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ABSTRACT

Partnerships between postsecondary education institutions and employers, unions, professional associations, and other groups are discussed. The majority of examples are based on projects of the Education and the Economy Alliance, a program supported by the Fund for the Improvement of Postsecondary Education. Partnerships and joint, or collaborative, activities of colleges and these groups often involve research, economic development, and human resource development. Research partnerships may be basic or applied and may lead to new and profitable products. Economic development partnerships frequently concern community development, institutional development, and business development. Human resource development partnerships can be categorized as: entry-level preparation and orientation, technical skill development and maintenance, career transition preparation and skill enhancement, and career completion. The following basic factors involved in collaboration are considered: the organization's mission, the location within an organization of the partnership project, the level of leadership involvement with the project, and the depth of collaboration (i.e., how deeply felt are the values and practices of collaboration). (SW)

POSTSECONDARY EDUCATION FOR A CHANGING ECONOMY PROJECT

HIGHER EDUCATION PARTNERSHIPS: PRACTICES, POLICIES, AND PROBLEMS

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HIGHER EDUCATION PARTNERSHIPS: PRACTICES, POLICIES, AND PROBLEMS*

I. WHAT MAKES THE NEW PARTNERSHIPS DIFFERENT?

When we talk of partnerships (or collaboration) between higher education and other organizations, do we mean anything different from the exchanges of goods, services, and ideas with which we are already familiar?

In a world in which no individual or organization is self-sufficient, exchanges of one sort or another are the incessant ebb and flow of daily life. Universities purchase food, computers, books, and other goods from companies. Businesses hire college graduates as employees and faculty as consultants and may purchase licenses to university-owned research. Some unions negotiate faculty contracts while other unions represent different groups of college and university employees. Academics, employers, and employee representatives mix their interests while serving on boards of trustees and advisory committees. Colleges and businesses and associations, because they bring jobs and budgets with them, are sought by politicians and other citizen groups who want them to locate in one or another state or community. In thousands of ways all these people help themselves by helping others, exchanging a part of their time, energy, funds, or expertise for some resource provided by others.

Why then does the rhetoric of the new partnerships and of collaboration raise hopes and fears quite different in character from the emotions and expectations related to the routine purchasing, selling, and interacting that go on daily among the sectors of our society?

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By new partnerships or collaboration we mean the joint ventures between higher education and other organizations (particularly the business sector) that are characterized by: voluntary institutional participation; multi-sector leadership, problem-solving, and performance-based orientation; shared or complementary interests; and shared responsibility for agenda planning and action. But is this new partnership just another name for patterns of institutional behavior that have been with us for a long time? Or are the patterns themselves changing and in the process forcing us to create new behaviors and new ideas to guide those behaviors?

First, we can readily admit that in many respects the future is but an extension of the past. Certainly in the United States, with its diversity of public and private colleges and universities, many of them founded and supported through close relationships with business and industry leaders, there has been little ideological basis for separatism between the institutions of work and learning.

Nonetheless, the concepts of institutional collaboration and partnership do imply changes in both style and substance affecting these relationships in some basic ways. In style, projects we designate as partnerships and collaborations imply a greater degree of collegiality, openness, and commitment to shared values than would be typical of an exchange relationship. We do not use the term collaboration to describe a contract under which a company provides food services, maintenance services, or computer services to a college. But "collaboration" seems just the right word to describe a project to develop a new computer assisted manufacturing process or to help employees learn English as a second language. Here both the college and a "partner" such as a union or a company assist in the effort. It is not collaboration when a company or a government agency contracts with a university to survey employee needs, conduct

archeological assessments in advance of new road construction, or design the reorganization of a department or office. Yet "collaboration" seems to fit the situation when university and contractor, with or without external funding, work together on organizational effectiveness research, develop guidelines for employee needs surveys, and share personnel and task responsibilities in carrying through the work. The closer we look at the situations we call "partnerships" and those we do not regard that way, the more we see partnerships and collaboration as dominated by collegiality and shared responsibility across institutional boundaries in the performance of substantive tasks.

In substance, projects and programs we designate as partnerships and collaborations imply a breaking or at least a temporary minimizing of the boundaries that normally separate organizations. Rules regarding the sharing of information or the qualifications of certain personnel or the scheduling of certain activities are bent if not changed. The more rules are bent and exceptions made, the greater we feel the influence of the collaborative style.

Style and substance merge. In this breaking of rules the participants experience, to varying degrees, a sense of adventure and exhilaration. Collaboration and partnership become words which imply a feeling of synergy, of extra energy, nd imagination applied to a program.

Thus what we call collaborative activities <u>are</u> different. They create situations in which decision-making authority over the design and operation of certain missions and functions of an organization is shared with "outsiders." This threatened sharing of authority is what makes collaboration risky as well as challenging and exciting. The organization's norms of leadership and control are questioned. The job has to get done. The organization needs to prove itself, to show that it can do the job. But it cannot do the job by itself. The opportunity and responsibility must be shared. This dilemma strikes at the

emotional and pragmatic gut of an organization. All the more reason, one concludes, that the benefits of partnership programs should far outweigh their costs.

Throughout this paper examples of higher education partnership efforts are provided. The majority of these examples are taken from a group of projects which comprise the Education and the Economy Alliance, a program supported by the Fund for the Improvement of Postsecondary Education, U.S. Department of Education. (For more information on any of these projects, contact the National Institute for Work and Learning.)

II. THREE CATEGORIES OF PARTNERSHIPS

Partnerships between postsecondary education institutions and work organizations directly challenge the ideal of the autonomous university or college. In the face of declining youth enrollments, growing control by public agencies and state legislatures, and increasing costs that cannot be passed on to consumers, postsecondary education institutions look to partnerships with corporations and unions as one way to help balance sources of revenues, political pressures, and student enrollments. From the model of faculty and institutional autonomy, the modern education institution shifts to a model of multiple power centers of students, government, business, labor, and other groups as external forces with faculty, administrators, and boards of trustees in higher education performing a balancing and integrating function at the hub of the postsecondary education enterprise.

Three Categories

Essentially partnerships and joint, or collaborative, activities involving postsecondary education institutions with employers, unions, professional associations, and other groups may be said to trade in three types of resources:

ideas, wealth, and people. In well-planned projects these three resources reinforce one another. These three types of resources play dominant roles in three corresponding types of partnership activities (see Johnson, 1984):

- Joint research partnerships are built on the production and development of ideas and concepts. Basic and applied research potentially leading to new and profitable products can be a highly rewarding basis for education-business partnerships, especially in scientific and engineering fields.
- Economic development can be defined as the creation of new wealth through the use of money, markets, manpower, materials, and management, the "five M's" of economic development theory.
- Human resource development can be interpreted in either the more narrow, utilitarian, economic development sense of investing in people to make the most productive use of their talents or in the broader humanistic sense of enabling people to develop their individual talents for their own sake.

Each of these broad categories has many varied specific incarnations. Each category has its own sets of strategies for successful partnerships. Each has diverse programs and outcomes. Yet, the three can be related. Bridges can be built from one type of partnership with its goals and programs to the other two types of partnerships with their goals and programs. A joint research project, for example, can also be developed to train a new generation of researchers or to build the conceptual basis for a project with economic development implications.

Similarly, activities in these three areas can be pursued at various levels of cross-institutional involvement. Johnson (1984) describes three levels of interaction between academic and industrial (or business) organizations:

- Least interdependent are academic activities oriented toward business. This level includes research centers and institutes established on a unilateral basis by postsecondary education institutions, publication and speaker programs oriented toward business audiences, and professional curricula serving business purposes.
- Academic activities in cooperation with industry require more sharing of resources and responsibilities. These may include: personnel

exchange programs, research consortia, contract research, adjunct faculty, advisory committees, cooperative education, extension services, consulting relationships, and development of industrial research parks and small business "incubator" facilities.

- Academic/industrial partnerships are defined by Johnson (1984) to include such activities as cooperative research centers, joint planning and program councils, and cooperative entrepreneurial development projects.

The more specifically we describe a project the more difficult it becomes to categorize the project neatly by level of involvement.

The broad sweep of collaborative possibilities can be suggested, however, by the identification of some sub-categories of such projects. Closer examination of substantive topics possibly deserving of multi-sector attention also points to some of the problems inherent in the practice of partnership developments.

Research Partnerships

Corporate research tends to be skewed toward the development of marketable products. Academic research tends to pursue the goal of new knowledge regardless of its commercial value. Between these two main tendencies are many points of overlap and separation. Many ideas produced in universities enter public use and discourse through publications and teaching without ever becoming the basis for formal collaborative projects. And much of the thinking, research, and teaching in colleges and universities is shaped by major events and issues in the world outside. At the same time, each sector has its own separate culture where direct contact with outsiders may never occur.

Partnership activities, therefore, tend to favor those parts of their respective institutions having the most similar interests and methods and having the potential to provide mutual rewards. Inevitably this skewing of focus raises questions about the integrity of academic and professional practices, including the freedom to select topics, to pursue ideas wherever they seem to

lead, to publish findings freely, to discuss research ideas with peers and students, and to move unhindered from one institution to another.

In recent years many of these "principles" have become negotiable because of the growing similarities between the roles of researchers in industry and those in academic settings. Theoretical knowledge in many technical fields is finding quick absorption into applied knowledge. Theory is being developed more rapidly under the pressure of challenges in product development. The closing gap between theory and practice in technical fields and even in many social science fields such as organizational leadership, decision-making, and political science is triggering an era of good feelings among corporations, unions, and universities that was largely unforeseen and even unwanted two decades ago.

Typical of these science and engineering research partnerships are:

- o Monsanto and Harvard University - research on biochemistry and biology in organogenics.
- o Bristol-Myers Company and Yale University - production of anticancer drugs.
- o The Standard Oil Company of Ohio and Stanford University, the University of Pennsylvania, Pennsylvania State University, the University of Illinois, and MIT - research on offshore engineering, crop genetics, and mining technology.

Corporate interest in state-of-the-art research in areas other than science and engineering has extended primarily to business-related specialized topics in organizational psychology (for insights into leadership and supervisory behavior), communications theory (for command and control systems used in defense and multi-national corporations), and general management theory. In Search of Excellence and other landmark studies, for example, have been the result of joint research projects initiated by either university faculty or management consulting firms. In these business research projects as in the sciences, partnership projects and the opportunities they bring for individual

involvement tend to be limited to the elite public and private research universities.

Not yet a widespread occurrence but with the potential to reach into a wider range of colleges and universities are examples of research on topics of regional and community interest involving colleges and universities with regional and local constituencies. Here business sponsorship tends to emphasize analysis of regional economic, demographic, and political trends on the one hand, or the development of research programs closely linked to industries (for example, ceramics, or automobiles, or construction) with a strong presence in the region.

Labor unions have had almost no role thus far in these research partnerships, with some very modest exceptions involving state universities with strong programs of labor studies or industrial relations. Professional engineering and scientific associations have played a modest yet important role in raising corporate attention to concerns such as the shortages of engineering faculty and in encouraging the development of education-corporate partnerships through reports, publications, presentations at annual meetings, and the formation of associations dedicated to cooperative education.

What appears to be lacking in these research partnerships is serious attention to potentially controversial areas in which corporate performance in matters affecting the public welfare might be subjected to public criticism. Issues such as disposal of chemical wastes, affirmative action, occupational safety and health, plant closings and worker displacement, and investment in overseas production facilities may affect corporate profits and products in direct, occasionally spectacular ways. Yet corporations, or unions for that matter, tend not to seek out joint research projects on these issues. Foundations, government, and public interest groups tend to be the sponsors of

college and university research on these topics.

Opportunities for research partnerships also are directly affected by national and state laws dealing with tax, anti-trust, and patent policies. Fears of anti-trust prosecution have inhibited the formation of industrial consortia sponsoring university research projects in the past. The financial value of a research project differs if it is treated as a philanthropic contribution from a corporate foundation than if it is treated as a depreciable or tax creditable investment in corporate research facilities. In recent years some of the main legal barriers to partnership programs have been removed. With those barriers eliminated, some of the advantages of campus-based research environments, especially for consortia-type research, have emerged. The more open-ended, exploratory atmosphere of the campus, the greater credibility associated with research findings produced in the "neutral" campus environment, and easier access to inexpensive yet highly motivated student research assistants all favor collaborative campus-based projects once negative factors are removed.

In sum, joint research partnerships encourage participation in a relatively narrow band of intellectual topics and appeal to individuals who are committed to a specific scientific or engineering research topic. Such persons may also be relatively sympathetic to corporate interests in developing products based on the research. Researchers -- whether employed by corporations or universities -- who are involved in topics of public controversy or topics far removed from product development seem to be less likely to become participants in education-business research partnership projects.

Economic Development Partnerships

Partnerships between higher education and business for economic development are changing and increasing (see Doyle and Brisson, 1985). Economic development

partnerships have three faces:

Community development refers to planning and implementing projects and programs to improve the economic and social qualities of life in a whole community or geographic area. Gains in individual or institutional wealth are assumed to contribute to overall public welfare. A new college campus, a new office of a government agency or of a private employer, a new factory, a new museum, or the upgrading or expansion of these, are actively sought and developed by public and private interests for the additional jobs, tax revenues, and consumer spending they can be expected to bring to a community and region. Part of this expected value may be more indirect: for example, the expectation that the presence of one organization may attract others, whether as suppliers, competitors, or simply as neighbors constituting a core for economic growth. The Economics Education Project of the Highlander Research and Education Center (TN) is an example of a new partnership for community development. The project is developing a participatory research and education process to enable residents of rural Appalachian communities to deal with the impacts of the changing economy on the economic and social qualities of their communities. Models of new partnerships between local higher education institutions and grassroots community groups have been developed. A new economics curriculum for local community development is also being developed.

Institutional development involves a more self-serving analysis and utilization of the organization's own resources. In recent years, for example, colleges and universities have more carefully analyzed their real estate holdings and other real estate parcels in their vicinities. Reflecting on the successes of Silicon Valley near Stanford University, the Route 128 corridor near the research and engineering schools of the Boston area, and the Research Triangle in North Carolina's university research center, colleges and

universities are placing new and higher values on their regional investments, their faculty, and their physical resources. Even universities that do not aspire to national status better understand the attractions of the campus research environment for businesses involved in knowledge production. Institutional development involves new ways of identifying the tangible and intangible assets of the institution and finding ways to capitalize those assets and market them to potential partners. An example of a partnership for institutional development is the Model CAD/CAM Training Center at the Milwaukee Area Technical College (WI). The CAD/CAM Training Center offers software and training materials in "Computer Integrated Manufacturing" for retraining industrial workers. As part of the Center, a microcomputer-based CAD system was developed. The system has been sold to educational institutions and a dealership network has been established.

Business development includes elements of both community and institutional development. The aim here is to grow new enterprises or to assist older ones. Sponsoring entrepreneurial "incubator" centers and venture capital funds for small businesses, or organizing small business assistance centers (perhaps with state or federal government funding) may have community development as a primary purpose and institutional development as a secondary purpose. The method chosen is clearly that of improving the chances of business owners to achieve product development and marketing success. This is in some contrast to the emphasis of community development on building an infrastructure of public services and core employers which supplies the economic "yeast" for self-generating growth. And it is also in contrast to the emphasis of institutional development on the comparatively narrow self-interest of a specific organization. The Small Business Incubator Project of Portland Community College (OR) is an example of a partnership for business development. In addition to offering low cost rental

space to small businesses, the project provides support services, classes, seminars, and professional consultations to the prospective entrepreneurs. Businesses can remain in the incubator during their developmental period, up to three years, after which the project assists with relocation for ongoing operation.

Education-work partnerships can be used to generate development projects, or partnerships can be nurtured and generated as a result of effective economic development projects.

As with research partnerships, economic development projects frequently depend on government funding or tax policies as a sometimes active and sometimes silent partner. Interest-subsidized revenue bonds, for example, may be more easily justified in public policy rhetoric if a university or similar non-profit research organization is a sponsor of a project and is likely to be a major beneficiary of the public subsidy. Urban Development Action Grants (UDAG), Community Development Block Grants (CDBG), and other direct payments from governmental programs can be used as incentives for collaborative projects. Federal and state training monies from vocational education and Department of Labor training programs are used in many states to build programs of job training partnerships among community colleges, employers, unions, and other community-based education and training organizations. Some states, Massachusetts and Pennsylvania, for example, have created state-funded programs which require matching contributions and collaborative agreements between employers and education institutions before state financial support is provided. Finally, the largest incentives for college partnerships with employers and unions may be through tax-financed student grants, loan guarantees, and subsidized tuition rates at public institutions.

The incentives for economic development partnerships are many and varied. Full understanding of these varied incentives, of the financial savings that can be built into programs serving different institutional and community needs, and of the ways programs can be marketed to different audiences in business, labor, and the public sector can be an important factor in determining the success of partnership programs.

Human Resource Development

The life of every working adult is a kind of informal partnership between education and work institutions. A career with a steady flow of income is the implied reward that follows from educational preparation. Individuals must draw the connections by making career choices, selecting educational programs, earning income to pay for education, searching out a first and successive jobs, learning on the job, and using the career advancement network to move from position to position.

Many corporations have their recruiters. Colleges have their placement offices and cooperative education programs, as well as their continuing education programs. Nonetheless, collaborative partnerships for career development are as underdeveloped and as open to innovative possibilities as are the research and economic development programs currently attracting leadership attention. Gradually, employer, union, and education leaders are recognizing opportunities for programs that formalize explicit relationships between performance at work and performance in education.

Put in terms of career progression, human resource development partnerships can be categorized as:

- Entry-level preparation and orientation
- Technical skill development and maintenance

- Career transition preparation and skill enhancement
- Career completion

Entry-level preparation and orientation: Instructional programs at most colleges and universities are dedicated primarily to preparing young students for their first major transition from education to work. Whether the goals of study be liberal arts, sciences, engineering, technician skills, legal or medical studies, few students would attend undergraduate, graduate, or professional degree programs without career preparation as a primary motivation. At first glance, education institutions ought to be expert in understanding and shaping the subtle and complex relationships between intellectual training, skill training, and career transition planning.

In recent years entry-level preparation by postsecondary education institutions has come to include remedial education in basic skills presumed to have been taught during elementary and secondary education. Some corporations and unions have contracted with postsecondary education institutions to provide basic skill training to their employees or to develop basic skills curricula for adult learners. The English Language Training for the Workplace Program of Arizona State University provides English-as-a Second-Language training to employees of Honeywell's Large Computer Products Division. The program uses an innovative "functional" approach to language training. The curriculum deals with language in a comprehensive way including grammar, pronunciation/intonation, spelling, communication strategies, style, and culture. The aspects of language skills are always presented with content drawn from the work environment at Honeywell.

In other instances, universities and colleges have become involved in collaborative projects with employers, local governments, unions, and others to improve the effectiveness of elementary and secondary education. Sharing

responsibility for the design and effectiveness of the entire education system may lead to new ways of incorporating the traditional liberal arts core of the undergraduate curriculum into pre-occupational training. In many communities, making these changes from the traditional role and content of postsecondary education institutions has required collaborative business-academic leadership.

Technical skill development and maintenance have long been a higher education function. These activities range from the summer executive seminars for alumni and corporate top managers to the skill training of associate degree or certificate programs. The rapidly growing training function within corporations is the catalyst for greater use of contract training and long-term "retainer" training relationships. Employment-based tuition assistance programs have become a mainstay of many continuing education programs at nearby colleges and universities. On the basis of these two sources of employer funding -- training and tuition assistance -- specific degree and non-degree programs can be developed. The Special Technician Training Program of Rio Salado Community College (AZ) has trained production line workers of Motorola, Inc. in electronic and semi-conductor technology. Participants are given paid leave for one year with all tuition costs covered by the company. The community college has designed a one-year Associate in Applied Science degree program with courses held five days a week for eight hours a day. Upon completion, participants are placed in electronic technician and semi-conductor processor positions within Motorola. The contract between Motorola and the community college includes provision of a training center, technical equipment, and cooperative education experiences for students.

Similarly, collaborative opportunities abound in the development of programs and research supporting the career transitions of adult workers and of retiring workers. Whether these transitions are initiated voluntarily or

involuntarily by the individual, employers are assuming more responsibility than has been the case historically for the financing and planning of personnel changes. An outplacement industry of consultants is being created first by difficult economic conditions and second by a fundamental restructuring of the "social contract" between employer and employee. As researchers, as consultants, and as traditional providers of career counseling and training, postsecondary education institutions still have much to learn about the educational needs of adults facing occupational and economic transitions. But their position is no different from that of employers, unions, professional associations, and adults themselves who are also moving quickly into uncharted territory. With these uncertain times and the anxieties of many workers is coming a strong compulsion for lifelong learning: the need to have multiple skills and experiences simply to make career change less risky. Better understanding of the dynamics of career change can itself be a basis for the development of partnership programs.

Summary

Collaborative partnerships between postsecondary education institutions and work institutions are essentially of three types: research partnerships intended to produce and develop ideas; economic partnerships intended to produce and develop wealth; and human resource partnerships intended to develop people. Within each of these categories are many different opportunities for substantive projects linking education and work institutions. But the likelihood of actual project initiation and the scale of resources allocated to specific activities are influenced by many factors and problems. Collaborative activities tend to develop around substantive issues where common interests are strongest. These common interests may engage only small aspects of the collaborating institutions. Moving beyond the margins of prestigious areas of collaboration

requires persistent creativity, persuasion, and solid performance.

III. WHO COLLABORATES?

Who participates in collaborative projects? Each partnership activity has a ripple effect on the politics and personalities of the institutions involved. One must ask in each case not only if the respective organizations benefit, but also who else benefits.

Some understanding of the organizational conditions for collaboration is essential to an understanding of who collaborates and who benefits from collaboration. The basic factors involved can be described from four perspectives:

1. The perspective of organization mission: Are the style and substance of the collaborative program consistent with the organization's sense of its own identity?

2. The locus of the initiative within the organization: What are the effects on those involved and those not involved?

3. The level of leadership directly responsible for the collaborative initiative: What powers of position and resources are brought to bear in support of the program?

4. The depth of institutional involvement in the program: Are the activities restricted legitimately to a small corner of the organization or are the opportunities and rewards widely distributed?

Effects of Mission

An organization's mission, its sense of main purposes, has much to do with the projects it selects for collaborative programs, the types and size of resources devoted to these programs, and the selection of people to be involved. Computer firms prefer programs and projects that advance the sophistication, quality, uses, and reputations of computers. Insurance firms also look to ways of enhancing their products, including economic and community development activities that enhance the value of real estate properties in their investment

portfolios. Labor intensive businesses and labor unions seek ways of enhancing the quality of the labor force, particularly as it affects the quality of entry-level workers, supervisors, managers, or skilled labor. The Honeywell English Language Training Program and the Motorola Special Technician Training Program are examples of how an organization's mission determines the nature of the partnerships entered into with institutions of higher education.

Similarly the missions of education institutions establish the direction of their partnership interests. Research universities such as Yale, Harvard, or Rutgers look primarily for partnerships which enhance their reputations as innovators on the cutting edge of new knowledge in fields such as pharmaceuticals, business organization, or ceramics. Other universities and colleges (or other departments at the same institutions) seek partnerships which enhance their reputations as innovators in applied research and producers of quality professional workers. Liberal arts colleges seek partnerships enhancing their view of the world, seeing themselves as producers of creative managers and pre-professionals. Community colleges draw on their several missions: as providers of lifelong learning to adults entering new careers, as producers of quality entry-level technical workers, as providers of remedial learning to employees lacking skills, and as sources of technical assistance to local small business.

The Education Bridges to Options in High Technology Employment project of San Diego State University (CA), the College of Staten Island (NY) Upper Division Bachelor of Science in Nursing (BSN) project, and the School for New Learning graduate program of DePaul University (IL) are examples of how the mission of the education institution can dictate the nature of its partnerships. The San Diego State University project offers retraining and updating in biotechnology and analytical chemistry to mid-career scientists for professional

development and career enhancement. The project responds to the school's mission of serving the expanding high technology industrial community in San Diego County. The College of Staten Island project provides a means for working RNs to have access to and progress toward the BSN. The program responds to the college's mission of meeting the educational needs of working adults and the human resource needs of the health and social service deliverers in New York City. The DePaul University project directly responds to the School for New Learning's mission of offering innovative experiential liberal arts programs to working adults. This Masters of Arts program integrates skills and perspectives of the liberal arts with individually-tailored programs of study in various professional areas.

Thus, an organization's mission in many direct and subtle ways stereotypes the reputations of the people who work for it, both enhancing and restricting the opportunities available to them for collaborative action. Even so, the experience of American colleges, universities, corporations, and unions over the past few years appears to indicate that all these institutions have seriously undervalued the resources they bring to the partnership negotiating table and underestimated the variety of profitable opportunities for collaboration among education and work organizations.

Employer organizations and unions tend to undervalue the learning that occurs daily on the job. Consequently they often neglect ways of improving workplaces as learning environments. Work organizations are only beginning to understand that the spirit of self-initiated learning and problem-solving can be nurtured and combined with techniques of training and formal instruction as important aspects of business success. As workplaces become better organized as

learning environments they will also become more attractive partners for colleges and universities trying to show connections between theory and practice.

Similarly, postsecondary education organizations have not viewed themselves as the owners of franchises on important aspects of research, knowledge, and instruction. Organizations are established and maintained only at great cost. Once established their presence tends to ward off the establishment of other similar organizations. State boards of higher education may explicitly limit competition by preventing other institutions from developing competing programs.

Businesses and labor organizations have long appreciated the power of such "franchise" positions. Unlike large and wealthy corporations able to seek out information and expertise anywhere in the nation or world, the typical employer, union, or student must look closer to home. Education institutions, while thoroughly experienced in exploiting their geographic proximity to high school graduates, are frequently naive in exploiting that same proximity to other organizations.

The language arts faculty need not be of national stature in order to provide top quality instruction tailored to the needs of nearby managers and industrial workers. The economics department can develop a strong reputation locally as a source of regional economic data and analysis without expecting to compete with major university researchers in the pages of professional journals. The mathematics, science, business, and language departments, by paying more attention to the economic and demographic characteristics of the region's employers, may be able to develop special expertise in areas of research, scholarship, and instruction that will bring national or international fame

while also attending to matters of immediate import in the region. These opportunities and possibilities are inherent in almost every collaborative relationship.

Serious development of education-work partnerships should strengthen the diversity of American postsecondary institutions. Better understanding not only of their own strengths and weaknesses as isolated institutions but also of the strengths and weaknesses of the communities, regions, and other organizations within their reach should result in more sophisticated understanding of organizational missions and identities. This deeper understanding should lead in turn to more creative uses of joint ventures between education and work organizations. For example, the nation's elite research universities are working more actively than ever before to capitalize on their "franchise" resources of expertise and prestige (including joint research projects, research park and real estate developments, community action programs, and even summer sports camps). Other educators following these examples will come to see the opportunities for partnerships that can be found in their own backyards. The Milwaukee Area Technical College microcomputer CAD system discussed earlier is a case in point.

Locus in the Organization

At first blush, the problem of location within a given organization of a partnership project or program must appear obvious. Of course a new genetic engineering partnership program will involve a few key academic departments and one or more of the few firms with expertise in that field. And of course the new automotive technician program sponsored by the local automobile dealers' association will benefit the automotive specialists.

Programs in each of the three categories of partnership activities tend inevitably to benefit those responsible for organizing and directing the

programs. Publicity, possibly prestige, job security, and professional opportunities may accompany the project.

But the location of a program can work in opposite directions. Most partnership efforts are small, tentative explorations of new ways to provide services, solve organizational problems, or develop credibility and trust across organizations. Ventures that have the blessing of high university and corporate officials may be viewed suspiciously or merely negligently if not given appropriate attention and resources. Ventures lacking higher endorsements face all kinds of obstacles of attitude and administrative practice unless the entire organization is accustomed to the nurturing of innovative programs. Such innovation-nurturing organizations are rare.

In this broad analysis, therefore, location of a partnership program activity can elicit two types of effects: rewards or difficulties. In either case a special entrepreneurial outlook will be required on the part of the individuals responsible for the project or program.

Over the years most faculty have learned to live with the fact that certain specializations and professions have greater opportunities than others for external consulting and the income and visibility that such activity provides. Within departments accommodations are made for the star performers. To the extent that these activities bring additional funds, students, research opportunities, and prestige to the institution, the faculty and departments involved often find ways to claim special rights and treatment in dealing with other department and campus administrators. Depending in large part on the mix of personalities, the internal politics can be either ferocious or diplomatic.

Collaborative activities of a low-key nature, small in scope and involving only a few faculty, can have much the same impact within a college or university as a consulting relationship. But the relationship takes on a different quality

and significance once an official institutional involvement is suggested. The first projects may be smaller and less r_ eworthy than a faculty consulting project. But the intent, even the mere possibility of developing longer term relationships with one or more external organizations raises the "ante" and introduces new factors affecting faculty participation. Similarly in a corporation or union, the individual project of a subordinate manager or official takes on different meaning if it represents the direction toward which higher level officials may want to move the entire organization.

Therefore the process by which chief executives -- whatever their organization -- or other policy-making officials reveal or hide their intentions and review and select partnership opportunities makes an enormous difference in the ways these activities are perceived and supported by others in the organization.

At times it is advisable to minimize the impact of particular projects on an organization. The special exceptions made to permit the project to accomplish its goals are specifically rejected as precedents. In other cases it makes sense to develop formal organizational policies and to support an activity as an example of the type of initiative desired.

Some times it makes sense to stress the ways in which the entire organization benefits from the side effects of a particular project and to establish special committees to oversee the activity, learn from it, and seek additional ways to involve others. At other times it makes sense to protect a project from too much attention, whether to protect a limited budget or to protect a politically sensitive project activity. The considerations are multiple. Yet from a strategic viewpoint, every collaborative project should be assessed on how its present location in the organization can best be used to touch and inform the lives of other members of the organization, and how its

presence can be used to enhance and perhaps give new meaning to the central mission of the organization.

Level of Leadership

The question of who collaborates in education-work partnership projects and programs also must be answered in terms of the level or levels within an organization at which the partnership activity is initiated. Major differences in style and substance of partnerships are affected by the relative differences in power, prestige, resources, and visibility associated with different levels within organizations. These differences frequently determine who gets involved and in what ways.

Yet it is doubtful that a top level activity is inherently "better" than a lower level activity. Successful and influential partnership projects can be initiated as readily at the junior staff level as at the presidential level. Too frequently people assume that top level support is essential, an assumption that raises expectations yet may result in greater disappointment when success does not follow obediently the commands of those leaders.

Success and quality are functions of wise management (and good luck) at any level, built on a proper use of the levers of control available to those directing the collaborative effort. The impact of organizational level on program quality and success requires, therefore, some discussion of the available levers of control at each level. For purposes of this brief discussion, two generalized "levels" will be analyzed: "top level" initiatives and "lower level" initiatives. The intent of the comments that follow is to approach each organizational level objectively and without pejorative connotations. Different situations can make either level the target of opportunity.

Top level leaders, for example, tend to be very sensitive to failure. A leader knows that he or she has a limited stock of credibility. Many demands are made to tap that limited stock of decision-making opportunities. Consequently, the typical organizational leader wants ideas to be tested, to have all the risks identified and taken into account before decisions are made about the worthiness of a project or the amount of resources to be invested in it. Such thinking tends to err on the side of cautiousness.

Small, peripheral projects with which the leaders of organizations have little or no direct contact can play crucial roles in the development of partnership programs by testing and cleansing ideas of their more outrageous and ineffective features. Thus the interplay between top level and lower level initiatives is essential. Rapid progress and enthusiasm for partnership programs develop in situations where participants at the different levels of an organization understand and consciously employ the techniques of interaction between high level and lower level initiatives. Where chief executives and staff do not communicate, do not understand the opportunities and ploys available to them, or even disagree and work at cross purposes, partnership initiatives at any level are more likely to encounter frustration and failure.

Top level initiatives: The involvement of top level officials in a collaborative education-work project usually implies the making or anticipation of a decision related to one or more of six factors:

- a major investment of financial resources;
- a major shift in institutional mission (or the decision to reject a proposed shift in mission);
- a major change in organizational practices;
- a major personnel change;
- a major public relations opportunity to represent the organization and take credit for some out-of-the-ordinary accomplishment; or

- a major political move to assuage, or reward, some individual or group.

In other words, the involvement of top officials in a collaborative project probably has little to do with the substantive content of the project itself and far more to do with impact of the project on the organization. Dear though the topic may be to the leader's heart, the development of a new computer assisted design program, the retraining of displaced workers, or the enrollment of assembly line workers in a technician level degree program must take second place to the question of whether or not the proposed activity will enhance the survival, continuity, and growth of the organization in a constantly changing world.

Because individuals differ in their judgments regarding how innovative activities will serve to enhance or detract from an organization's mission or reputation, decisions about collaborative activities can be controversial. Support from the chief executive usually means that the organization's resources -- its monies, personnel, reputation, and allies -- either will be enlisted in support of a project (throwing the weight of the organization behind the project) or at least will be kept in a neutral position, allowing the project to prove itself without undue interference. But the very fact of top level support may arouse sources of hidden opposition. People who might have ignored a project operating modestly under the direction of a junior professor or manager will pay close attention to the same project if it appears to have the blessing and interest of the top executives. Is the project a harbinger of things to come? If it were expanded, what would be the implications for the standard ways of doing things? If made permanent, who stands to gain, and who to lose? Would basic research be shifted into university laboratories? Would managers and union officials be accepted as adjunct faculty? Would affirmative action

programs be taken more seriously?

In a word, projects can quickly become politicized once the top officials of an organization are involved. Sometimes politicization helps a project by setting policy or intimidating the informal opposition, those persons who delay actions and raise objections and generally undermine the ability of a project to perform. Sometimes politicization hinders project performance by making potential opponents more aware of the significance of the project's goals and practices, of the people the project proposes to serve, and of the points at which the project is most vulnerable to criticism.

Top level involvement in collaborative projects, therefore, is most justifiable when the skills and resources associated with an organization's top leadership are most in demand and can be most useful in practice. Of these skills and resources, credibility is the most important. The endorsement of top officials, their commitment to the goals of a project, their word that a project is of genuine importance to the mission and future of an organization, can carry enormous weight with funding agencies and prospective partner organizations and key personnel. The details of what is meant must be worked out according to the situation, of course. But the initial commitment to a project from top officers puts their credibility on the line and affects how seriously their commitments will be viewed in the future. Because it is preferable to avoid spending one's credibility, leaders generally prefer partnership projects that can manage on their own to find funding and produce desirable results without leadership involvement. The leader's skill and status are saved for other days and bigger deals.

In addition to their credibility as leaders, that is, as people with the capacity to assure that things get done, top level officials are presumed to control resources. Smaller projects make relatively modest claims on an

organization's resources. Larger projects, by stepping on more toes as it were, make larger claims: they need more attention from central administrative units, are more likely to require special dispensations from certain rules, and are more likely to make one group of people in the organization more noticeably enviable than the other groups. Leaders get called upon to balance these diverse interests and to assure an equitable distribution of rewards, or to rationalize the inequities in ways others accept as reasonable.

Involvement by top level officials is also necessary when changes in organizational mission are required. This frequently requires shifts in resources. The ability to shift mission and resources is entirely beyond the abilities of lower level staff.

All these strands of credibility, resources, and mission come together in the collaborative event made to order for the top level leader: the big deal. It may have been planned well in advance. Or it may be an opportunistic idea, casually mentioned over drinks or dinner with a fellow top level leader. The follow-up discussions, analysis, and planning may take years or only days. But the implications for the organization's future are large: money, prestige, the ability to attract staff and better serve clients all hang in the balance. At such moments the top level officer earns her or his pay by astutely conceptualizing, adapting, and negotiating to assure that the collaborative idea helps to shape the future course of the organization in desirable ways.

Two examples of the critical role of top level leaders in the success of new partnerships are the TECPLAY and Business Development and Training Center projects. The TECPLAY project of the National Institute for Work and Learning and the Charleston (SC) Higher Education Consortium provided a computer assisted program for upgrading basic skills and a comprehensive career development program to urban minority young adults. The short and long term success of the

project is directly related to the roles played by the Mayor, the senior staff of Trident Technical College, the head of the local City Venture Corporation, and a number of community leaders. Their support and the resources they provided gave the project visibility and a solid footing which were central to its success.

The Business Development and Training Center (BDTC) at Great Valley Corporate Park (PA) is a cooperative joint venture of the Compact of Lifelong Education Opportunities and Rouse and Associates. The BDTC brings aggregated learning, business development assistance, and learning services to employees and employers in the park. Credit and non-credit courses, workshops and seminars, career academic counseling, assessment of prior learning, and networking are offered through the BDTC. Without the support and resources of the head of Rouse and Associates the Center would be little more than a good idea. The Chief Executive Officer of Rouse and Associates has provided space, financing, staffing, and, most important, visibility to the Center and its various activities.

Lower level initiatives: The ability to devote oneself single-mindedly to a project is one key resource that the top level leader can rarely provide. This, in contrast, is the most precious resource of people working at the lower levels of an organization. At any level and for any person, many competing demands on time and energy abound. But the top level executive has a job whose very nature requires multiple roles and responsibilities. Lower down the organizational ladder are located the responsibilities for actually implementing the details of specific projects, and, frequently, for creating the ideas that lead to other projects.

Small organizations such as small businesses, local unions, and smaller colleges have so many tasks to be done and so few people to do them that anyone

with any enthusiasm is soon spread thinly over numerous responsibilities. In such cases it is hard to talk of organizational "levels." In part, this is the very reason the movement toward partnerships between education and work organizations has tended to focus on larger businesses and education institutions. Local unions and small businesses are so deeply and constantly involved in their primary "bread and butter" work that time and staff are not available to explore possibilities of partnerships, much less actually manage partnership projects. For these people to become involved in a collaborative education-work project means, by definition, that the purposes and activities of the project are directly related to the central purpose of their jobs and their organizations' missions.

Within larger organizations smaller, less visible projects initiated by individual managers and faculty can and have proved exceptionally valuable. Like the inventor in the garage, testing and refining a product until it is ready for market, small collaborative projects enable people with foresight and motivation to put ideas into practice and to integrate the lessons of practice into new conceptualizations. Implementing the concept may take many months, during which new insights are seen, the strengths and limitations of partnership and personal abilities are revealed, and the world outside the project constantly changes.

But what if a project that seemed to set a crucial example turns out to be unimportant in the grand scheme of events? Or perhaps it is headed in the right direction but lacks some necessary ingredient. Or perhaps it is timely and does constitute an example worth replicating. The smaller project can take these risks at a relatively low cost to the collaborating organizations. Indeed, the mutual learning that occurs through the project and the trust established between professionals and organization administrators may be more valuable as a

basis for future joint ventures than the substance of the specific project.

The smaller project initiated by an individual manager, researcher, faculty member, or union official will seem to lack the "clout" that is associated with more powerful positions in the organizational hierarchy. If the project director decides that an advisory panel would be useful to assist in securing access to information or critique the development of the project, less prestigious people will be attracted to the lower level project than if the invitation comes from a top level executive. All is proportion: technical expertise and lower level contact people may be more important to the success of the project than the visibility and temporary prestige of "names."

The top executive can more easily gain the attention of news media and more readily command the attention of the organization's own publicity staff. On the other hand, individual faculty and staff with strong reputations within their own technical fields will have easier access to those specialized audiences. Having the flexibility to call on technical and institutional authorities as the situation warrants enhances collaborative projects by providing access to special skills and resources at all levels.

The lower level project is a valuable way to test the feasibility of ideas and of relationships between organizations. It is also a way of testing the ability of one's own organization to respond to the inevitable organizational problems of collaboration: scheduling, personnel, financial arrangements, decision-making and so forth. And the lower level project can be especially effective as a way of undermining the legitimacy of current practices and attitudes.

Whether one takes the viewpoint that the project is testing one's organization in a problem-solving way or undermining organizational practices in a confrontational, revolutionary way will depend in part on the personalities of

the people involved and in part on the requirements of actual conditions.

In most education institutions, corporations, and unions, collaborative partnerships diverge from the standard operational procedures, the "S.O.P.s" of routine relationships and responsibilities. Few corporations rely on universities for the bulk of their research. Few colleges and universities rely on partnership programs with employers and unions for the bulk of their students, research opportunities, or curricular programs.

Inevitably, therefore, the individual who chooses to become involved in a partnership project is seeking to differentiate himself or herself from other faculty, administrators, or managers. Faculty in particular, because of the nature of college and university jobs and schedules, have time to pursue individual interests. These interests may take them into collaborative projects with populations (for example, migrant laborers, the unemployed, and welfare mothers) and organizations (for example, labor unions, civil rights organizations, community based groups of whatever kind) that represent interests frequently in opposition to the dominant business and political powers. Or, as is typical of business school faculty, the individual interest of the educator might be entirely consistent with the interests of the dominant political powers and aimed at improving the functioning of those dominant organizations. It is natural in these choices that the character of the partnership should take on the core attitudes of the individuals and organizations involved.

Thus in some cases the individuals initiating lower level partnership activities use them to differentiate themselves from their peers in hopes of improving their visibility and approval in the eyes of higher authorities. In other instances, by seeking collaborative projects with organizations not viewed sympathetically by those authorities, the initiators are challenging the powers that be. In either case the rewards of partnership projects are likely to

attract entrepreneurial, individualistic persons. But the style of motivation and action will differ dramatically.

Collaborative activities, it seems, imply a certain level of confrontational spirit, either toward one's peers mired in routine or toward other organizations whose structures and behaviors have created the conditions which the collaborative project is meant to overcome. The Rural Education/Adult Development in Idaho (READI) project is one example of a new partnership that is characterized by a lower level initiative "on the margin" of its institution. Housed in the Cooperative Extension Service of the University of Idaho, the READI project helps develop computer literacy in rural adults. Working with local businesses and community groups, the project identifies ways technology can spur economic development in isolated rural communities. From its inception the project has been a lower level initiative of one committed energetic person who is "on the margin" of the Extension Service and the University.

The level at which a partnership project is initiated and operated within an organization profoundly influences who conceives, who negotiates, who directs, who performs, who assesses, who represents, and who benefits from collaborative education-work projects and programs.

Depth of Collaboration

Eventually the question of who collaborates begs the question of how deeply felt within an organization are the values and practices of collaboration. Do partnership programs and, more to the point, the style and methods of reaching out to other organizations affect an organization and its members superficially or profoundly? Are such programs praised as examples for emulation or are they restricted to the periphery of institutional attention? Are they used as catalysts for change within the larger parent organization? Or are they used for public relations purposes to demonstrate a degree of outward-looking concern

while the rest of the organization is in fact shielded from the influences of their examples?

When used superficially, collaborative projects are not likely to be controversial. They do not challenge standard operating procedures and are likely to involve relatively few people. Scheduling, staffing, location, decision-making, assessment of results, and other matters requiring a sharing of viewpoints and authority among the collaborating organizations are carefully isolated to the collaborative projects. Implications for improvements in overall organizational performance are not discussed.

When used in more profound ways, the experiences of the organization in conducting collaborative projects are carefully examined for lessons learned. Standard operating procedures -- whether dealing with personnel, paperwork, remuneration, or other relevant topics -- are carefully reviewed and compared to those of other organizations. Inquiries about the project experience are encouraged. The board of trustees or directors is kept informed, and top officials are able to monitor the quantity and quality of the organization's efforts to establish and maintain collaborative relationships with other organizations. Members know that finding ways to work with other organizations is an acceptable means of solving problems.

An example of a new partnership that uses collaboration in a profound way is the Experienced Workers Re-Training Program of St. Louis Community College (MO). The program involves a local partnership of business, education, labor, and government to provide outplacement services to workers and employers affected by structural changes in the local economy. In addition to helping workers and employers, the project has had a profound impact on the relations

between the college and business sectors in the community, not only in delivering training programs that are responsive to business needs but in a wide range of other areas as well.

IV. SUMMARY AND CONSLUSION

There are no simple answers to the questions surrounding collaboration. A college or university that bases its curriculum on cooperative education programs, requiring students and perhaps faculty to leave the campus and work at intervals in non-education organizations, is not necessarily a "better" or more effective organization than a college or university with a standard curriculum. It may operate on collaborative principles and may do a better job of serving those students who seek theoretical learning with work experience, but all this is done with trade-offs of time and energy that could have been spent on a traditional classroom curriculum.

A corporation that contracts with a university for a joint research program on computers or cosmetics is not necessarily better or more effective than its competitor that prefers its in-house research team. A company that joins a consortium of firms in supporting human development projects is not necessarily wiser than a firm that persists in going its own way. A union that develops a collaborative research and training project with a local college may in fact be spending resources better used on other union projects.

Partnership programs start from problems. Collaboration is a strategy for solving problems. The concepts of partnerships and collaboration viewed in the abstract are only solutions in search of problems. The benefits resulting from collaboration must be self-evident before a partnership program is initiated.

By the same token, organizations faced with problems need to look beyond their own boundaries and the limitations of their own resources when searching for solutions. The partnership option should be considered on its own merits.

Who in an organization collaborates depends on much more than the personality and motivation of individuals. Opportunities to initiate and participate in collaborative programs are directly influenced by an organization's mission, the locus of the collaborative activity within the organization, the level at which the individual works and at which the project is initiated, and the depth of an organization's experience with partnership projects.

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