an administrative structure that facilitates in-service education with planning to identify participants, determine the individual objectives and work stations, to supervise work experience and to arrange for academic credit. Local school district administrators must agree to provide released time for teachers from their normal teaching duties and business must be willing to provide work experience.

It is in the interest of industry to participate in the structuring of a process for teacher training, so that the realities of business are fully perceived by teachers. In the pursuit of this objective, it is essential that we make available our people and resources as an integral part of the process. The purpose of this relationship is to make the efforts of the schools, which train students for careers, more concrete and realistic.

If educators and industry are serious in their concern that teachers should fulfill a more informed role in the transition of their pupils from school to work, they must provide the resources necessary to allow teachers the time and...
the means to increase their understanding and experience of the world of work during their teaching careers. It is recognized that in some school districts there will be difficulty in gaining administrative approval for released time, as is the case with in-service credits. Industry has a responsibility to explore the prospects for mutual benefits to be derived from participation in the establishment of an integrated system of in-service training, if we are serious about contributing to an upgrading of teacher competencies.

In this era of rapid changes in business/industry, occupational education teachers are in a dilemma as to how to stay relevant. Industrial techniques change. The skills required to complete various tasks become more complex. Awareness of these changes is impossible if there is no precise system for dissemination of information or acquisition of new skills. Having recognized the need, we must determine that process which will provide the strongest organizational mechanism needed to mobilize the private sector and define an explicit role for the involvement of both business and education organizations. Most of the information about job processes or the learning of new skills can only be obtained in a job situation. This raises grave concerns in terms of the validity of curriculum designs which are currently being touted as tools to prepare students for their future. The provider of such tools lacks the perspective and ability to conceptualize future realities and career opportunities. In-service professional education beyond the bachelor degree, designed to provide broad
occupational experiences for vocational teachers is a responsibility industry should consider. Keeping abreast of knowledge in the field does not assume understanding of the practical application of this knowledge in employment situations. The educator must have the ability to use and understand theory and the practical methods. It is equally important that the teacher understands the organizational structure of business. The question is how to provide comprehensive programs to achieve the goal of quality professional development for teachers.

The most important contribution industry could make to the professional development of teachers would be the use of resource personnel and training facilities for jointly sponsored in-service programs. That is something industry is capable of doing and quite well.

There are as many reasons for employers' participation in work experience programs for teachers as there are employers willing to participate. Some employers recognize an obligation to contribute to education, others are motivated by public relations and others are influenced by strong appeal from business/industry trade associations and others by the possibility of getting better trained employees. Industry is more than willing to be a part of the system which will assure such development. Expanded private-sector efforts in teacher training should not be limited to large corporate employers but should take advantage of the existence of many small businesses. No firm should be asked to make special efforts if it would jeopardize its efficiency.
A major problem seems to be a lack of communication. Can the communication schism between business and education be forged to attain maximum potential for an evaluation of teacher needs and the role industry might assume in teacher training. Educators complain about the lack of assistance from business and industry, while simultaneously business and industry lament as to the ineffective preparation of students entering the world of work.

Can the communication schism between the two groups be forged to attain maximum potential for teacher training? Questions to be resolved are substantial. Who has the responsibility for the continuing education of vocational teachers? Who is responsible for providing the resources and training for the upgrading of teacher skills? How far-reaching is the responsibility? In terms of educating the customer, there have been concrete examples of business and education working together. AT&T has experienced many instances where the educational system has responded to the telephone company by structuring various programs in telephone usage based on teaching aid materials supplied by AT&T. The fact that AT&T has over two hundred people working with educators and that over thirty million pupils were reached in the past year are indeed basic indicators that progress in communication between the two groups is occurring.

The concept of education serving as a provider of experiences which will structure success in the world of work for the student is indeed a worthy one.
However, an inherent problem arises immediately. Who in our educational institutions understands just what it is that the student will need for success? In other words, are our educators themselves knowledgeable enough about the American business system to allow them to plan for successful collaboration with business and industry? Unfortunately the answer is an emphatic "NO". Teachers are ignorant of economic concepts and practices which govern sound business practices. As a group they're not alone. Studies have shown that people who don't have a factual knowledge of business, have a low opinion of business and that 80% of adults nationally have little knowledge of economic education and the practical application of concepts and principles.

If we are concerned about increasing business inputs in teacher professional development, then we must be able to identify those issues which are of prime concern to businessmen. This exercise will inevitably lead to the development of a strategy for increased business involvement in the educational process. A description of the Cyanamid experience with a teacher professional development model, which addressed a major concern of top management might serve as an example for the successful development of a strategy to bridge the communications gap.

"Economics in the Classroom," a seminar series for teachers has proved to be an effective vehicle for combining the resources of the public schools, business/industry, organized
labor, state and local community organizations, teacher organizations and local colleges and universities in a combined effort aimed at increasing teachers economic understanding. The objectives being to strengthen instructional practices, improve teacher understanding of the American economy and acquaint teachers with economic education materials. The listing of basic economic concepts covered in the course was developed by the Joint Council on Economic Education in cooperation with the American Economic Association Committee on Economic Education. The series consists of 15 two-hour weekly meetings in a classroom provided by the participating school district.

How is the program implemented? The initiative is taken by a local plant manager to organize a meeting with potential local participants, including representatives of the Joint Council on Economic Education, state affiliates of the teacher association, Board of Education, local college or university personnel and local business organizations.

The specific role of county and local teacher associations should be to assist in program planning and in providing access to their communication network to disseminate information concerning the program and its availability.

The superintendent of schools has multiple responsibilities.

A. To communicate program information and distribute registration forms.

B. List the program as a professional development offering.
C. Designate a coordinator of staff development to cooperate with the sponsoring group in planning for follow-up visits to teachers to assist in the incorporation of new knowledge into the curriculum.

The local Industry/Education Council, or other local group has the following responsibilities:

A. Works directly with the business representatives and others in implementing the program.

B. Designs classroom follow-up procedures with the Superintendent's office and teacher organizations.

C. Is the recipient and the administrator of funds from participating companies.

Business organizations, such as the local Chamber of Commerce, publicize the effort within the business community.

The successful formula used for the design and implementation of the "Economics in the Classroom," professional development series for teachers might be applicable as a model for structuring a professional development program for vocational teachers. The key element is the responsibilities of the groups comprising the Steering Committee.

A Steering Committee composed of representatives from the Board of Education, participating companies, State Division of Vocational and Technical Education, teacher organizations, and the Industry-Education council would determine specific guidelines for program implementation of the concept of occupational teachers continuing their professional growth through periodic structured programs of in-service work experiences.

The Committee would determine work experience needs, identify work stations, contact and make agreements with employers for planned experiences. The expected outcomes
will be a better understanding of the teacher's field, foster new relationships with business/industry personnel, and demonstrate how these experiences could be applied in the classroom instruction, use of business/industry contacts as speakers, and for plant tours.

The Division of Vocational and Technical Education would continue to provide leadership and support for greater participation of teachers in the in-service work experience programs.

Vastly expanded and highly innovative schemes for collecting and perfecting job market requirements must be developed at local, state and national levels. The success of these occupational data systems depend upon the participation of the private sector, which has a vital stake in the range and relevance of vocational education.

The failure of youth to identify and pursue rewarding career goals is costly to society both economically and socially. Inadequately prepared job applicants and rapid job turnover are a drain on productivity.

The field of placement must be re-examined, and a close working relationship established between industry personnel and teachers responsible for the placement of students. There is the need for industry sponsored workshops to prepare teachers to function as school-based placement persons.

The support for planned work experience as a component of in-service teacher education is often not considered by teachers, local administrators, or the public. The implementation
and continuous support of programs of in-service work experience for a broad spectrum of vocational teacher personnel has not been realized as an element in the development of professional staff who are knowledgeable concerning the current state of business/industry. The literature contains many statements that lend support to the concept of planned work experiences.

Albert Hill writing in "The Assumptions Underlying In-Service Vocational Teacher Education Programs" describes ten assumptions implicit in the upgrading of vocational educators. The first assumption emphasized the need for in-service education.

It is imperative that vocational educators continue to improve their performance and to keep up-to-date in:
(A) the discipline(s) which provide the subject matter, the basic knowledge for an occupation, (B) the occupational field which is the source of the skills, procedures, and knowledge for occupational education, and (C) new educational processes and methods derived from current research and experimentation.

Work experience is desirable for adequate content presentation in the classroom.

What kind of in-service training and education does the private sector do best? What kinds are best done by the universities? Who is to pay the tremendous cost of providing the training and what incentives are needed to encourage and stimulate the fullest response to these learning needs? As great as our resources are in both the private and public sectors, these resources are nonetheless limited.
One of the questions you must concern yourself with in this conference is that we do not have at our disposal an instrument by which the primary parties—education and industry—can react and discuss an agenda of priorities. We lack a vehicle whereby matters of importance can be discussed deliberately and with authority at the local level. Central to the success of a collaborative relationship involving industry is the local plant manager. Some of his concerns include the local business climate, the flow of newly hired employees, the quality of local educational institutions and the interests of local business organizations.

A characteristic of business enterprises as they are organized today which must be understood is the near autonomy of local plant operators. The central office will only authorize corporate involvement in local programming on the recommendation of the local plant manager. The plant manager then has the responsibility for allocating local staff time and taking the initiative to implement the program. Another important consideration relative to available options of local plant management is the budgetary constraint under which he operates and the limited discretionary funding available to him.

The ideal time for submitting proposals which require funding is June 1 if this request is to be included in the local manager's budget recommendations for the following year.

Of equal importance is the role of the local teachers' association. Since the majority of the 2.5 million teachers
in this country are represented by teacher organizations their active involvement in the planning of teacher professional development programs is critical to the success of these efforts. It has been our experience that these organizations are interested in establishing a working relationship with industry and willing to provide professional advice. Such a collaboration resulting from common interest provides immediate access to an established network for effective communication with the local teacher population. Though the negotiations and bargaining interests of these organizations should not and must not be a concern of industry, the professional development interests are of mutual concern.

Educators must take the initiative in acquainting business/industry with the needs of teachers. The advances in technology and the continuing education needs of an aging teaching population are adequate incentives for the teacher professional organizations to aggressively address the problem of deficiencies in professional development programming.

If the participation of industry is critical to the success of that programming, these organizations have a responsibility to clearly define their perception of the role of industry in that educational process and to seek the cooperation of industry.

There must be learning on all sides; no one group has the answer and no one group has the skill to design valid programs alone. The time has come for planning in a vacuum to cease.
the time has come to put aside parochial concerns and to open the windows to the real world as it exists today and as it will exist tomorrow. While tours, field trips, and access to community resource people are useful and necessary activities, staff development is the critical need and the key to development of an informed group of occupational teachers. The private sector should play a direct role in the design of the program, hosting some of the conferences, providing instructional personnel and facilities, and assisting in the evaluation of the training.