Growth of a human resources perspective among work institutions, mirrored by the lifelong learning perspective in educational institutions, has created an opportunity for collaboration among and within education, business, labor, and government. Barriers to such interaction between education and work include different formats for teaching and learning (emphasis on team effort in work settings, but little team teaching or learning in education) and different motivational settings. Four basic functions seem to characterize institutional relationships between education and work institutions. These are (1) learning experiences and services, (2) flow of human resources, (3) new ideas and products, and (4) strategy development. One strategy/mechanism for maintaining leadership communication across the business-labor-education sectors over an extended period of time is the local collaborative council. Collaborative councils can be distinguished by these criteria: membership is representative of major community sectors with collaborative mechanisms intended to join and serve the interest of more than two sectors, they are self-organized and performance-oriented, they represent shared responsibility, and organizational activity is sustained through formal council organization with assistance from a staff director or coordinator. (YLB)
INDUSTRY-EDUCATION-LABOR COLLABORATION:
DESIGNING MECHANISMS FOR SUSTAINED IMPACT

by Gerard G. Gold
Senior Program Officer
National Institute for Work and Learning
Washington, D.C. 20036

Assumptions

Interactions between education, business/industry, and labor are diverse in substance, wide in scope, and varied in quality. Moreover, the decade's vast expansion of corporate and union directed training makes the total range of interactions far more complex than the traditional division of functions between education and work institutions.

Professional educators in schools and colleges are only beginning to feel the effects of the increasing education and training competence of employers and unions. Pressures on traditional education systems are developing from two sources: demand for higher quality performance by education institutions in preparing graduates for labor market entry, and direct competition for the time and interests of out of school youth and adult learners.

One message of this paper is that the growth of a human resources perspective among work institutions, mirrored by the lifelong learning perspective in education institutions, has created an unprecedented opportunity for discussion and action among and within the major sectors of education, business, labor, and government. From such discussions and collaborative action at local, state, regional and national levels will come greater consensus on problems, preferred solutions, resources, and priorities. Attempts to enforce the isolation of

The work upon which this paper is based was performed pursuant to Contract #300790691 with the Office of Vocational and Adult Education of the U.S. Education Department. The views expressed are those of the author.
Educational institutions from their economic and political constituencies are doomed to failure. But openness to these constituencies does not necessarily imply a loss of professional integrity. Educational leadership is crucial if shared responsibility is to result in greater institutional effectiveness.

Whether the patterns created by this dissolution of institutional isolation will be uniform or diverse in form, content and leadership is still open to speculation. What seems more certain is that institutional structures are needed to sustain these relationships and assure the accountability of the participants.

Underlying these relationships must be an understanding of core differences between the two institutions. Businesses emphasize training both in task skills and interpersonal relations (Lynton, 1981). These two areas converge in most work settings because group or team effort is necessary to get the job done—whether on an assembly line or in a top management context. In education, team teaching is rarely stressed and team learning rarely occurs off the sports field. On the other hand, diversity of interests may be more encouraged by the very lack of group structures in education organizations. More than the public-private distinction frequently raised, this difference in the very format for teaching and learning is probably the most significant barrier to communication across the two sectors.

A second barrier is related to the first: work institutions teach skills and develop teams because tasks need to be accomplished that make a difference to the survival of the organization and the continuity of rewards for individuals. Schools and colleges are rarely so dependent for survival (at least in the short run) on the performance of teachers and learners. Thus the motivational setting differs between the two sets of institutions, creating yet another barrier to effective interaction on a large scale. From another point of view these
underlying differences may very well be key elements that must be taken into account in understanding the limitations of collaborative activities and the boundaries of institutional inequity.

Also underlying these relationships are the core assumptions that have shaped the attitudes of institutional leaders throughout the history of American education (Trumb, 1975).

From the perspective of the literature of collaboration (Fraser et al., 1981), it finds three themes of special significance:

1. That individual learners will be motivated to develop academic and vocational skills and positive attitudes towards society if in-school learning is closely linked in the learner's mind to relevant roles, places, and opportunities in the immediate community and the larger society. Improved motivation may, in turn, reduce both anti-social behavior and the need for costly remedial programs.

2. That maintaining the values of democracy and capitalism requires the participation of employers, workers, and other citizens in support of curriculum development, teacher training, career guidance, effective educational administration.

3. That maintaining a labor supply "aligned" with the market demand for labor is cost effective and requires the participation of knowledgeable business, labor, and education leaders in developing labor market information, forecasting the economic development and employment needs of the local and regional economy, preparing short and long-term guidance for curriculum developers, career guidance planners, students, and the community at large.

These have consistently been the rationales driving career, vocational, and out-of-school training legislation. Beyond these rationales lies the equally persistent question of how best to realize their desired ends.

The search for effective implementation has moved recent policies beyond interventions by simple agencies to an emphasis on interagency relationships. There has developed a consensus that fragmented, institutionally unilateral approaches to youth education, training, socialization, and transition services
have proven inadequate. The point of convergence is on the principles that
(1) national problem-solving requires community level participation, (2) community participation requires effective processes to create shared understanding, shared responsibility, shared resources, and shared benefits, and (3) the participants in these processes should include a wide range of community leaders: employers, workers, educators, students, government officials, community organizers, and volunteers.

**Functional Relationships Between the Sectors**

Four basic functions characterize institutional relationships between education and work institutions (Gold, 1981). These are:

- The production and distribution of teaching/learning experiences and services. Which institutions will be responsible for adding economic and other values to human resources?

- The flow of human resources between education and employment. Who will design, finance, and manage (in sum, who will control) information and opportunities for directing individuals into education and work opportunities?

- The production and distribution of new ideas and products. Who will be responsible for basic and applied research of various kinds?

- The process of strategy development for higher education-business relationships. Who will be responsible for deliberate planning and communication to influence the structure of education and business relationships for the three previous functions?

The four categories are derived from consideration of the exchanges of resources which higher education and business organizations can offer to each other: people, money, ideas, power, time, places. The bottom line for all activities associated with these functions is whether, collectively, they produce mutual respect, trust, reliability, and demonstrated results meeting specific needs of
individual businesses, higher education institutions, and adult

A very few examples will be used to demonstrate what is

Teaching/Learning Function

The classroom is the central image of formal education as the place where most of the "business" of schools and colleges (to a lesser degree) take place. A decade or more of experimentation and reform have changed our conception of where teaching and learning can take place and who can teach. Even traditional schools have changed little in where teaching and learning do take place, though alternatives are gathering respectability and credibility, more so at the adult level less so at the pre-adolescent level. From Foxfire, to experience-based career education, to executive and career internships, to cooperative education and work experience generally, out-of-classroom learning for adolescents and adults is now a valued concept with a wide range of useful practices, most of which require substantial cooperation from employers, unions, and other community institutions. Various vocational, career, and cultural education strategies have been used to bring the outside world into the classroom, a less costly approach, sometimes supported with corporate and union-produced teaching aids for topics ranging from economic and labor education to general public issues.

At the postsecondary level the relationships are yet more active, including cooperative education, college-coordinated apprenticeship and pre-apprenticeship programs, tuition assistance programs, industry-services programs, joint curriculum projects (especially in vocational and economic education), management training, as well as the traditional professional graduate education programs. On the corporate/union side are more of the same: training for everything from basic skills to graduate programs, use of consultants and published curricula, use of community colleges and universities for packaged training. The corporate
education under probably approaches $30 billion annually, about 6 percent of that by the K-12 System alone. Teaching services for in-school and out of school youth are provided by corporations, community organizations, and labor unions, sometimes in cooperation or under contract with school systems, sometimes independently.

The flow of human resources

From the perspective of societal survival, giving people the skills they will need to earn a living and providing social institutions with people capable of performing needed social roles are the "bottom line" for educational institutions. To survive themselves, colleges and universities must demonstrate their continuing contribution to this core social function. The flow of human resources, from an institutional perspective, is a three-stage process: intake, treatment and productive use, transfer to the outside world.

Among the examples of present interactions: corporate and union scholarships for high school graduates, including "upward bound" programs for minority students; corporate and union support and participation in in-service occupational information programs for secondary and post-secondary teachers, administrators, and guidance counselors; employer cooperation with high school and college job placement offices and career counseling programs; use of internships and cooperative programs reducing costs of employee orientation and screening as well as for more sympathetic handling of individuals (such as the handicapped) whom employers or unions have typically excluded either by bias or by rigid entrance requirements.

A different perspective on the flow of human resources is provided by consideration of the uses of volunteers from business and labor organizations. The classroom uses of volunteers have received attention in recent years through career education programs. Volunteers on vocational and other advisory councils
are another widely known but little researched use of highly variable quality. Less known is the intermittent use of volunteers as consultants to improve school and university administrative, transportation, financial, personnel, maintenance, and related support systems.

Finally, the flow of human resources touches adults who seek more education to strengthen their chances for mobility and other adults required to learn simply to preserve their status. Returnees to the "learning force" may pay their own way, be subsidized by employers and unions, or use government subsidies. They may be seeking basic or state-of-art technical skills. They may find appropriate sources of motivation in secondary schools, colleges and universities, corporations and technical institutes, or through independent learning in libraries and published media.

New Ideas and Products

The area of interaction is more commonly recognized where corporations and universities cooperate in basic and applied research, or where consultants are used to train employees in new concepts or techniques. Peripheral industries (especially, aerospace engineering, and pharmaceutical applications) around major university research centers exemplify this fact. The flow of new ideas and products at the secondary level is frequently overlooked and is, indeed, harder to find. Publishers are traditionally the only arm of the private sector with easy access to schools. They act as intermediaries between campuses and schools by translating "hot issues" in the education profession into teaching aids suitable for different grade levels. More recently publishers have joined with mass media to produce videotape, videodisc and other consumer items which supplement and as often compete with schools and colleges for the attention of
serious as well as superficial learners. Yet to develop is any meaningful inter-
change of ideas between the corporate/union training profession and the
traditional education profession. Certainly the two sides have much to teach
each other.

**Strategy Development**

In education as in politics, the foundation for strategy is demographics. It can be argued that beyond basic demographics are three factors forcing realign-
ments in all four functions of business—education—labor relations. First, the
pact of technological innovation has created demands for massive and frequent
retraining (perhaps even re-education) of the nation’s labor force. Second,
allocations of resources for education are finite and in the process of being
redistributed as the average age of the population shifts upward and as alterna-
tive claims are made on capital. Third, employers, unions and others perceive
failure on the part of education institutions—both secondary and postsecondary—to transmits knowledge, skills, and values needed to survive in a highly
competitive world economy. This last argument is especially devastating because
almost all education institutions are direct or indirect beneficiaries of tax
subsidies. When public confidence decreases, a deadly spiral of declining
resources and declining capability sets in. The question is whether public
and private education institutions will be given enough time and resources to
prove that they have the leadership capacity to help employers, unions, and
individuals meet the nation’s skill requirements during the next decade.

A number of vehicles for the development of collaborative strategies
already exist, but rarely has their potential effectiveness been realized.
Presumably this is because institutional leaders are only beginning to define
the extent to which their self-interests require collaborative behavior. Also, even where vital interests have been identified, the behaviors of industry/business/education-labor collaboration are new and being tested and refined in daily practice. Among the existing mechanisms are effective programs, coordination units, conferences, and collaborative councils.

Effective programs solve the problem of how to implement agreements made at leadership level or how to demonstrate the utility of new services prior to top leadership involvement. Principal examples of such programs include exemplary cooperative education, vocational education, and career education programs which actively involve educators, employers, and/or unions in their planning and implementation.

Coordination units solve the problem of assigning responsibility and accountability for day-to-day relationships with other community institutions. Career and vocational education coordinator positions, career guidance and placement offices, campus-based "centers" of education-work research and program development, and industry-services coordinators are all of proven value when supported by leadership commitments and competently staffed. Vocational and career education advisory committees coordinated by school staff and appointed by superintendents are one form of coordinating unit. Chamber of Commerce, National Alliance of Business, the AFL-CIO's Human Resource Development Institute, and many large corporations and unions have education liaison/coordinator positions.

Conferences are valuable for their cumulative effects on network building rather than for their one-time effects. Annual conferences of the American Association of Higher Education have reemphasized education-work linkages over several years. The mini-conference series of the U.S. Office of Career Education has been an extremely effective means of articulating issues and building a multi-
sector constituency for that concept. The established fields of vocational and cooperative education use their annual and other meetings to create linkages. Recently the American Association of Community and Junior Colleges, the American Vocational Association, and the American Society for Training and Development jointly sponsored a conference whose true purpose was to open communications and cooperation among the constituencies of the three groups (Yarrington, 1980).

Finally, collaborative councils are mechanisms for maintaining leadership communication across the business-labor-education sectors over an extended period of time. These councils range from the Joint Council on Economic Education formed in 1947, to the Business-Higher Education Forum formed in 1978, to local work-education and industry-education-labor councils developed in over 100 communities during the past five years in particular. The particular value of local collaborative councils is that they are located where specific problems touch specific individuals and institutions and where any solutions proposed for those problems must be implemented.

Local Collaborative Councils

It takes day-to-day experience, and year-to-year planning of activities and procedures for communities to develop, test, and rework effective collaborative mechanisms. Collaborative councils are one means through which community leaders are learning how to cope with the real problems and needs of youth, adults, and the institutions in which they learn and work. Words such as "turfdom" and "politics" were once accepted as negative, irreducible facts of life (and used as excuses for inaction). Through community councils, we are beginning to learn how to turn the self-interest inherent in those words to the advantage of all. "Collaboration" and "collaborative councils," as found in the literature, are young concepts still being developed.
Collaborative councils usually are identified as either "Industry-Education-Labor Councils" (and "Industry-Education Councils") or "Work-Education Councils" (and "Education-Work Councils"). Local names for these generic types vary from community to community. Community Action Council for Career Education, Consortium of Vocational Educators and Employers, Tri-Lateral Council for Quality Education, and Association of Business, Labor, and Education are but a few of the names that collaborative councils go by. Some of the Private Industry Councils (PICs) recently initiated through the federal government's Comprehensive Employment and Training Act (CETA) have also taken on the collaborative council's characteristic autonomy and involvement in education as well as work-related issues.

Collaborative councils can be distinguished by a few criteria. These are general characteristics and fit better in some cases than in others:

- Council membership is representative of major sectors in a community; collaborative mechanisms are intended to join and serve the interest of more than two sectors. Councils should be designed to treat education, industry/business, labor, government, and youth service institutions as equal partners. In local practice, the interest and strength of one or two sectors may predominate, but the goal of collaborative councils is to seek a balance of multiple purposes rather than exclusivity.

- Collaborative councils are essentially self-organized. Initial sponsorship may come from one sector or even a single organization. But once organized, the council is responsible for its own continuity. Neither membership nor agenda is assigned to the collaborative partners by a single institution.

- Collaborative councils are performance-oriented. Members and staff develop their own agendas and approaches to community needs. While such councils may choose to play advisory roles in specific instances, they are designed to perform a variety of roles ranging from fact-finding, to project operation, to program development, to program brokering and catalyzing.
Most crucially, council members and the institutions they represent share responsibility for implementing the action agenda which brought them together in the first place. Members exercise active leadership within their primary constituencies and with other sectors and constituencies. Collaboration implies a recognition of shared self-interests that leads to mutual action.

Organizational activity is sustained through formal council organization, with assistance from a staff director or coordinator.

The issues on the agendas of collaborative councils run the gamut from policy to programs to process. The agenda items may address the functions, attitudes, behaviors, and capabilities of schools, colleges, employers, labor unions, government agencies, and religious and social services institutions.

For example, some collaborative councils have exhibited leadership in linking economic development and human development. As employers and unions begin to examine the workplace of the future, they are troubled by the perceived obstacles of employee/member skills and motivation at all levels of the work force. Trying to cope with workplace requirements, employers and unions are drawn progressively further into analysis of the education and training systems as they look at the causes of success and failure in career preparation. Collaborative councils are neutral "turfs" where these leaders and their education counterparts can discuss and act on needs, resources, and strategies in positive ways.

Linking diverse institutional self-interests is the principal strategy used by councils to engage institutions in joint planning and action on specific education-work issues. In this way, collaborative councils are intended to strengthen the capabilities of community and state-level institutions by using problem-solving approaches that build trust and achieve desired results.

Most councils operate on modest budgets. The principal cost factors are two: whether there is a paid staff and whether the council seeks project operation responsibilities requiring additional staff. Budgets of $40,000 to $100,000...
are typical of councils with paid staff. Budgets of $2,000 to $3,000 are typical of councils which rely entirely on members for coordination, outreach, and in-kind support. As councils become more active, and as their independent, honest broker role in the community becomes more significant, a core, paid staff tends to be indispensable. Councils must then develop cash or equivalent donated staff services.