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ABSTRACT

Six exploratory papers by different authors from both the corporate sector and the public school systems present several relevant perspectives on business/education collaboration. The first, by Dr. Marsha Levine (who also provides the introduction to the collection), suggests three analytic frameworks for planning and implementing public/private ventures: (1) interinstitutional collaboration, (2) public-private partnership, and (3) a systems approach, relating schools to external organizations. The second, by Maurice Leiter of the United Federation of Teachers, takes a pragmatic view of public and private entities' shared reliance on a prosperous economy. The third, by Larry Cuban, a former school superintendent, identifies conflicting interests in corporate involvement with public schools, balanced by a shared concern for developing students' problem-solving skills. Richard Caldwell, in the fourth paper, identifies legal barriers to corporate involvement in public schools, the most significant being the question of equitable distribution of corporate resources in educational aid. The corporate view is presented in the fifth and sixth papers by representatives, respectively, of Control Data Corporation (Marcia Appel and Susan Schilling) and AETna Institute for Corporate Education (Badi Foster and David Rippey). The former sees computer-based education as requiring fundamental changes in the relationship among education, business, and government, while the latter describes AETna's external programs and establishes criteria for collaboration: accommodation, reciprocity, standards, and communication. (TE)

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BARRIERS TO PRIVATE SECTOR PUBLIC SCHOOL COLLABORATION

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INTRODUCTION

by

Dr. Marsha Levine
Education Consultant
American Enterprise Institute

Introduction

The 1980s have already been established as an era of concern about American education. In the spring of 1983 three major reports were presented to the nation on the condition of America's schools: the report of the National Commission on Excellence in Education, the report of the Education Commission of the States Task Force on Education and Economic Growth, and the Twentieth Century Fund report. Each of them details critical problems in America's public schools. Each makes recommendations for action to deal with the problems. Each notes the interest and concern on the part of business and industry. As is often the case with such reports, they make official the recognition of a problem already recognized and often already being addressed. Such is the case in education and specifically in the area of private sector involvement.

A number of strategies for private sector involvement in public schools are already being employed: the establishment of private foundations for financial support; partnerships between individual schools and businesses; local school system/industry collaboration; industry provision of training, internships and summer jobs for teachers and students; and administrative and financial management assistance.

The steadily increasing pace at which partnerships are being created at the local level, coupled with the issues raised by these national reports, has focused our attention on the question of what potential such collaboration really does have for improving the quality of public schools.

Accordingly, a public-private venture was undertaken by the American Enterprise Institute and the National Institute of Education. These organizations joined together in developing an agenda to examine one aspect of this question: The Barriers and Incentives to Private Sector Involvement in Public Schools. Six exploratory papers were commissioned by NIE and AEI. Authors were selected to represent several relevant perspectives on business/education collaboration. They include two corporate views, from the high-tech and service sectors of industry; those of a former school superintendent/academic; a state policy analyst/attorney; a teacher union official from a major urban school district; and a public policy analyst with extensive public school experience. The papers are intended to provide a springboard for discussion in a seminar held at the American Enterprise Institute. Participants include business and education leaders, policy analysts and decision-makers.

This introduction will describe a conceptual framework in which collaboration may be viewed, briefly summarize the commissioned papers, and comment on their similarities and differences. It will conclude with a summary of questions for research suggested by the authors.

Conceptual Framework for Business/Education Collaboration. Some view private sector involvement in public education as an example, among other private sector initiatives; of a renewed spirit of voluntarism in America. Critics of this concept question the usefulness of such initiative and see it as diversionary, drawing attention away from the scope and seriousness of problems in American public education. They

claim, correctly, that corporate voluntarism can neither fill the gap created by cutbacks in education budgets nor correct structural problems associated with school deficiencies.

Others view business/school collaboration in the context of public-private partnerships. For them, a reduced federal role in education creates the opportunity for more local and state decision-making and, along with that, an increased need for collaboration between the public and private sectors.

Still others stress the relationship between education and economic growth and emphasize the interests business and industry have in a well-educated workforce. In this context, education as human resource development is the focus of interest; some tension often exists between the goals of public schooling and these purposes of the private sector.

In reviewing the papers, it was not my intention to identify each of the authors with any one particular perspective. In fact, as I studied the papers, I noted that several authors acknowledge and use more than one framework in their discussions.

The paper on the conceptual framework for business/education collaboration which I prepared, develops these alternative perspectives in more detail. Additionally, it suggests to those involved with business/school collaboration that there already exist well-developed analytic frameworks which can be used for understanding, planning, implementing and evaluating these public-private ventures. Three such frameworks are suggested: inter-institutional collaboration, public-private partnership, and a systems approach which emphasizes the ways in which school systems relate to external

organizations. Each of the frameworks offers a method for identifying a particular cross-section of barriers and incentives.

The first perspective of inter-institutional collaboration focuses attention on the following elements: effects of environment and history, organizational factors, inter-organizational processes, and the roles of individuals and linking structures.

The second framework of public/private partnerships introduces a more specific set of issues and factors related to balancing private sector interests and public sector responsibility and addresses them in the arena of public schools. Three changes are identified as significant factors in the context of developing public/private partnerships in education. The first is the expanding definition of education beyond the traditional schooling in the usual time frames. This altered definition carries with it implications for shared institutional responsibilities and changes in public policy. Second, structural changes in the economy highlight the relationship between education and economic growth, emphasizing industry's interest in education. Third, demographic changes and a low level of public support for public schools create a need for alliances with the private sector if the schools are to be able to meet their human resource development goals.

The third framework focuses on schools as one system interacting with other sectors in society, i.e., community and industry. Changes in one sector affect functions in the others. Patterns have developed for relationships between schools and external organizations, and it is suggested that business/education collaborations can profit from examining those relationships.

While this paper offers a rather abstract description of these frameworks and suggests how they may be used, each of the succeeding authors employs some of these guidelines in his/her discussion of collaboration.

Summaries

Maurice Leiter, Director of Program Development for the United Federation of Teachers, takes a pragmatic view of relationships between public and private entities, business, labor, and government.. He draws on examples from history and experience in New York City for the development of a "logic of common interest". Today that common concern takes the form of a relationship between economic development and human capital formation and a recognition of the inter-relationship among the sectors and their shared reliance on a prosperous economy.

Leiter identifies the now familiar litany of incentives in the private sector, ranging from the benefits to corporations when they support livable, viable communities, to industry's concern for the skills of its workforce. The incentives are "human, practical, and urgent". From the public school perspective Leiter identifies the schools' reliance on a positive climate, community confidence, and solid relationships with the private sector. Schools can benefit immeasurably from the climate of support generated from a show of private sector involvement and interest in public education. This is as important as the gains associated with programmatic involvement: expertise, materials, resources, and perspective. Additionally, Leiter identifies the intrinsic incentives associated with

collaboration: "satisfaction, a sense of purpose and accomplishment, a feeling that people can make a difference, an awareness and respect for partnership and collaboration." In reviewing these incentives, Leiter concludes, with all due respect to the benefits of programmatic involvement, that the private sector can have its greatest impact at the public policy level through support of budgets which "represent a real investment in schooling."

Leiter discusses barriers to business/education collaboration, and related biases, on the implementation and policy levels. On the policy level, he identifies some issues which arise when corporations find themselves at cross-purposes in their desire to improve human capital development and support public schools, which may conflict with their corporate policies related to fiscal restraint. Attitudinal barriers and stereotyping are also raised as obstacles to be concerned with in collaboration. Implementation barriers are addressed, and Leiter points to the need for familiarity and communication across sectors. He details organizational differences and emphasizes the importance of dealing with differences in purpose which he sees as central or core barriers. He advocates an "honest airing" of these differences--necessary if collaboration is to move forward. Leiter provides us with a 'stereotype' and a 'prototype' for business/education collaboration. The stereotype offers lessons to be avoided. The prototype meets the criteria he defines as characteristic of successful collaboration. Leiter concludes with a set of questions for future research which should be addressed, with the implication that further exploration is worthwhile.

* * * * *

Drawing on his own experience as a school superintendent in Arlington, Virginia, Larry Cuban begins his paper with a brief historical analysis of corporate involvement in public schools. He identifies a set of unresolved issues which persist today. Changing the focus to California (where he is now a professor at Stanford University), Cuban challenges the assumptions which he feels underlie the California Roundtable recommendations for school improvement: that a lack of appropriate training in high school causes unemployment; that improving high school performance on tests will produce better-trained graduates; that state mandates and better teaching will improve high school academic performance; that high technology needs demand major curricular changes in the high school.

Although Cuban questions the validity of these assumptions, he does not conclude that corporate sector involvement has no potential for improving the quality of public schools. Rather, he argues, in support of the fifth assumption of the Roundtable, that business support can play an influential role in helping to restore confidence in public schools. Cuban views lack of public confidence as critically disabling to schools and school personnel. He sees business as an important political ally to education, and the development of corporate/school coalitions as promising evidence of the potential impact business can have.

While acknowledging the important impact such support may have, Cuban identifies the conflicting interests encountered by corporations concerned with both school improvements and corporate fiscal interests, or the conflict between short-term labor needs and long-term national interests. Cuban suggests that such conflict can be

transformed into a struggle over core issues; or they may be side-stepped altogether by concentrating on peripheral programs. He indicates that such a struggle might be beneficial to schools but not without costs.

Cuban cautions against over-simplification of the problems associated with improving school outcomes. He emphasizes the importance of addressing needs in elementary schools as well as at the high school level if we are to be able to truly affect the quality of our high school graduates.

In addition to the potential for raising public confidence, Cuban sees corporate concern for thinking skills--or problem-solving skills--as an important objective and one which is shared with the schools.

He concludes with a note of skepticism: Can business involvement improve the quality of education if actions are predicated on questionable assumptions about what will work?

* * * * *

Badi Foster and David Rippey take a corporate view of business/education collaboration. They approach the issues from the dual perspective of corporate education and training and corporate public involvement. As recently transplanted academics in the corporate community, they highlight the contrasts between educators and business people in education philosophy, policy, and practice. They draw heavily on the example and experience of AEtna Life and Casualty and specifically the newly formed AEtna Institute for Corporate Education where Foster is president.

Their purpose is to describe the process of collaboration from a corporate perspective. They do this first by developing a picture of

corporate education and training. Foster and Rippey note that AEtna, as any other corporate entity, does not have education as its central mission. Corporations view education as a means to an end; schools on the other hand have education as their central purpose. They discuss a number of internal or organizational factors which affect corporate education and go on to environmental factors affecting a corporation's involvement in public schools.

AEtna involvement in education outside the corporation is organized in three ways--through the Institute, through a School/Business collaborative, and through its Office of Corporate Public Involvement.

The authors describe AEtna Institute's External Programs which are perceived as integral parts of AEtna's human resources development and corporate public involvement strategies. The goals of these programs are internally and externally focused. They provide us with a set of conditions which they describe as necessary for corporate involvement in such an external program.

Their criteria for collaboration establish a corporate perspective on business/education partnerships. The emphasis is on process: accommodation, reciprocity, establishment of standards, communication. They stress the importance of timing, momentum, simplicity of organization and complexity of problem. They recognize the need for establishing neutral turf, the role played by intermediary organizations, and the nurturing of relationships. In addition, they recognize the internal requirements within an organization which facilitate their ability to collaborate with external organizations.

* * * * *

Richard Caldwell's paper on legal barriers to corporate participation raises a set of issues which, to date, are not commonly associated with business/education collaboration. Caldwell is an attorney and Director of Public Affairs at the University of Denver.

In his view the most significant legal barrier to corporate involvement in public schools will be "the problem of finding mechanisms for the fair and equitable distribution of corporate resources in aid of education." The equalization of educational opportunity has been the focus of education policy for the past twenty-five years. The elimination of segregation and disparities in school finance have been the object of "intense litigation." Caldwell contends that corporate involvement may "well be likened to a kind of 'finance', i.e., funding of a new type that could be subject to judicial review by active courts."

Questions of appropriateness abound on both sides. From a legal perspective, can schools accept such support? How do you deal with the question of inequity from a business perspective? Is it appropriate for corporations to be in the business of giving resources away? These questions may be raised concerning the establishment of private foundations in support of public schools as well as in the creation of partnerships. Caldwell identifies the possibilities of a tension between a state's concern for the right to equality of education and its concern for establishing education policy which will promote economic development and productivity. Caldwell further identifies the need to consider such legal issues in a broad social framework--one which encompasses the relationship between education and economic

growth and which considers the possibility that it may require coordinated public-private action.

* * * * *

Research Agenda. Each of the authors addresses the question of needed research. Taken together, they represent an ambitious agenda for both the private and the public sector.

Foster and Rippey advocate the establishment of a well-developed historical perspective to serve as an incentive to action, as well as to avoid duplication of effort. Also, they address the particular issues related to research on public/private collaboration. Research should be useful and useable by both sectors. This may necessitate the development of new research models to accommodate the different ways in which each sector uses research and conducts it. They raise the possibility of collaborative research with the appropriate adjustment. As topics for theoretical research they include conceptual or policy issues; and for action research, their agenda includes the identification of working models for planning and management, implementation, and evaluation.

Caldwell suggests that we need to examine the social framework which may shape the law concerning equitable distribution of resources to the public schools from the business sector.

Leiter's research agenda includes policy questions: How can contradictions of purpose be dealt with? What is the Federal role in facilitating corporate involvement in public schools? Are there outcomes possible only through collaboration? Is programmatic institutionalization possible? Are collaborative programs cost-effective? What changes in the perceptions of corporate leadership can be

identified with private sector involvement in education? What are the effects of internship programs on teachers' expertise, knowledge, commitment to teaching? Leiter also suggests some basic data-gathering on the value of investment being made, the distribution of resources and money, the tax implications and the effects of corporate giving to education on other areas of corporate social responsibility.

Cuban's skepticism about the assumptions made by business as to how they may improve the quality of schools implies a research agenda. The questions are familiar but nonetheless critical. What is the relationship between school achievement and unemployment? How can we maintain a balance among the agendas of parents, professionals, taxpayers and business in developing school policy? What are the curriculum changes in the high school required by high technology? What models exist which are effective in developing teachers' abilities to develop thinking skills in their students? Also, the potential Cuban sees in the ability of the private sector to raise confidence and the level of public support for the schools would be stimulated through the identification and description of successful coalitions which have lobbied successfully in support of the public schools.

* * * * *

Conclusion. The set of papers is instructive for the similarities as well as the diversity represented. Although they do not include the views of all relevant constituencies (e.g., the parent/citizen groups or Federal policymakers), they do represent the business and education sectors from a number of perspectives. It is hoped that they will

serve as a springboard for discussion among others representing a broader range of interests.

The authors raise similar concerns about conflicting interest and cross-purposes. They identify organizational and inter-organizational barriers; they see a range of possible outcomes of private sector involvement in public education.

While each of the authors recognizes important differences between industry and schools, they tend to think about those differences in ways which themselves reveal differences. The corporate perspective tends to acknowledge the differences and emphasizes processes for coping with them. The academic view tends to emphasize the differences as barriers. Labor sits somewhere in between, with perhaps the most pragmatic view of collaboration.

Whether or not the reader agrees with this analysis or with the views expressed by the authors themselves, it is hoped that he will want to examine his own perspective on collaboration and share his views in an instructive interchange.

BARRIERS TO PRIVATE SECTOR/PUBLIC SCHOOL COLLABORATION:

A CONCEPTUAL FRAMEWORK

by

Dr. Marsha Levine
Education Consultant
American Enterprise Institute

April 30, 1983

The views expressed are those of the author and do not necessarily reflect the opinions of the scholars, trustees, or staff of the Institute.

BARRIERS TO PRIVATE SECTOR/PUBLIC SCHOOL COLLABORATION:

A CONCEPTUAL FRAMEWORK

Introduction

Events of the early 1980s have emphasized the strategic importance of education in America's economic development and have placed education high on the nation's agenda. At least three dramatic changes in the American economy point toward greater dependence of business and industry on the quality of the public schools.

First, global competition will increasingly require American industry to work smarter, faster, and more efficiently. In order to do this, employees need to be able to adapt to technological change in the workplace.

Second, a shift in our economic base from smokestack industry to information-based, high-technology industry has created an increasing demand for better educated workers with knowledge and skills in mathematics, science, and technology.

And third, in order to maintain our leadership position in these ~~new industrial areas we are dependent upon highly skilled individuals~~ to keep us on the "cutting edge" of new technologies through research and development.

Increasing attention is being directed toward understanding the relationship between education and economic growth and documenting the costs of educational failure. Business and industry, recognizing their dependence on the output of the public schools, are seeking ways to affect quality in public education. Business/education collaboration represents one such attempt.

It may be no coincidence that at the same time that business and industry, in self-interest, are asking how best to improve American public education, there are signs of positive change in the schools themselves: higher standards are being reintroduced; requirements for promotion and graduation are being reconsidered; and student performance levels in some areas are going up. Such signs of encouragement are evidence to the outside community that efforts toward improvement are worthwhile. They offer a seriousness of purpose to the questions central to this paper: What is the potential for private sector/public school collaboration? Is it a viable way of improving the quality and relevance of public education? What are the barriers to its success?

The objective of this paper is to increase our understanding of the potential of such business/education partnerships or collaboratives by suggesting three frameworks through which they may be considered.

The first way of looking at private sector/public school partnerships is through the conceptual framework of inter-institutional collaboration. The most general framework of the the three, it provides us with a way of assessing these joint ventures. The second framework is that of public/private partnerships. More narrowly

focused, this framework presents a set of questions and raises a group of issues related to balancing private sector interest and public sector responsibility in the arena of public education. The third framework to be applied is that of a systems perspective: the interaction of schools, workplace, and community. In this last view we will concentrate on school/business partnerships as one example of how schools relate to external organizations generally.

These three frameworks provide an increasing degree of specificity. There are obvious overlaps in issues and approaches, but each framework adds a perspective of its own. They each offer the opportunity for useful insights about business/education partnerships and are suggested as fruitful areas for further examination. Examples of how the frameworks can be applied to existing collaborations should illustrate their utility and encourage further, more in-depth analysis.

Before applying these three frameworks, however, a few words are in order about collaboration as a strategy--its peculiar strengths and its potential for achieving the ultimate goal of improving public education.

Forms of Collaboration Corporations are involved nationally in collaborations or partnerships with public school systems providing financial support, links to community resources, curriculum development, teacher development, advisory and planning assistance, and budget and management expertise.

These activities have several purposes: to facilitate school-to-work transitions; to develop career awareness; to encourage business, economics, or free enterprise education; and to strengthen

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general, basic education, as well as curriculum in specific areas of science, mathematics, and technology.

Involvement takes many forms: adopt-a-school programs, curriculum development projects, teacher in-service programs, participation in magnet school development. Some have short-term objectives; others reflect long-term commitments. Some collaboratives are initiated by the school systems, others by corporation or universities. A considerable number of collaboratives are the result of court mandates related to desegregation decisions. Collaboration in Boston, Cleveland, Los Angeles, Denver, Dallas, Providence, and Buffalo are the result of such court orders.

It is important to recognize at the outset that collaboration between industry and public schools is just one of several strategies which may be employed by the private sector in an effort to affect the quality of public schools. Other strategies include direct funding through corporate donations and political support through lobbying for public funds and supporting legislation. Additionally, the adoption of corporate policies which encourage parent and citizen volunteer activities may provide support for public schools without requiring direct institutional involvement.

Collaboration here is defined as relationships between organizations, involving sustained interaction between members of each organization and including the identification of shared and agreed upon goals.

Collaborations or partnerships have taken many forms. Further application of the conceptual frameworks identified in this paper should be helpful in understanding why some forms are viable where

others may not be, and why some forms of collaboration arise where and when they do. Additionally, they should assist us in understanding how the characteristics of any collaborative may determine its limitations.

Partnerships or collaboratives are different from other strategies for private sector involvement in their requirement for direct interaction between the corporation or business and the schools. Herein, perhaps, lie their greatest strength and also the source of their greatest problems.

In terms of potential, collaborations can produce two critical changes which go to the heart of school-to-work transition problems. The first change is to counter the isolation of schools--an isolation that is felt by the individual classroom teacher and which typifies the policy-making process at all levels. This isolation is detrimental both to schools and to the complex systems which influence economic growth. While the systems may labor inefficiently but more or less adequately during stable periods, times of crisis emphasize weak linkages. The enormous education demands of an economy in transition from a manufacturing base to an information/services base cast in high relief the need for education/private sector collaboration. Public education needs much closer ties with the economic community if it is to successfully achieve its goal of human resource development. Similarly, business, industry, labor, and commerce cannot address the requirements for growth and increased productivity without considering the resources of education and the responsibility of the education community for policy, planning, and implementation. Collaboration, therefore, achieves the dual purpose of moving

education out of isolation and involving it as a strategic component in economic planning.

A second and related change which collaboration may facilitate is the improvement of communication between schools and the private sector. There are at least two purposes for improved communication. The identification of skills and knowledge required by employers is one of the most important things to be done in bridging the gap between education's outcomes and industry's needs. The communication of this information is critical. There are significant problems associated with what gets communicated and how this is accomplished. Collaboration or partnerships may represent the opportunity to establish effective, ongoing linkages which would ensure this necessary communication.

Another aspect of improved communication through such collaboration is the direct effect it can have on students. Up front, visible corporate sector involvement in public schools can link students to the reality of the workplace and provide the critical connection between what happens in schools and what will be required on the job. The importance of these changes cannot be overstated. Reduced isolation and the strategic involvement of education in economic development, together with the establishment of strong communications links between schools and the private sector can lead to significant changes in both education and industry.

The Framework of Inter-Institutional Collaboration

The Literature A considerable body of literature already exists on collaboration between institutions. Some of it has focused on

relationships between educational institutions.¹ The frameworks for looking at these inter-organizational relationships offer a valuable, systematic way of viewing business/education partnerships. They focus our attention on the following elements of collaboration:

- o Effects of environment and history.
- o Organizational factors which serve as support for or barriers to initiating or sustaining collaborative relationships. For example, the organization's ability to assess its own needs and resources, its ability to coordinate with another institution, its attitudes or inclinations toward such collaboration, its awareness of opportunities for collaboration, the structural factors in the organization for decision-making, implementation, and evaluation.
- o Inter-organizational factors--for example, the processes involved in collaboration: negotiating, initiating, compromising, and the dynamics of power and dependence and the process of exchange.
- o Roles played by individuals as linkers or brokers, mediators, and champions.

Researchers emphasize the importance of one or another of these factors. For example, Whetten's review of the literature (1981) emphasizes the organizational factors involved.² Aiken and Hage (1968), in contrast, focused on the environment.³ The latter point to the influence of periods of crisis, scarcity, and declining resources in the formation of collaborative relationships. The work of Schmidt and Kochan (1977) describes a more complicated basis for

inter-organizational collaboration which is based on hierarchies of needs and resources available, and emphasizes negotiation and exchange in combination with power and dependency roles.⁴

In her work on inter-institutional research arrangement, Levinson identifies certain predisposing organizational factors and environmental factors which have obvious relevance to the relationships we are discussing: configuration of declining or scarce resources, the existence of networks of informal linkages; and in organizations: awareness of resource acquisition opportunities, access to alternative resources, need for additional resources, consensus regarding the legitimate domain of each organization and the appropriate domain of the inter-organizational arrangement, and the presence of an inter-organizational champion.⁵ Levinson's review of descriptive studies and case studies of successful inter-organizational arrangements supports the significance of the "champion". Timpane's descriptive study of public school/private sector collaboration similarly points out CEO commitment as a critical element in successful collaborative efforts.⁶ Informal interviews reported by Levine and Doyle also support this view.⁷ Similarly, Chin and Associates, in their case studies of three urban university/school collaboratives, identify the role as significant.⁸

The following sections will consider business/public school partnerships from perspectives identified in the literature on inter-institutional collaboration.

Environment and History. The circumstance under which collaboratives are formed may have a great deal to do with their structure and their potential for success. Timpane noted that many collaboratives came

into being when some major event, involving the schools, threatened the stability of the community.⁹ The business community responds often by taking action to maintain stability. Desegregation is the most frequently cited event of this kind. While the threat to stability may serve as a stimulus to collaborative efforts, the process for determining involvement can affect the way in which each institution perceives its own role and the purposes for collaboration. For example, Chin and Associates indicate that court-ordered collaboration in Boston had the effect of rendering the school participants powerless in their own perception. This self-perception of power is thought to be a key factor in the potential of such inter-organizational arrangements.¹⁰

From an historical perspective, school/business relationships have ebbed and flowed over the past seventy-five years, driven largely by industry's needs for trained, skilled workers. The development of vocational programs and the career education movement are two major outcomes of business/school interaction in this century. Each was attended by major debates over appropriate goals for education and concern about the motivating self-interest of the business community.

The present environment for business/school partnerships must be distinguished from the past in several important ways. First, concern on the part of the business community about the relevance and quality of school outputs comes at a time of record setting, low public support for the schools. Second, increasing costs of social services and demographic changes have placed public schools in a non-competitive position for public funding. These two factors present obstacles to the formation of balanced partnerships in the sense that they put the

schools at a power disadvantage in negotiations. However, they are all the more reason for the creation of partnerships which can encourage public support and provide leverage for increased funding. There is a third factor, however, in the environment which is most supportive of partnerships. Whereas past efforts toward business involvement in public schools have been criticized by some as attempts to vocationalize the curriculum, the concerns of industry today about school curriculum run parallel to, if not identical with, the academic goals of the schools. Structural changes in the economy and the now familiar demographic changes we are experiencing are resulting in a convergence of interests and objectives among educators and business people. Basic skills, science, mathematics, computer literacy, and higher level thinking skills and problem-solving abilities are the focus of both sectors' curricular goals. A reduction in the size of the available workforce makes the development of skills and knowledge in all students an industrial concern.

Although broadly defined, these environmental factors operate at the local level where partnerships occur. They are important to any consideration of incentives and barriers to collaboration.

Organizational Factors Schools and school systems are quite different organizations than businesses or corporations. Anyone who has worked in both settings will testify to differences which, for the purposes of collaboration, are very important. These factors can be grouped into three categories: those which affect the way people work and work gets done in the organization; those factors which determine the organization's ability to collaborate successfully with another organization, and those which characterize or determine the

organization's philosophy or perception of education, which is, after all, what the collaboration is all about.

The most basic difference between schools and businesses is their very different view of education. Corporations view education as a means toward an end. For schools, education is a goal unto itself. Corporations will provide, support, and encourage education and training insofar as it serves the basic goal of the business: to maximize profits and serve the shareholders. Additionally, once corporations have determined involvement in education is necessary for their purposes, corporate goals and philosophy will determine educational practices and policies. Corporate educational programs are likely to reflect business' concern for output or products. This is in contrast and can be in conflict with the traditional stress placed on process by educators.

Schools and business differ in the way in which people work and the way work gets done. These differences can also affect the success of collaboration. For example, the literature of educational organization identifies the "loosely coupled" nature of school systems.¹¹ This refers mainly to the lack of coordination among work groups in the organization. This structure has been contrasted with that found typically in business organizations. Corporations often are coordinated tightly around technical production systems with performance control based upon operational standards of productivity. Public schools typically lack such bases of coordination and control.¹² Teachers generally work as individuals in isolation. There are few rewards for being a "team player" in a school. Employee exchanges between schools and industry must be sensitive to such differences.

Collaborative efforts involving school personnel and corporate employees must be aware of differing expectations.

The ability of an organization to assess its own needs and resources will determine in an important way how it perceives its role in a partnership. The importance, utility, and practicality of the goals it determines will be affected by this ability.

The Honeywell Corporation/Minneapolis Public School experience serves as an instructive example of collaboration developed with these factors in mind. It represents a project mutually arrived at through independent organizational decision-making processes. The decision to collaborate on the planning, development, and implementation of Summa Tech, a science and technology magnet high school, was the result of strategic planning in both the schools and the corporation.¹³

Viewed as a developmental process, the partnership involves a full range of resources provided by both sectors--financial, staff, material, and facilities. This ability of the Minneapolis Public Schools to assess its own resources and needs (developed through a strategic planning project corporately funded) is an organizational factor cited in the literature as a requirement for successful collaboration. Similarly, the Washington, D.C. Public Schools' plan for business/education collaboration provides an assessment of school system resources which the schools bring to the developing partnership.¹⁴

An organization's ability to coordinate with another institution (an additional factor for success) is affected by the decision-making process used in the organization. The time-lag caused by the bureaucratic process in school systems, in contrast to the quick turnaround

in some corporations, itself constitutes an organizational barrier encountered in collaboratives.

Enough anecdotal evidence exists to suggest structural differences are important factors in collaborative efforts. Secondary analysis of the literature on school and corporate culture and structure would identify the areas of potential strain and suggest strategies which would take such differences into consideration.

Inter-organizational Factors. The processes of communication, negotiation, initiation, compromise, exchange, and feedback are all a part of the collaborative relationship. How successful a school system or a corporation is in carrying out these processes is in part a function of its own characteristics. However, these processes may be greatly facilitated by inter-organizational structures. In some situations, such linking structures have been developed specifically for this purpose. For example, the Honeywell/Minneapolis Public School Summa Tech Project created its own organization of joint committees and created a jointly funded position of broker or facilitator for the project.

The Atlanta Partnership of Business and Education, Inc. is a non-profit corporation including well over one hundred businesses and higher education institutions. The partnership was organized to facilitate joint programs in the Atlanta school system. The three largest programs are Adopt-A-School, Magnet Schools, and Job Placement.

Alternatively, collaboratives have utilized already existing linking structures or organizations with the potential of serving as linking structures. The Allegheny Conference on Community Development

in Pittsburgh was established in 1944 to serve the corporate leadership of Pittsburgh in carrying out its civic agenda. It had a long history of brokering relationships between the private and public sector before it became actively involved in corporate sector/public school collaboration. With a history of success in regional economic development, the Allegheny Conference had the confidence of the community as well as the established networks or linkages for communication. The strategy for collaboration they have used is to focus on special programs and policy development assistance aimed at improving school quality.¹⁵ Activities of the Allegheny Conference range from involvement in the creation of a magnet school program and implementation of a school desegregation program to the administration of a mini-grant program which provides direct grants to classroom teachers for innovative projects. The Conference links the school system, education organization, and citizens' groups with the business community of Pittsburgh.

The Boston Compact, a major initiative undertaken by the public schools, universities, business community, and city government, was developed in part through the efforts of the existing Private Industry Council and the Tri-Lateral Council. These networks played an important role in the development of the plan and should be critical to its successful implementation.

The goal of the Boston Compact strategy is for business involvement to improve the quality of Boston's public schools by re-focusing resources within the existing system, leading to a general rise in the quality of education. The Boston Compact is targeted on building changes into the school system which are not dependent on outside

funding, which is always viewed as "insecure and peripheral". It is a strategy directed at incremental improvement through a systemic change in the school system: a movement toward more instructional and financial authority at the building level.¹⁶ In contrast, the Houston Independent School District Business/Education Partnerships and the Washington, D.C. Business/School Partnership focus on developing islands of excellence through targeted program development.¹⁷ They represent quite different collaborative strategies, and they raise a number of questions for researchers: How are strategies arrived at? What influences the choice of strategy? What is the effect of history or environment on such choices? What role do existing linking structures play in the choice? Are linking structures necessary? And finally, what is the role played by individuals in the process?

The Role of Individuals The literature of inter-organizational collaboration and anecdotal case studies emphasizes two points about individuals in the collaborative process. First, individuals create partnerships; institutions do not. Second, successful partnerships require an advocate or "champion" who plays a vigorous, visible, and persistent role in the processes of initiating, planning, and implementing collaboratives.

The Committee for Economic Development calls such individuals "civic entrepreneurs" in the area of public-private partnerships for economic development. They cite as examples James Rouse, the developer of Harbor Place in Baltimore and Quincy Market in Boston; Ted Kolderie, executive director of the Citizens League of Minneapolis-St. Paul; Sister Falaka Fattah in Philadelphia (instrumental in reducing

juvenile crime in that area); and Mayor Tom Bradley of Los Angeles.¹⁸

In private sector/public school collaboration, educators or business people may play the role of champion. The effectiveness of such urban school superintendents as Billy Reagan in Houston, Floretta McKenzie in Washington, D.C., and Alonzo Crimm in Atlanta is known nationally. In the corporate sector, Fletcher Byrom of Koppers Company and Frank Cary of IBM are just two who have been visible spokesmen for collaboration. Detailed case studies should include a close look at the role of the advocate--What influences him to act? What conditions support his action, and what conditions impede him?

The Framework of Public/Private Partnership

A second, and somewhat less general way of viewing collaboration between the private sector and public schools is as an example of public/private partnership.

This framework introduces a more specific set of issues and factors which may act as barriers or incentives to the formation of such partnerships.

Parameters for Partnerships. From the corporate perspective, a set of guidelines exists for what may be considered appropriate public involvement. A recent study on public/private partnerships by the Committee for Economic Development defined two principles which frame public/private interaction. First, it is not in the self-interest of corporations to engage in activities which are counter to the public interest, as defined through a political process. Second, whatever corporations do in the way of public/private partnership needs to be

defensible to the stockholders, employees, and customers of the corporation or business.¹⁹

These guidelines set the parameters for public/private partnerships but do not themselves constitute either barriers or incentives.

Public/private partnerships in education raise issues specific to our philosophy and beliefs regarding the purposes of public education. How private sector involvement affects education decision-making as a political process should be included in any research designed to fully understand the implications of partnerships with the private sector.

For the past one hundred years the provision of universal public education has been highly regarded as a societal value in this country, founded on the belief that an educated citizenry contributes in an important way to the public good. Responsibility for the enterprise was and is largely in the public sector. Indeed, conflicts over control and policy, especially in recent decades, have occurred within the public sector among the levels of government--federal, state, and local.

However, more recently several important changes have taken place which have broadened the focus of education to include relationships between sectors--public and private--principally at the local level.

Basically three such changes can be identified. First is the growing need for a redefinition of education, expanded beyond our notion of traditional schooling accomplished in the traditional time frame, to include the activities and impact of home, workplace, church, and community occurring over a life time. This expanded definition carries with it implications for shared institutional responsibilities and for changes in public policy.

Second, structural changes in the economy have highlighted the relationship between education and economic growth and have resulted in an increasing awareness of education as an investment in human resource development. This conceptualization emphasizes industry's interest in education and carries with it an array of possibilities for policies and practices, public/private partnerships being just one example.

Third, although a changing economy and a technological revolution are making substantial substantive demands on the public schools, which require expertise and increased financing, they do so at a time when changing demographics and low public support result in continuous challenges to public school.

These changes and needs for a basis for our consideration of private sector involvement in the public schools.

Environment for Public/Private Partnerships The above conditions or changes may serve as incentives to the formation of partnerships. Although limited financial resources and limited institutional capabilities may indeed encourage partnerships, they do not necessarily create an optimal environment for them. Partnerships require a balanced perception of resources and needs. Public/private partnerships in education are not meant to fill the gap created by cutbacks in federal or state budgets. Nor are they expected to solve the problems of America's public school systems. Rather, they are creative responses to meet needs which require coordinated action in the public and private sectors. Joint ventures can establish linkages at the local level between educators and the private sector. These linkages will facilitate the kind of communication which is necessary

if schools are to provide quality education relevant to the economic needs of the nation.

Corporate Perspective When looking at public/private partnerships from the corporate perspective, a series of questions should be raised:

- o Why should corporations be involved in public interest concerns, and specifically why should they be involved in public education, particularly?
- o What does involvement in a partnership require in terms of corporate capabilities?
- o What are the different ways corporations can be involved in the public interest?
- o What, if anything, is required at other than the local level to facilitate private sector involvement?

Considerable attention has been directed toward developing answers to the first question. Industry has become increasingly more aware of its dependence on the economic and social health of the communities in which they do business. Corporate social responsibility has been the subject of debate among the nation's business and civic leaders and has been the focus of a number of reports and studies.²⁰ Some view the long-term viability of the business sector as directly linked to corporate responsibility to society. An important element in the health of the community is the quality of the public schools. The link between quality education and corporate self-interest has also been written about recently in some detail. The Center for Public Resources survey on corporate requirements in basic skills provides specific information on an area in which the outcomes of schools are directly linked to the efficiency of industry.²¹

With regard to the corporation's capacity to carry out a partnership with the schools, several points can be made. Successful

involvement requires the integration of commitment with the management and decision-making structure of the corporation. Corporate/school partnerships require corporations and schools to adequately assess their needs and the resources they can bring into the relationship. A partnership must have the support of the top corporate leadership and must be viewed as an activity tied to the bottom line. As such, it requires the establishment of standards and evaluation criteria for the purposes of accountability.

The third question raised from the corporate perspective concerns how corporations can become involved in the public interest. The focus of this paper is on collaboration or joint ventures. They represent just one strategy. Corporate sector initiatives, unilaterally undertaken, are another form of involvement in the public interest. A good example of this type of corporate initiative is the creation of private foundations in support of public schools. In California, private, non-profit, tax exempt foundations have proliferated throughout the state. Large corporate donors to public school foundations include The Bank of America, Corning Glass, and Levi Strauss. The Allegheny Conference, a business group in Pittsburgh, has provided a model for business-funded foundations for public schools which is being replicated all over the country with the assistance of a Ford Foundation grant. While joint ventures between schools and industry provide much needed communication between sectors and sometimes offer the opportunity for resource exchange and development not possible in any other way, corporate foundations have the advantage of side-stepping some of the barriers identified in inter-

institutional collaboration. Additional study of the potential and the problems related to such foundations should be carried out.

The final area in this corporate perspective is the question of government support for public/private partnerships. Generally, government can facilitate such relationships by removing identified barriers and providing incentives and supportive programs to such partnerships. There is currently a plethora of bills on the Congressional agenda addressing the crisis in science and mathematics education. Among the measures being championed are incentives to private industry for the donation of capital equipment to schools, the hiring of teachers for summer employment, and the allocation of employees as resources to schools for teaching and curriculum development. Donation of funds to public schools already carries with it a tax benefit. Although not any one measure will solve the problem, implementation of such incentives can assist in its solution and create a supportive environment to public/private cooperation.

Public School Perspective The condition of education in the public sector has been described and discussed at length in the media and in professional and public forums. However, it is not a universally accepted notion that public education stands to gain from carefully crafted partnerships with the private sector. One must be continuously aware of the arguments typically levied against such involvement, for these concerns are central to safeguarding the purposes of public schooling. The two greatest concerns, however, have been somewhat ameliorated by the current environment. The much-feared vocationalizing of the curriculum, perhaps a real concern in the past, has less relevance today as the needs of industry and the academic

goals of schools continue to merge. Similarly, the demographic view of the future workforce, heavily minorities and women, places industry's interest in a well-educated employee squarely in line with public education's commitment to equality of opportunity.

And finally, a provocative thought on the appropriateness of public/private partnerships in education. Conventional wisdom holds that when the private sector fails to provide goods and services that society values, government may intervene. Would not the converse of that be that when government fails to provide goods and services valued by society, the private sector may appropriately intervene?

Relationships Between External Organizations and Schools

The third and final framework for understanding private sector/public school collaboration is based upon what we know about relationships between schools and organizations external to them.

This framework employs a systems approach. The limitations of this paper permit only the suggestion of some issues such a framework would raise. The perspective is one which is worth exploring, however, because it emphasizes the interrelationship between schools, community, and the private sector. When changes occur in one sphere, they have impact on the others and create the opportunity, and some would say, the need for interaction.

Business and industry, community-based organizations, churches, parent and citizen groups are organizations external to the schools but within the schools' field of influence. They each have central purposes and goals quite apart from schools, but their ability to

function may be affected by schools. Additionally, they may become practical allies of schools from time to time.

Critical events in schools seem to draw external organizations into relationships with them. Desegregation, financial crises, the establishment of minimum standards, or the pursuit of excellence seem to have this effect.

Perhaps the greatest value of this perspective is that it emphasizes the interrelationship of schools with other sectors of society. The tendency to think of education as an isolated and separate enterprise and therefore to try to solve its problems independently, has been too often characteristic of education policy-makers. The isolation of schools handicaps them as workplaces for teachers and administrators and as institutions of learning for students.

In examining relationships between schools and these external organizations, certain factors emerge as barriers to successful collaboration.

To begin with, external organizations may experience the professionalism of educators as defensiveness, which presents a formidable barrier to joint ventures. Such defensiveness springs from two very real sources. First, certain turf issues get in the way of external organizations working with schools. Control of such issues as credentialing, curriculum, and methodology fall into this category. Second, the episodic nature of such involvements--the "here today, gone tomorrow" phenomenon affects the nature of relationships and the expectations which school people hold for them. Educators do not expect long-term sustained involvement from an external organization because that is what they have experienced in the past. As a result,

they may limit their own efforts and participation in a collaborative. Any real change in schools requires a supportive posture from both institutions sustained over time. Time is a necessary factor for success. Schools may be leery of collaboratives which may easily be dropped from a corporation's agenda. Another requirement for success is that the process of collaboration allow for a feeling of ownership by all participants. The bureaucratic nature of public schools and some large corporations creates environments which do not encourage ownership. This, too, can be an obstacle to the collaborative process.

Additionally, relationships between external organizations and schools must be organized around a specific, mutually defined and accepted purpose. General goals are more likely to bog down in the implementation process. They only serve to heighten organizational differences in structure, style, and perspective. Specific goals must be framed within the context of the assessed resources and needs of the institutions involved. The purposes thus defined will in turn determine the nature or kind of involvement.

Perhaps more than the others, this framework permits us to identify the limitations of business/education collaboration. It does so because it deals most specifically with the nature of schools as an interacting system. It is the most pragmatic of the three.

Conclusion

The purpose of this paper was to suggest conceptual frameworks which can be helpful in addressing the question of whether public/private collaboration offers a viable approach to improving the quality

of public education. First, collaboration was defined and identified as one of several possible strategies the private sector might employ in its involvement with public schools. Certain characteristics of collaboration make it potentially a very effective form of involvement--i.e., reducing the isolation of schools and establishing structural links for communication between sectors.

Three conceptual frameworks were then suggested which provide useful ways to think about private sector/public school collaboration: the frameworks of inter-institutional collaboration, public/private partnership, and a systems approach. Each of the frameworks was described, and it was suggested that each of them offers a method for identifying a particular cross-section of barriers and incentives to business/school collaboration. Examples of how one might look at a partnership program from each perspective were given.

The conceptual frameworks suggested here offer three different perspectives for examining private sector/public school collaboration. The insights to be gained from applying these frameworks would be very useful. However, a word of caution concerning their use is necessary. Business/education partnerships are pragmatic ventures; While conceptual analysis may inform the process and bring important issues to the surface, it should not be confused with the process itself. Analysis itself should serve that process in ways appropriate and useful to the participants and their goals.

In going about the business of creating partnerships in education, we must bear in mind that the goal is a mutually beneficial relationship. It would be counterproductive to become bogged down in conceptualizing collaboration. The frameworks offer assistance,

especially in policy areas. But partnerships occur in the realm of practice, and for the practitioner conceptualizations may be "too thick to navigate and too thin to plow."²²

Endnotes

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- 2 D.A. Whetten, "Interorganizational Relations: A Review of the Field," Journal of Higher Education, 1981, Vol. 52, No. 1, 1-27.
- 3 Michael Aiken and J. Hage, "Organizational Interdependence and Intraorganizational Structure," American Sociological Review, 33:6 (1968), 912-930.
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- 6 P. Michael Timpane, Corporations and Public Education in the Cities, prepared for Carnegie Corporation of New York, May 1982, p. 13.
- 7 Marsha Levine and Denis Doyle, "Private Meets Public: An Examination of Contemporary Education," in Meeting Human Needs: Toward A New Public Philosophy, Jack A. Meyer, ed., American Enterprise Institute, 1982.
- 8 Robert Chin and Associates, op cit, p. 52.
- 9 Timpane, op cit, p. 12.
- 10 Chin and Associates, op cit, Executive Summary, pp. 8-11.
- 11 See Karl E. Weick, "Educational Organizations as Loosely Coupled Systems," Administrative Science Quarterly 21 (1976), pp. 1-19.

- 12 Joan E. Talbert, Project Report No. 80-A9, School Organization and Institutional Change in Loosely Coupled Systems, Institute for Research on Educational Finance and Governance, Stanford University, 1980, p. 4.
- 13 For a discussion of this collaborative venture, see Levine and Doyle, op cit, pp. 307-309.
- 14 District of Columbia Public Schools, "Briefing Paper: New Initiatives Through Private Sector Investments," October 1981.
- 15 David Bergholz, "Marshalling Support for Public Education," Place, May 1982.
- 16 The Boston Compact, An Operational Plan for Expanded Partnerships with the Boston Public Schools, September 1982.
- 17 For a discussion of the Houston Independent School District Business/Education Partnership see Levine and Doyle, op cit, pp. 309-311.
- 18 Committee for Economic Development, Public-Private Partnerships: An Opportunity for Urban Communities, New York: February 1982, p. 25.
- 19 CED, op cit, p. 92.
- 20 See for example, CED, Social Responsibilities of Business Corporations, New York: 1971; Linda Wintner, Local Involvement of the Corporation in Headquarters and Branch Site Communities, New York: The Conference Board, 1980; U.S. Department of Commerce, Business and Society: Strategies for the 1980s, Report of the Task Force on Corporate Social Performance, Washington, D.C.: U.S. Government Printing Office, December 1980.
- 21 Center for Public Resources, Basic Skills in the U.S. Work Force, New York: 1982.
- 22 Verse from blue grass song about the Mississippi River.

**Going Public:
A Labor/Education Perspective on
Private Sector Involvement in the Public Schools**

- Maurice Leiter
United Federation of Teachers

I. Assumptions

This paper proceeds on a number of assumptions which may not be valid beyond the confines of these pages but which, nevertheless, determine its contents and define its perspective.

Assumption One: The National Institute of Education's effort to develop a research agenda concerning private involvement in public schools is necessary and timely and places the discussion of which this paper is a part in the intellectual arena rather than the political arena.

Assumption Two: It is true that most review and debate concerning public-private collaboration parallels President Reagan's espousal of voluntarism, private sector initiative, and decentralization of governmental presence in the provision of human services. However, the private-public issue is a product of ongoing events and circumstances which existed and continue to exist independently. One compelling example has been the presence of Japan's high technology effort on the international economic scene.

Assumption Three: While much of what has happened with respect to private sector-public sector involvement in education is, undoubtedly, a bandwagon phenomenon,

having become, for a time, either the thing to do or, at least, the thing to talk about (and, in this sense, more of a political occurrence), there is enough of a pre-history of private sector support of and collaboration with public schools to suggest that the current increase of interest and activity is a beneficial fortuity.

Assumption Four: Schools, unions, corporations are all nourished by a health economy, by opportunities for human and institutional growth and by being perceived as relevant and successful.

These assumptions about the matters being examined provide the context for the discussion. What follows are six sections which fill in the details. Pragmatics describes the rationale for the private-public involvement. Incentives probes the motives and justifications for it.

Barriers and Biases explores some of the many obstacles to successful collaboration. Prototype and Stereotype compares two examples of private sector involvement in the public schools applying criteria for productive collaboration. Questions articulates matters which need additional study and discussion. Finally, Directions seeks to summarize some of what matters in this discussion and to suggest ways to continue both the effort and the dialogue.

II. Fragmatics

The posture adopted here is one of high-minded pragmatism. Thus, within the normal bounds of ethical and humane consideration, the question is not to whose benefit is private sector/public school collaboration, an essentially meaningless question from the present perspective, but rather what needs to be accomplished to make the public-private relationship beneficial to the whole society. Consider the following:

1. A special section of the bi-weekly newspaper of the New York State United Teachers, The New York Teacher, for 4/3/83 is entitled "Education and Business: A Growing Partnership" and features articles on the need for a skilled, literate work force, on the relationship of education and the new Job Training Partnership Act, on examples of education-industry cooperation and an interview with a state business leader, "What Does Business Want from Education?" The section is representative of both the direction and the perspective of the American Federation of Teachers (NYSUT being its largest state federation) with respect to private sector involvement with the public schools.

2. The President of the same American Federation of Teachers, Albert Shanker, devotes more than a dozen newspaper columns over a two year period to issues related to business-education common interests, human

resource development, job training and the like.

3. The New York City Partnership, a consortium of some two hundred large corporations chaired by David Rockefeller forms an Education Committee which includes the NYC Chancellor and AFT President Shanker as members and proceeds to endorse several significant public school programs including three which involve the United Federation of Teachers as collaborators. Some months later, the Partnership installs as its new president, that same Chancellor of the New York City public schools, Frank Macchiarola.

4. The Governor of New York, in organizing the State Job Training Coordinating Council to carry out the mandates of the Job Training Partnership Act, includes among the forty-six members of this business-public sector collaborative body both the President of the New York State United Teachers and the Executive Director of the United Federation of Teachers.

5. The New York Alliance for the Public Schools which includes corporate as well as public membership launches a public information campaign, "Go Public!" designed to tell parents the "good news" about the public schools and to encourage families to send their youngsters to public schools.

All of these events reflect certain common characteristics. They indicate an ever-widening recognition of the linkage of public schools and private enterprise, of schools, jobs and business. They reflect a labor

posture of high interest and effort in strengthening that linkage and they convey a recognition on the part of government and business that such a junction of concerns is proper and merits positive response and effort.

Clearly the organization which the author represents advocates cooperation and collaboration of the sort under discussion and has practiced its preachings by making operational many political and programmatic efforts involving the private sector and the public schools. Such specific projects include representation within committees and organizations which bring together private corporations, public schools, labor unions, and other institutions and agencies for the purposes of jointly addressing issues of policy and practice concerning education, training, employment, economic development and related matters. Such approaches to this private-public question have always been eminently practical, grounded in common sense and firm in emphasis on mutual concerns rather than historic differences.

Assuredly, such cooperation occurs with full awareness of the corporate concern for the balance sheet and sensitive to the widely-held view that business' interests are not altruistic. There is a leavening recognition that the public sector faces a balance sheet, too, public revenues through taxation comprising the income and the provision of a free public education

for some 925,000 New York City youngsters constituting the cost of doing business. Moreover, while it is easily arguable that unions are more likely to make sacrifices for the greater good of the public and more likely to take risks in the service of socially responsible causes (their very existence is, after all, the outgrowth of human needs called forth by an unresponsive business environment), such consideration does not negate realism about the practical aspects of functioning as a union including the need for a steady flow of dues income in order to provide services, meet needs, right wrongs. Having twice gone without dues income because of legal penalties, UFT fully understands the importance of income to institutional survival. Unions also seek to develop markets and offer a product--the market under development being the unorganized, and the product being effective representation and all it implies in terms of income, security and circumstances of work.

The New York City fiscal crisis in 1975 was a turning point in the understanding of the closely coupled nature of relationships between public and private entities, business, labor, government. It drove home to us the fragility of economic institutions and the interdependence of the political or constituent interests which together make up our city. It took a heavy dose of collaboration and

sacrifice to keep the city from bankruptcy, and unions were active participants in keeping the city economy from collapsing entirely. While labor was, in those events, more unselfish than the banks, we were driven by motives far more pragmatic than simple generosity. Such experiences served to create a logic of common interest which in the present historical moment appears in more sophisticated guise as the marriage of economic development and human capital formation.

It embodies the view that our actual or potential prosperity in the economic arena is part of a continuous whole. The public sector--education, for example--draws its support from a viable economy and the flow of tax revenues from that economy to which it contributes in turn an educated populace capable of contributing to continued growth and development. The private sector, by the same token, supports substantial investment in public education and training efforts in order for it to reap the benefit in the productivity of its skilled employees and the purchasing power of a prosperous population. In short, one sector nurtures the other in an ongoing cycle.

III. Incentives

There exists something of a public domain with respect to the enumeration of incentives for private sector involvement in public schools. It is almost suspiciously easy to develop reasons to encourage business involvement as well as reasons for the public schools to welcome and respond to the opportunity. This is not because the incentives are specious but because they are so amenable to the exercise of common sense. Many are present in other activities of the business community.

Particularly in urban settings, the perceived or actual success or failure of public schools directly affects the viability and stability of communities. Businesses dependent on stable communities have a substantial interest in strengthening public schools.

Similarly, increasing the likelihood that graduates of these institutions will be capable of making a constructive economic and social contribution increases the increment to the private sector in several other ways:

1. A more economically productive population accelerates commerce
2. A better educated and skilled population means a more creative and productive workforce
3. Both of the above mean lower public costs

attributable to social failure: crime, unemployment, neglected health, etc, thus reducing the drain on productive segments through taxation or, conversely, permitting tax revenue to be used for human resource and capital development.

A literate, skilled population is capable of the flexibility and versatility necessary to function successfully in a dynamic technologically vigorous environment. Such a citizenry is both less prone to dependence and obsolescence as change occurs and more likely to factor in on creating change. Furthermore, as we level up the skills and capacities of our population, we permit opportunities for those of seemingly lesser capacity to emerge. Thus, a population of overall higher attainment not only increases invention and production but stimulates equity. As we enter a period when the demand for workers within both sophisticated and simple settings outdistances the supply of new entrants to the workforce, we cannot afford to neglect and/or underserve segments of the population which have historically gone least served, least educated and most dispensable. We can no longer tolerate the presence of significant numbers of older workers who languish because of a dearth of retraining opportunities, or the unmet needs of adults, in significant numbers, whose lack of literacy and related deficits render them poorly employable. Similarly, we must serve the legions of disadvantaged young people, primarily of minority origins,

(but also including rural and urban white poor) whose potential is more staggering than any dreamt technology, and the millions of handicapped persons, many of school age, whose strengths and promise far exceed their handicapping conditions and a cohort of women, school age and otherwise, who still need to be assisted into mainstream opportunities in our society.

A private sector which did not see the human, the practical, and the urgent incentives in contributing to the development of those possibilities would be dimly-sighted, indeed. These people are consumers and service deliverers, creators and participants. It is they who will support and enable the next generation of growth and productivity. And the public schools are the institutions best situated to provide and facilitate the skills acquisition and/or reinforcement which are the basis of both employability and stable citizenship.

The issue of human resource development is now widely discussed and threatens to become a convenient political buzz word. Yet, the development of human potential has always been the basis of growth in our society and education has always made it possible.

Elsewhere in this paper, some reference is made to reasons which explain the greater degree of involvement of the private sector with institutions of higher education--generally private colleges and universities. Bringing business commitment to public elementary and

high schools is not in essential contradiction to that well-established practice but is rather an extension of it to the level where greater impact and more comprehensive effect is possible. It is an effort to gain a headstart on the problem of providing an educated citizenry.

Directing the attention of the private sector to the public schools really zeroes in on the most significant opportunity for having education take hold. It is as natural to support K to 12 schooling as it is to affirm the practicality of commencing regular dental care well before college.

Two matters remain. First, it might be wise to review the incentives which command a collaborative response on the part of the public schools. Second, there is the question of what sort of private sector involvement would have the greatest effect (this question is posed in the Questions section, too, as it certainly would benefit from a solid process of policy analysis).

The public schools have much to gain from private sector interest, commitment and involvement. To generate the kind of public support necessary to assure an adequate flow of tax revenues to make quality education possible, schools need a positive climate, community confidence, and solid relationships to the private sector. A private sector which believes

in the importance of a strong public school system is an important political ally. A private sector which actively supports these schools whether by virtue of public relations efforts or contributions or joint projects helps to radiate out a sense of public confidence in the schools as the cornerstone of the community's social and economic life. In addition, private sector programmatic involvement clearly offers an additional source of expertise, technical assistance, resources of money and materials and perspective. Whether such specific private sector collaboration is the best way to go is arguable, but it is clearly the most common way business has of relating to schools. Experience with business-education advisory councils, with coop programs, student (and teacher) internships, summer jobs activities, curriculum projects, equipment donation, vocational exploration opportunities and a host of other efforts have taught one clear lesson: the better the two sectors have come to know each other and to recognize each other's needs and skills, the greater the increment for schools and students. The industry council that supports the education and placement of youngsters in New York's Aviation High School, for example, provides a model of professional collaboration for the solid purpose of assuring a technically sound connection between school and work. Many high schools associated with specific trades have similar private sector support groups. Such private sector efforts

are mutually rewarding, for they serve to focus school efforts toward work readiness while providing business with young graduates who are more readily assimilated into the trade because of both training and familiarity with the ethos of the occupation.

Such efforts should not be viewed as limited to narrow vocational contexts. Private-public efforts in the author's city and elsewhere exist for the health professions, for law, for science and technology, for engineering and architecture. In fact, one of the most satisfying and successful such efforts which includes both private and public collaboration and which involves the renowned structural engineer, Mario Salvadori, the United Federation of Teachers, the New York City Teacher Centers' Consortium and Community School District 10 in the Bronx, New York, is an effort to train teachers in the use of a manual and a kit of materials designed to teach youngsters from elementary school on up concepts of engineering and architectural structure and function to increase their appreciation of the built environment. Tied to that project are career development pieces intended to encourage minority youngsters toward careers in architecture and engineering. A delightful by-product of this collaboration is a kit for classroom entitled, "Happy Birthday, Brooklyn Bridge" which commemorates the Bridge's one hundredth anniversary.

Both the latter kit, of somewhat modest proportions, but including detailed plans for building the Bridge of simple materials in class and the "Why Buildings Stand Up" kit which weighs in at about forty pounds and contains materials for literally dozens of learning projects were built by disadvantaged and handicapped youngsters in UFT's Youth Employment Project. While most of the foregoing was both publicly funded and staffed, none of the outcome would have been possible absent the devotion and expertise of that very gifted private sector person who was the two projects' human resource. These experiences emphasize the important personal and human dimension possible in joining together public sector and private sector people and goals in a context emphasizing a commitment to students and teachers and a mutual respect for what each sector has to offer. One man, from a small company, (Weidlinger Associates) may have, in fact, generated more human outcome than a less engaged giant corporation.

There are real satisfactions in collaborating on specific projects and at school sites with private sector individuals and organizations. These experiences create intrinsic incentives: satisfaction, a sense of purpose and accomplishment, a feeling that people can make a difference, an awareness of and respect for partnership and collaboration. Such efforts should continue and should be encouraged.

However, valuable as the specific initiatives

may be, they may not provide the best or most important use for the energy and resource of the private sector. Ultimately, the economic and human investment which the funding of public schools represents is the key to the ability of the schools to accomplish the goals both sectors support: a high quality education for personal fulfillment, constructive citizenship, and a productive career. Whatever the merits of particular schemes and projects, and there are many such merits, their impact is necessarily limited by the simple reality that private sector direct investments in schools whether by grant, or goods or on-loan staff are essentially corporate contributions. No one has maintained that the job of the schools can thus be fulfilled or supported.

Clearly, the private sector can be much more effective on the public policy and political level and can make that comprehensive difference that provides the underpinning for individual efforts. Support of national, state and local education budgets which represent a real investment in schooling with strengthened funding for technology education, for literacy training, for early childhood and adult education, for professional levels of compensation which will attract talented people into teaching, and support of funding for training, updating and

retraining existing staff into areas of need (an activity which has always seen more enlightened application in the private sector) are some of the ways that the business community and consortia of business leaders can connect their recognition of the need for an educated population and workforce--yes, the human capital connection--which is, in the final analysis, the single most compelling incentive for the private sector and the nation. Lacking coordination between the specific efforts of business and general policy initiatives will create disincentives or barriers to the kind of relationships which have been developing.

Thus, it is appropriate to state that Labor views the private-public relationship as one of shared concerns and mutual interest tied closely to larger national educational and political issues surrounding economic and human resource development.

IV. Barriers and Biases

Any discussion of ties between business and public schools inherits a baggage of longstanding objections which are properly described as biases because they exist irrespective of the facts of particular cases. Examples occur on both sides of the putative partnership:

- Pursuit of profit and public benefit are mutually exclusive
- School people do not understand the real world
- Business is interested in the public schools for selfish purposes
- Schools are interested in business involvement only for the resources they may offer
- Business involvement is anti-humanist
- Public education is a disaster: the schools are not educating an employable population.

These few illustrations of stereotypic thinking will strike many readers as familiar chords in the orchestration of relationships between business and public schools. The difficulty of overcoming these biases lies in the fact that they are often true assessments of individual experiences.

No one can argue that considerations of profit never appear inimical to the public weal. One does not have to seek out extreme or brutal examples. Even the nature or extent of corporate-giving in areas of

public need is often constrained or compromised by profit margins or criticisms of irrelevance.

The example of Atari is instructive. On the one hand, the company sets up a mechanism whereby it gives grants of computer equipment for education-related purposes. On the other hand, it removes a major part of its manufacturing activities from California to the Far East, permanently displacing 1,700 workers in Sunnyvale and San Jose. Atari is not unionized. It is clear that the cumulative social and economic impact of this cost-cutting measure far outweighs the ancillary benefits of its rather modest grants program. San Jose, for example, is a city which has struggled for years to be educationally progressive and innovative. Shrinking its tax base will weaken its schools. Idling one thousand workers will weaken its family structure and its overall economy. Nevertheless, industry analysts view the move as "a positive demonstration of Atari's efforts to reduce its overhead cost....(and) will enable Atari to be much more cost competitive." (New York Times, 2/23/83, D5).

There is very little question that Atari's primary purpose in this maneuver is to obtain a source of cheap labor for what are routine tasks within a high technology context. It exemplifies a situation in which profitability confronts respon-

sibility to no one's satisfaction.

A related dilemma is reflected in the controversy in New York City over the stock transfer tax. The New York Times devoted its lead editorial to this tax on 4/23/83. Here are excerpts:

"The case for a stock transfer tax appears strong at first glance. If city residents are to endure higher personal taxes and lower service levels, and city workers are to accept layoffs, it seems only fair that the booming brokerage business also bear an increased tax burden.

Besides, the city has a long history of taxing stock transfers: if the 75-year-old tax had not been phased out in 1981, New York would have collected an extra \$531 million in 1982.

First glances, however, can be deceiving. The city repealed the stock transfer tax because brokerage houses started moving across the river to New Jersey in the 1970's, and others were threatening to follow. Since the beginning of the tax phaseout in 1978, employment in New York's securities industry has increased by 40 percent. And subsequent changes in technology have made the case against the transfer tax even more compelling.

Now seven regional stock exchanges are linked by the Intermarket Trading System, an electronic network that allows a broker to find and make the best deal instantaneously. If the city reinstated

the transfer tax, fewer and fewer of those "best deals" would be on the New York or American exchanges.

If a computer in Atlanta can execute stock trades as easily as a computer in New York, there is no compelling reason why the paperwork shouldn't also be done in Atlanta. Indeed, there may be compelling reasons for doing the paperwork where wages and rents are lower.

The hard truth is, New York needs the securities industry more than the securities industry needs New York. The city can't afford a tax that pushes it out of town."

Thus technological progress provides a private benefit, and facilitates transactions designed to produce income. At the same time, local government is held hostage by the technology within an industry and becomes unable to exercise its taxing powers for public benefit. Why has no one proposed a national stock transfer tax collected at the transaction's origin?

Nevertheless, we must not conclude that profit-seeking is, in fact, anti-social under any circumstances. Does it make any sense to suggest that Time, Inc., for example, has a stake in maintaining a dependent sub-literate population? On the contrary, much of their profits are derived from a consumer population which is verbal and literate and responds to cultural/linguistic stimuli. Time has a stake in literacy and thus in education.

Whatever the charges, it is well to remember that questions fraught with prejudice must be dealt with in the same way we would deal with any form of stereotyping. Examine the particulars.

Maintain openmindedness. Be realistic. Seek to educate as to facts. Acknowledge just criticism. Remain constructive.

There are corporations which view their social responsibilities narrowly. They need to be drawn into the debate on the benefits and defects of involvement in public school or other human service matters. But there are also corporations and small or large businesses which do have a strong sense of social responsibility (within the company and outside) and do model constructive efforts to work with public institutions such as schools. Occasionally, one encounters the knottiest challenge of all: the socially responsible company which is well-intentioned and desirous of being of service but not sensitive to the needs or circumstances of those with whom it wishes to work. The resultant effort will run the risk of appearing self-serving and/or of failing because of defects in design and strategy.

The foregoing are general considerations within the universe of bias which often characterizes particular efforts at private-public partnership.

There are a host of other kinds of barriers which must be overcome to make collaboration possible.

Most of these grow out of the coming together of disparate organizational structures which imply unlike frames of reference.

The following are illustrative of these difficulties:

- While most polls indicate that those who have first-hand knowledge of the public schools think more of them than those whose information depends on the media, most corporate leaders and middle managers have little if any direct acquaintance with public schools. For example, the head of a prominent business consortium which had been working with the schools admitted at one point that he had not been in a public school since he was a child when "everyone in school could read." His frame of reference was somewhat dated. This experience is more the rule than the exception. Most likely, if business leaders have any perception of lower schools at all, it very likely stemmed from back in the fourth grade: they remembered school through the eyes of students-- possibly private school students at that. Making private sector people familiar with schools is a clear need.*

* Of course, the private sector tradition is support of alma mater; the college memory is at once clearer and more romantic. Such loyalty is supported by the culture and the network to which many business leaders subscribe.

- As a realistic matter, CEO's tend not to be directly involved in their organization's relationships with public schools or other "social responsibility" activities. Thus, the depth of commitment may be lacking. Lacking as well may be a mechanism whereby the organization is enabled to obtain an understanding of what the schools are like and how they function.
- Because they may have no way of understanding schools as organizations, private sector people will find it comfortable to believe that their own organizational models are universal. Thus they will assume that schools are organized like businesses, are hierarchically responsive and will carry out that which has been determined at the top.
- The social organization of school and private sector differ. In this, the public sector is wanting, for the corporate environment is more likely to facilitate joint planning, collegiality and communality rather than the isolation and loneliness which characterizes the school professional's life.
- Yet on the other hand, it is important to remember that school is a human service organization which business is not, that schools often emphasize

process in contrast to the private sector emphasis on product, and that evaluation criteria in the private sector are more likely to be quantitative and measurable. Many aspects of schooling resist such outcome standards and, as a result, are viewed by outsiders as of questionable value. The public, including the business sector, can however understand SAT scores, or nationally normed reading tests and educators are ill-advised who refuse any effort at product evaluation.

- Not only agreement on criteria for measuring success, but a shared sense of what constitutes productivity is often missing from the private-public concordance. Overcoming such perception gaps often requires a greater flexibility and understanding than is available. Most could agree, perhaps, that rising test scores would indicate a kind of productivity, but ... efforts to reduce those measures to specific accountability domains are generally unsuccessful. This is precisely because the control factors that operate in, let us say, a manufacturing environment are usually all known while the causes of, for example, poor performance on a

comprehension assessment instrument are likely to elude precise definition. There is a very real gap between a world where ostensibly all causes are known and a world where some causes are merely suspected. While this probably overstates the technology and understates the professional judgment, it does serve to define the extremes.

- To a private sector person, a labor-management model is more meaningful than a peer model, a quality of work life issue more understandable than a teaching-learning issue. Very often, it is necessary to convert or adapt a learning paradigm to a business paradigm--study circles are less real than quality circles.
- While the private sector is more advanced than the public sector in its recognition of the importance of professional growth and training to the maintenance of an effective workforce and customarily provides innumerable incentives to that end: on site- training, paid tuition, etc., training and development exist in an outcome context and the investment in the employee is related to a payoff: a demonstrable skill, more efficient performance and the like. School training and development is not always comparable and those accustomed to a rapid transition from

training input to product output may find it difficult to understand notions of professional growth which concentrate on teacher effects, such as sense of efficacy as opposed to pupil effects such as improved test scores. This again relates to the product-process differential.

- Because business is, however, more likely to view training as part of work, assumptions about provisions for training may result in unexpected frictions or confrontation when it is discovered that a school system may be unwilling to pay its people for training or to release them from work for that purpose-- a practice that industry may take for granted.
- As was discovered in the television industry, businesses tend to shy away from controversy, to exhibit a conservatism in how things are undertaken and what is undertaken. However, schools as social organizations are a minefield of potential controversy and conflict. The possibility of becoming associated with a sensitive situation may discourage involvement.
- When businesses do business, they acknowledge and take risks, but when they collaborate with schools only the schools are at risk. This one-sidedness weakens the relationship. The challenge is to create circumstances of

shared risk and joint stakeholding.

- The industrial model is predicated on a sameness or replicability and a consistency of performance. The organizational model within schools resists this systems-centered configuration. Program models perform similarly. In school settings, they resist replication, uniform application, transfer from place to place and seem more responsive to idiosyncratic and unique environments. The eighteenth century universe as perfect clock (Timex, perhaps, as the clockmaker) is a technological not a human model.

Beyond barriers of organizational and etiological difference, are thematic considerations which often cut deeper into relationships and impede healthy interaction.

Is business really concerned with the ostensible broad, humanistic aims of education or is it seeking short-term advantage and quick-fix solutions? Is the realization of the earlier-mentioned trio of education's aims: self-fulfillment, citizenship and career facilitated or constrained by the private sector presence and involvement? Similarly, has the private sector a tendency to drive the curriculum, to skew it in the direction of world of work outcomes? It is surely true that both an increase of private sector involvement and an

intensification of employability emphasis have come together in the public schools of late. However, concurrence is not equivalent to causality and, in any case, it is fair to argue that preparation for work realities were too long neglected in schools.

The most significant of these thematic issues is related to goals and purposes. It has already been suggested that the private sector initiative with respect to the public schools frequently exhibits cross-purposes between good works in schools and policies in the political arena. It is true that some of the same business organizations which opposed public service employment, supported tax credits for hiring disadvantaged workers, which labored valiantly to develop jobs for unemployed teenagers, sought to reduce what the teenagers minimum wage would be, and collaborated with unions, while resisting unionization for their own employees.

All of these questions merit an honest airing in the hope that common ground can be found for moving into new collaborative arrangements and eliminating contradictions between voluntary initiatives and formal policies. The same arguments which underpin the basic support which exists for private sector involvement with public schools may apply equally well to resolution of seemingly thorny differences of policy.

One final issue, a rather concrete one of the management of involvement calls for discussion. A significant obstacle may be that of the absence of coordination or a mechanism for involvement.

It is because of this problem that groups such as the NYC Partnership have become involved with the schools and have attempted to provide a coordinating function to channel the flow of money, resource, or expertise. Similar consortia of business interests have been put in place in other cities as well: Chicago, Pittsburgh, Cincinnati, to name a few and, occasionally, a corporate grouping attempts to exercise a coordinating influence statewide as is the case with the California Round Table which has become involved in both the question of educational reform and the politics of funding it.

It was, in part, an absence of mechanism that led IBM to seek out the Educational Testing Service in pursuing its Personal Computer training project in New York, Florida and California (see Section V for further discussion).

It is also the coordination vacuum which has made Adopt-a-School or Join-a-School approaches seem attractive, for they provide a manageable or bite-sized way of relating businesses and schools.

Most ways of managing the relationship have some limitations, and it is very clear that the micro-

relationships of businesses and public schools will
to have a certain irregular or ad hoc
character absent a highly structured
system for bringing the partners together in a way that
is goal consonant, resource efficient, and mutually
rewarding.

Corporations, particularly those of substantial proportions, have strong identities and personalities and are less likely to be self-effacing in their undertakings. Like foundations, they often require that what they do be highly visible and influential, for such activities are more justifiable to stockholders or trustees and are more likely to redound to the reputation of the institution.

Smaller businesses, both absolutely and relatively, on the other hand, may satisfy similar needs and goals in a more modest fashion by association with one school or one project.

There again, the issues and needs change with reference to the place. Coordination or integration of effort differs in dimension between New York City and Rochester, or between Los Angeles and Armonk. Towns and cities which are dominated by a single corporation's influence such as Hallmark's in Kansas City or Eastman Kodak's in Rochester or company towns or industry areas (such as Silicon Valley) have not the same kinds of coordination

problems as large cities with a range of potential corporate and small business collaborators. They may, however, have more severe problems in terms of relationships, priorities, and relevance for the more dependent one party is on the other, the more likely that what is done will appear to the objective observer as control and manipulation for self-serving purposes. Moreover, the larger areas benefit from the range and diversity of possible partners.

Prototype and Stereotype

The conference of which this paper is a part is entitled "Barriers and Incentives to Private Sector/Public School Collaboration." The concept of collaboration is central to realizing incentives and overcoming barriers, for, properly applied, the collaborative process can negate many of the difficulties normally associated with the bringing together of disparate universes of activity. Moreover, there are incentives inherent in the process itself which can enhance relationships and stimulate further efforts.

The characteristics of the collaborative process are, therefore, critical to success and can serve as criteria by which to measure the design of a private-public support effort and to distinguish prototypical approaches which should be encouraged from stereotypes of "cooperation," which are more likely to be efforts to coopt, to manipulate, to condescend, to do to rather than with, or to relate reflexively or myopically.

Collaboration

- Equity is the baseline. - All parties are equals within the process.
- Goal development, needs assessment, methodology, design, in fact, the entire process is jointly established.

- Consensus determines decision.
- Self-interest issues belong out in the open; nothing is non-negotiable.
- Everyone gives up something, but no one is forced to commit political suicide. Everyone's needs are important.
- Each participant should be credited with the same commitment level as the beholder.
- Respect everyone's universe and assume expertise unique to each perspective and discipline. Simple good-will is very helpful.
- Share work as equally as possible.
- Equality of participation does not imply that everyone does everything well. Each party can offer particular things. Those with money give money. Those with other resources make them available.
- Everyone's time is worth money. No one's time is more valuable.
- There are no assumptions about what to do, how to do it or who should do it. These are decisions that emerge from the process.
- Give and ye shall get.
- Levels of participation should be balanced. If the CEO of your collaborator is present, don't send your administrative assistant to represent you.

- The process is collegial not hierarchical
- The process is voluntary.
- The process is laborious--but it's worth it.

There may be other tenets which could be introduced to accompany these several "commandments" describing what collaboration is like, and there may be other ways of phrasing them, too, but the principles enumerated are, by and large, what collaboration is all about. Where they are applied, good things happen, much is accomplished, much remains after the process is completed. The reader is invited to match the collaborative criteria with his/her own experience in working with others.

For the purpose of this paper, two programmatic initiatives of significance have been selected for discussion and evaluation in accord with the foregoing. One, the example of "prototype," is the Mastery Learning project collaboratively developed by the Economic Development Council (a private sector business consortium--now part of the NYC Partnership but existent well before the Partnership was formed), the United Federation of Teachers, the NYC Board of Education, and the NYC Teacher Centers Consortium (a staff development project supported by Board and Union). The other, which is here the example of "stereotype," is the recently inaugurated IBM project to support the instructional use of computers in schools, a project exhibiting

almost no collaborative characteristics.

In neither instance have the private sector participants, so far as can be determined, been motivated by other than the highest of purposes. EDC has worked well with the public schools for many years; IBM has an excellent reputation for socially responsible corporate behavior. However, what we are interested in here is not motive or purpose, but process, for it is the thesis of this presentation that process will determine outcome.

A. The EDC collaboration consisted of an effort to introduce a promising instructional strategy developed by University of Chicago researcher, Dr. Benjamin Bloom, called Mastery Learning. It evolved out of Bloom's research in learning which convinced him that most young people could learn most of what the schools taught if the variables of instructional time and delivery were altered to permit highly structured presentation, regular feedback and assessment, and immediate reinforcement or corrective intervention. Bloom's research has had widespread influence in education throughout the world for decades and the book which dealt with Mastery Learning, Human Characteristics and School Learning has, in the past dozen years, influenced instruction in thousands of classrooms.

Al Shanker was among the first to call attention to Mastery Learning in the early 70's. A member of

UFT's staff, later to be the Director of the Teacher Centers Project had become familiar with Bloom's work at about the same time that the Vice-Chairman of EDC also became convinced of the value of the instructional strategy and, particularly, its importance in creating an egalitarianism for the learning experience. In essence, Bloom's work demolishes once and for all the stereotypes concerning the ability of disadvantaged youngsters to learn.

Out of these preliminaries grew a collaborative which initiated planning meetings in 1977 and has continued to support Mastery Learning training to the present.* The parties to the process have shared in every detail of program development and implementation of a project which has, to date, trained hundreds of New York City high school teachers, introduced Mastery to about half the 110 high schools in the city and impacted on tens of thousands of youngsters in numerous subject areas. The private sector share of this effort was substantial. It included high-level commitment which continued throughout, a staff person (a former teacher who moved over to EDC) to assist in support of the project, fundraising for supplementary project needs, linkage efforts, public relations, dissemination,

* The author was not part of the initial collaborative formation and implementation but has, for several years now, been a part of the collaborative's work.

and much else. Most important was the longevity of the commitment. EDC stayed with it for years.

Planning was joint, based on consensus and, throughout, the right of teachers to volunteer, to be paid for their work, and to be involved in decision-making and implementation considerations was fully respected. No effort was made to push the staff development model too far too fast. It moved from a small pilot of 10 trainees to large scale summer training of over 200 teachers at a time.

The project represented a major investment of staff development funds and of organizational commitment on the part of the collaborators. It required enormous numbers of hours in planning meetings and in informational presentations to all levels of school staff as well as in interacting with teachers and students involved in the project.

No one wishes to gloss over difficulties in making the program work. School-based participants often felt that the private sector people acted paternalistically and tended to be a bit pushy. Undoubtedly, EDC people were probably impatient to move to outcomes and may have felt that things could have moved faster. What is important to note is that the process of working together collaboratively made the parties increasingly aware of each other's strengths and respectful of each other's needs. Best of all, they found ways to modify each other's

behavior to reduce friction. Measured against the enumerated principles of collaboration, the project gets high marks. Every one of the sixteen items was fulfilled--a remarkable accomplishment.

Most importantly, the fulfillment of those tenets created a productive outcome that has not been short-lived or glossy. The program continues. Assessments of teacher and pupil outcomes are exciting. Program support and expansion have continued to occur and children have been the beneficiaries. The collaborative process has been vindicated.

The design of the IBM project stands in marked contrast to the program just described. It is a classical example of the monolithic/hierarchical approach to public sector relationship and reflects little or no understanding of the universe of the schools. It incorporates a great many of the misconceptions described in the "Barriers and Biases" section. The project is only just getting underway--the subcontractor has been at work some three months--so one cannot judge outcomes, but, putting aside its "flashier" qualities and the fact that machines and software are being donated, there is reason to predict that the program will not achieve long-term effects on teaching and learning. Before elaborating on this analysis, it may be helpful to read the description of the program excerpted from the "AERA

Convention Special 1983" of the Educational Testing Service's weekly, Examiner, p.3, under the lead "IBM, ETS to launch landmark computer education program."

"International Business Machines (IBM) has awarded a major contract to ETS to develop and refine a model to strengthen computer education in the nation's schools.

This landmark effort, beginning in New York, California and Florida, will introduce the effective use of personal computers into the high school curriculum.

The project will start with the selection of 84 urban, suburban and rural high schools that will be linked with 12 teacher training institutions working through four networks in each of the three states. Each network will consist of an average of seven schools, a teacher training institute or agency, a nearby IBM plant or laboratory and ETS Educational Technology Group.

IBM will contribute 1,445 personal computers and a substantial amount of the most current software for instructional use in the schools and teacher training centers. Each high school will select an administrator and three teachers to participate in a computer education training program to be conducted this summer by the teacher training staff.

Early this spring, the ETS Educational Technology

Group will conduct a two-week series of seminars and workshops for the teacher training staff, and they will in turn train the local school participants during the summer. The training will help teachers deliver instruction in many subjects and use the computer as a tool in a wide variety of learning applications.

By early fall of 1983, each participating school will have received an average of 15 personal computers, and will have a trained administrator and three trained teachers. And a team of IBM systems engineers located at nearby IBM plants and laboratories, ETSers, and teacher training people will be standing by to offer ongoing support to each school and network throughout the 1983-84 school year."

Consider what has happened. IBM determined that it wanted to do something related to Computer-Assisted Instruction. It knew pretty much what it had in mind from the start--including the fact that CAI was the subject of the effort--and proceeded to contract with ETS for further project design and implementaton. Geographical areas were predetermined by other factors such as the location of IBM facilities. ETS proceeded to contact three State Education Departments. Teacher-training facilities, most of which are colleges, were identified by the State Education Departments. Only then were school systems involved--also in

hierarchical fashion and the process of school selection itself is proceeding similarly. The practitioner is yet to be heard from and all decisions are being made unilaterally utilizing what is commonly called "input" from those contacted. No portion of the design and implementation of this project is even remotely describable as collaborative. IBM and ETS have decided what will be done for the schools and the schools can, essentially, either take it or leave it.*

If one defines charity as a benefit to a recipient concerning which the recipient has no say than this program is charitable. Of the sixteen listed collaborative criteria, none are represented in this program.

IBM has assumed that training in instructional applications of its PC was, essentially, a mechanical teacher-proof experience. That it should have conceived and generated such an ambitious training and materials donation scheme absent any discussion with teachers, schools, staff development experts or employee organizations and should have assumed that Educational Testing Service was the appropriate linkage agency--not because of any known capacity for teacher training or professional development or

*It should be noted that the eighty-four school project, an eight million dollar commitment includes a significant number of private and religious schools.

any particular known credibility among teachers--but because ETS is involved with college entrance assessment and, therefore, could probably identify institutions with students of promise (apparently, to its credit, ETS advised IBM to be less elitist in its project) is rather remarkable. That no consideration has been given to creating a collaborative framework for planning and development, to assuring that incentives for teacher participation exist, or providing or assuring equitable procedures for selection of participants, to creating a formative and summative evaluation design to determine what works and what doesn't, to considerations of curriculum, and a host of other matters essential to the successful implementation of school-based projects creates skepticism as to the goals of the program.

Similarly the use of the top down model for implementation, while probably quite appropriate to IBM, is inappropriate to schools.

On the other hand, it would appear that the school systems and the training institutions may have earned the right to be treated as "recipients" by their own passivity. Why, in the absence of a joint role in the design and planning of the program do both the schools and the training institutions accept IBM's (and ETS's) imposition of a model for the program? Yet this is what appears to have been the case. It is simply the power and prestige of the organizations

or is it also a failure to think through the implications of the offer? There are over 110,000 schools and some 3 million teachers in the United States. This program invests eight millions in serving 250-400 teachers and principals in 84 schools to some extent. To replicate the project within the 16,000 school districts of the nation using this model would cost tens of billions of dollars. Therefore, even by mechanical criteria, the project does not appear to be significant.

The author has been in discussion with both IBM and ETS concerning the program, its design and its implications (ETS had placed a call to UFT in the course of its process). IBM does not appear to be closed-minded or resistant to suggestion (other representatives of IBM have relationships with NYC's schools which are more collaborative); it is clear that much of the awkwardness of the situation stems from IBM not knowing how to gain entry into schools. However, as stated in Section IV, a well-intentioned corporate effort which proceeds without sensitivity to relationships with those who should be partners to the process runs the risk of appearing self-serving. Time will tell.

Meanwhile, what is important to note is the contrast between the approaches represented by the two program examples given. It is the author's

judgment that the collaborative model is best for private sector-public school relationships.

VI. Questions:

There is no prospect of decline in the generation of questions for study in connection with private sector involvement in public education. Some of these have been reconnoitred in the preceding sections of this paper; many others have been raised elsewhere. It is important, within the framework set, to review some of the salient questions pertinent to the subject which require further knowledge and policy development.

On the broadest level are questions related to policy:

- What are effective roles for the private sector with respect to the public schools?
- How can corporate policies with respect to governmental matters such as taxation and spending priorities and general matters such as employment and training policies, economic development initiatives, and education policies be synchronized with corporate practice in specific school-related situations? Can the contradictions be removed or resolved?
- What enabling role can the Federal government play in facilitating private sector efforts to support public schools? Are there currently Federal policies which undermine private sector support efforts?

On another level, are questions related to impact and effects:

- Have private sector technical assistance efforts to improve school system management yielded long-term savings or better application of resources? Where there have been savings, has there been an attendant social cost?
- Has private sector support of particular educational activities generated pupil outcomes or other increments not otherwise possible?
- Has programmatic institutionalization, where appropriate, been facilitated by private sector involvement?
- Are demonstration school-based programs generated or supported by the private sector cost-effective, replicable, capable of institutionalization? What becomes of them?
- Has experience thusfar in working with schools affected private sector leaders' sense of their role or mission? How do they now view that mission? Is there now sufficient history to distinguish commitment from the ephemerality of bandwagon phenomena?
- Do summer internship programs in industry for teachers increase longevity in the profession, expertise and knowledge? Is it carried back to affect teaching and learning?

Finally, there are practical data-gathering,

survey and information analysis needs:

- New studies are appropriate in the area of resource allocation: money directed by businesses into public schools, into private pre-collegiate schools, and into public and private higher education. Have urban schools, for example, experienced increased benefit? Have other "social responsibility" beneficiaries experienced a comparable decline in support?
- What are the tax implications of private sector involvement? Are we all underwriting the effort? Is it to a greater or lesser degree than before?
- Are contributions by individuals in business, in a corporate context or in an individual entrepreneurship computable in determining private sector effort?
- What are the kinds of "investment" being made in addition to direct funding: materials, equipment, staff, facilities? What is the value?

This is not an exhaustive set of questions: it is a representative one. Some of the questions have been answered in part by work already done and some of the answers are still relevant. However, so much has happened so fast that it is clear that new information is critically needed if the private sector effort is to be properly comprehended and appropriately encouraged.

VII. Directions

The title of this section implies further movement and that is proper and desirable as inference. On the whole, the range of activity across the land linking private sector organizations and consortia to public schools and to national and local collaborations for policy change, for support of public schools and for specific programs is healthy, exciting and stimulating even though it is at times a bit diffuse or anarchic or even contradictory. Going public has already shown itself to be a course of action worth maintaining.

The logic of common interest discussed earlier and the shared concerns of business, labor, public schools linked to matters national in scope and need provide the connection. Strengthening that nurturing cycle between education and economic development benefits the whole society insuring that we will survive politically and economically and will not be sucked into the vortex of austerity and ignorance.

Investing in public schools, the earlier the better, is as sound an investment as any planting that seeds a forest, as any planning which senses a future. Committing ourselves to equity in meeting our people's needs is not charity but wisdom. Tomorrow's full-fledged citizens and workers will be more diverse both by right and necessity.

That resource will assure us marvelous new markets here at home. We have within our nation a Third World of illiteracy, disadvantage and handicap which provided the means to grow and flex, to learn and to produce will give as good as it gets.

Whatever the level or locus of relationship, it is recommended that the collaborative model described here be the modality, for it will not only enhance the fineness and relevance of the effort and generate incentives beyond the merely practical, but it will by its nature and strategy serve to remove most of the barriers to the private-public relationship and to overcome the biases which undermine healthy give and take.

District and school-based collaborative efforts have a powerful human dimension, a vitality and a freshness. Corporate contributions at these levels are fine as are program demonstrations and experiments, as are site-based special projects, as are councils and commitments to provide technical expertise and to enhance school to work linkages. All of these should be encouraged, for they create a deeper texture and greater diversity within the public school context.

Yet the most important contribution the private sector can make is in its overall support for the aims and standards of quality education--humanistic and technical--and for the provision of the resources necessary to serve and educate.

This can best be achieved by private and public interest joining together on the national level to affect policy, funding, economic development and education. Such efforts support all the specific good works underway and assure the national commitment to quality public education, jobs, and human resources as well as programs. Such coordination of national purpose will eliminate the seeming contradictions which presently hamper the private-public collaboration and will open areas of partnership even beyond present prognostications.

CORPORATE INVOLVEMENT IN PUBLIC SCHOOLS:
A PRACTITIONER-ACADEMIC'S PERSPECTIVE

Larry Cuban, Stanford University

NOT FOR ATTRIBUTION OR QUOTATION WITHOUT
THE WRITER'S PERMISSION

CORPORATE INVOLVEMENT IN PUBLIC SCHOOLS: A PRACTITIONER-ACADEMIC'S
PERSPECTIVE

The current romance among educators over corporate involvement in public schools was missing when I served as superintendent. I might have enjoyed it.

My experience in Arlington, Virginia between 1974 and 1981 offers one superintendent's contacts with the business community that was as much shaped by the local political culture, previous relationships, the high level of public confidence in the local schools, and the economic situation as by whatever I did. I will use a description of my experience in Arlington not as a surrogate for all school chiefs' experiences but as a launching pad for a brief historical analysis of corporate involvement in public schools and the unresolved issues that persist in the current passion for increasing, in the buzz phrase of the day, private sector participation in public schools. Finally, I will examine the critical role the business community plays in generating confidence in schools and the importance of educators striking a balance between external and internal interests.

That corporations, small businesses, and individuals were heavily involved in Arlington was evident by the end of my first year as superintendent. I suspect that the extent of that participation differed little from other districts and merely mirrored arrangements made years earlier. Direct involvement with the business community was both at the company and individual level. Many observers of schools often overlook the commonplace and forget to note that school boards conduct business in the community as both employer and purchaser of goods and services.

2

The Arlington School Board annually contracted for millions of dollars of items and services from Arlington banks, wholesalers, food suppliers, etc. From Worcestershire sauce to pest control, Arlington companies did business with the School Board daily. Harmonious relations between the school district and local businesses were simply in the best interests of both.

Young business executives brought Junior Achievement into schools annually. Local companies contracted with the school system's center for Adult Education to train and hire non-English speaking and low-income residents. Each of the three comprehensive high schools had vocational education programs that sent students into local firms to work a few hours a day. School supervisors hunted for jobs that placed high school students in government agencies, auto shops, and local department stores. The Career Center enrolled sophomores through seniors in over a dozen different vocational programs that blended classroom and workplace training in construction, hospitals, motels, television studios, auto body shops, and beauty salons. Arlington realtors, for example, cooperated with the Career Center in finding a house in desperate need of renovation for students to complete. A network of business-school contacts existed throughout Arlington County that produced a heavy two-way traffic between classroom and workplace. The array of local companies directly involved with the district became evident each June at luncheons to which I was invited to award prizes to top students and cooperating business firms.

There were also the formal, traditional relations between School Board and the business community as captured in such activities as the Chamber of Commerce appearing at budget work-sessions of the School Board to present their views (cut administrators; enlarge pupil-teacher ratio; reduce proposed

teacher salary increase; cut bilingual programs, etc., etc.). The Chamber of Commerce, which I joined in my first year as Superintendent, represented the small business, professional, and corporate satellites' (e.g. Ramada Inn) concerns in the County. Their Education Committee had school district vocational supervisors serving on it, thereby permitting the identification and placement of students in local companies.

For each of the seven years that I served, the local Chamber fought increases to the school budget, damned teacher salary raises as being too high, and criticized existing programs for non-English speaking children as costly frills. When the school budget came before the County Board which decided how much to provide to the schools, the Chamber invariably urged reductions. They did support the Career Center and the introduction of economics courses into the curriculum that concentrated on the free enterprise system. After two years of this, I resigned from the Chamber. To the best of my knowledge, the adversarial relations between the Chamber and the School Board had no effect upon the richly-textured relationships described earlier.

Finally, there was indirect involvement from Arlington's businesses through individual service of civic-minded corporate managers. Local executive often sat on Board appointed committees or served on advisory councils to neighborhood schools. Occasional firms would release employees to help the district in tutorial programs and career days held in various schools.

I offer these few words to underscore two points: first, direct and indirect private sector-public school arrangements had existed for many years in Arlington; second, a school district is inevitably part of the business community as a corporation buying and selling items. That direct involvement,

however, may well be subject to tension simply because while schools behave as business organizations in some respects, nonetheless, they perform public services that require tax revenues drawn from businesses. Vital interests often clash over increasing school revenues and higher tax rates. Generalizing beyond Arlington is risky so I won't. This brief description, however, suggests one superintendent's experience prior to the current enthusiasm for corporate participation in public schools.

That enthusiasm continues to spread. Weekly news reports announce the formation of another business-school council or the results of a study commissioned by a consortium of corporate executives. Companies adopt schools. Corporations raise funds to underwrite a school district management study. Whether such renewed interest stems from some ineffable blend of voluntarism, anxious concern over a perceived deterioration of public schooling, or an unconscious effort to divert attention from profound managerial and labor market changes that are altering the familiar terrain of the economy, I cannot say. In the midst of high unemployment, concern for deteriorating productivity, slowly decelerating interest rates, and ballooning federal deficits, corporate executives are reaching out to increase collaboration with school officials.

These efforts involve students in businesses, e.g. adopt-a-school programs and Junior Achievement; help school districts cope with managerial and financial problems, e.g. management studies and loaning top corporate officials to districts; expand individual participation of executives in school matters, e.g. task forces, advisory committees; and establish formal

commissions established to coordinate school-business activities, e.g. National Association for Industry-Education Cooperation. 1

Beyond these familiar instances of joint action with the business community, however, are additional efforts that give a new twist to current cooperative ventures with schools. Take, for example, the recommendations of the California Roundtable, a group of eighty-six chief executive officers from major corporations in the state that established a Jobs and Education Task Force in 1979 to do something about urban unemployment. Interested "both in public education in its own right, and in the education system's ability to prepare youths to become productive members of the state's and country's work force," the Roundtable contracted with a consultant firm to determine the reasons for the high school's low performance and make recommendations to remedy the deterioration. 2

In quoting from the summary of the report, I wish to highlight the logic of the conclusions and the ensuing recommendations:

Data on student performance show that California secondary school students are not being adequately prepared for college or work....

Unless this decline is reversed, the California public schools will not produce the citizens, workers, and professionals who are needed to meet the challenges ahead....

The most immediate reasons for the decline in student skills are a lowering of standards for quality education during the sixties and seventies, and the erosion of the effectiveness of the teaching force. These problems have been accompanied by a growing crisis in technical education, diminishing community support for the schools,

demoralization among educators, and a worsening financial situation. 3

The consultants' recommendations, endorsed by the Roundtable, concentrated upon four areas:

- .raise educational standards
- .upgrade technical education
- .increase community involvement
- .reform finance and strengthen the teaching profession. 4

The proposed tools to transform these recommendations into practice combined joint school-business public relations campaigns, support for legislative mandates raising graduation standards, direct loans to schools of staff and hardware, and establishing independent coalitions that would press for improved teaching and financial aid. 5

"We want to make it clear," Dick Spees of Kaiser Aluminum & Chemical Corporation, a Roundtable participant, "that members of the business community are not school experts....We don't want to set education policy, but we can be an instrument to bring coalitions together and be an impetus on what to do about this." In investigating urban unemployment, Spees said: "We came to the conclusion the real problem was education itself." 6

The Roundtable, representative of enlightened and concerned members of the business community, has, in effect, endorsed the following logic which I have extracted from the report.

1. Student performance on standardized tests, i.e. paper-and-pencil variety with arbitrarily designated cut-off scores, taken between the ages of fourteen and seventeen predict accurately job performance in the marketplace.

2. Hence, low test scores and students ill-prepared for the marketplace (e.g. deficits in writing, math, reading, critical thinking skills, adaptability, etc.) are assumed to be identical.
3. Hence, improved student academic achievement, as measured by these standardized tests, especially in math and science, would produce more able candidates for both entry-level positions and high tech fields.
4. Finally, with improved academic achievement, stiffer graduation standards, and corporate support for efforts to improve both the practice and quality of teaching, youth unemployment would shrink, increased numbers of graduates would be better trained in math and science for vacancies in high tech firms, worker productivity would swell, and corporate and citizen dissatisfaction with public schools would decline.

At this point, let me simply underscore that these statements, propositions embedded in the report's logic, are not facts but beliefs. Not truth, but faith. I will return to these assumptions again.

To reformers and businessmen at the turn of the century, standardized tests were unfamiliar. Yet they were very aware of structural changes in the economy and heightened demands for skilled labor. That schools in the 1900s were somehow instrumental in providing potential workers with what the marketplace demanded was becoming an article of faith as industrialists anxiously viewed German technical advances. They would have, I believe, nodded their heads in agreement with the direction of the arguments and the underlying logic. The lyrics might be different but the melody was the same.

I believe it is useful to sketch out briefly previous efforts at business-school collaboration if, for no other reason, than to find out what businessmen gave to schools and what they expected from them in previous decades. In answering these questions, I can determine if the above set of assumptions in the 1982 California Roundtable recommendations for high school improvement is unusual.

Impact of Business-Industrial Involvement in Schools Since the Turn of the Century

We should act at once because of the stress of foreign competition. We are twenty-five years behind most of the nations that we recognize as competitors. We must come nearer to the level of international competition. As every establishment must have a first-class mechanical equipment and management, so must it have in its workmen skill equal to that of competitors, domestic or foreign. The native ability, the intuitive insight, courage and resourcefulness of American workmen is quite unsurpassed....It is their misfortune that they have not been given by this country that measure of technical instruction that is their due, and are by no means equal in technical skill to the workers of continental Europe....7

Year? 1905. Drawn from a report issued by the National Association of Manufacturers, its recommendations at a time of structural changes in the economy, demands for increased productivity, and tense concern over foreign competition called for radical changes in public schools. Throughout the

first two decades of the twentieth century a vigorous coalition of social reformers, businessmen, labor leaders, and school administrators fought to alter the academic curriculum and introduce courses that would better train students to enter the labor market with skills that emerging industries and established businesses could use. In turning to the schools as a solution to economic problems, coalitions like the National Society for the Promotion of Industrial Education (NSPIE) astutely used political channels to construct a national platform for introducing vocational education into public schools.

From the perspective of the 1980s, the notion of vocationalizing the nation's schools sounds tame; for the early 1900s, however, it was a hard-fought series of skirmishes that split educators and reformers alike. By the 1930s, the idea that public schools should train children, but especially high schoolers, for jobs had become an article of faith to parents, educators, and employers. The Smith-Hughes Act (1917) and subsequent vocational education legislation during the depression were outward signs of an inner change. While the massive unemployment of the 1930s often discredited businessmen in the eyes of educators, the New Deal established youth-serving agencies (i.e. Civilian Conservation Corps, National Youth Administration) that cooperated with the public schools, although remaining separate from them, in sustaining the linkages with the business-industrial community. World War II wedded further the high school to business and industry under a benign federal umbrella promoting massive collaboration to win the war. 8

By 1945, different curricula for different futures of high school youth had become established practice. Vocational guidance counselors, continuation

schools, vocational courses underwritten by federal subsidies, and direct ties to the business community for part-time jobs were part of the conventional educational wisdom. The shift from the high school as solely preparation for college (and future professional positions) to a place where students also prepared for jobs upon graduation—a commonplace notion today—was a fundamental change in both the ideology and practice of secondary schooling.

This vocationalizing of secondary schools capped the early twentieth century efforts of industrialists, educators, and reformers to locate national solutions to economic problems in public schools. Federal and state legislation funding vocational and technical courses, separate schools for these pursuits, and the inclusion of a distinct vocational curriculum in the comprehensive high school are just a few signs of this transformation. Probably of even greater significance has been the subsequent expansion in the school's mission to inculcate children with such values as competitiveness, producing work in conformity with teacher requests, and the the importance of those attitudes congenial to the workplace. That poll after poll of parents and students in the last few decades have registered beliefs in the public school as the proper place to prepare youth for jobs only confirms the shift in expectations since 1900. America loves success stories and the vocationalizing of high schools is, indeed, one. 9

Since World War II, patterns of expectations and practices that high schools should and will prepare youth for the marketplace were forged. Tremors, however, shook the schools into making occasional patchwork changes. In the late 1950s and early 1960s, for example, the spreading civil rights

movement, James Conant's Slums and Suburbs, the New Frontier, rediscovered, among other issues, high youth unemployment. Fears, in Conant's phrase, of "social dynamite" exploding in the cities triggered joint federal and state initiatives to put low-income minorities in jobs. Federal legislation in 1963 and 1968 offered incentives to states and local school districts to alter traditional vocational courses and undertake new manpower training programs targeted on unskilled and semi-skilled young men and women who were mired in urban and rural poverty. The War on Poverty generated anew both rhetoric and action to marry corporate self-interest and school needs into imaginative collaboration. New acronyms and program titles studded reformer and administrator vocabularies: MDTA, Job Corps, Mobilization for Youth, HARYOU, CETA, etc. Throughout the 1960s and early 1970s, on-the-job-training and skill classes blossomed across the country. The educational capstone to these ventures was the 1970 centerpiece of a U.S. Commissioner of Education's effort to install career education in all schools. During his term, Sidney Marland drummed up educator enthusiasm for the marriage of classroom and workplace in both elementary and secondary schools.

The spread of career education programs at both the elementary and secondary levels, promoted by federal aid, confirmed parent and educator receptivity to the appeal of vocational preparation anchored in the public schools. While such programs often ended up as an expansion or transformation of existing vocational education courses the point is, again, that public schools had already been vocationalized; career education became the most recent reminder of that fundamental shift. 10

Within this three-quarter century perspective, the current hoopla over business involvement needs to be appraised, I believe. Assessing current corporate involvement in terms of its magnitude, impulses, and assumptions may suggest if the present corporate effort is like an automobile driver whose eyes are firmly fixed on the rear-view mirror or whether new directions are being pursued.

Magnitude

Compared to the dollars, energy, and political involvement that industrialists and businessmen poured into the turn-of-the-century efforts to vocationalize the high schools, current business involvement pales. After studying corporate interest in urban schools, Michael Timpane reported that the company dollars "invested in adopt-a-school programs, in programs that lend executives to schools, or even in corporate contributions to elementary and secondary education is miniscule." Of the nation's two million companies, one estimate put philanthropic donations to any cause from less than 30% of the companies. Where businesses do give, it is small sums. Oakland, California's Adopt-A-School program includes over forty companies and adds annually over \$100,000 to the budget to cover expenses for the venture. The annual budget of the Oakland public schools is \$180 million in 1982-1983. While dollar amounts are seldom quoted, one source put corporate annual contributions to education at \$2.5 billion of which 5% (about \$50 million) goes to elementary and secondary schools across the nation. The 95% goes to higher education. In 1980, corporations gave \$236 million for university research. 11

Politically, however, business-sponsored agendas proposing action are broader than in earlier decades. Interested corporations now lobby for state and federal legislative initiatives, closer ties with public officials, and outspoken coalitions that publicly support schools. Such an approach echoes earlier efforts by segments of the business community except for one obvious difference in agendas. Previous industrial and business coalitions concentrated upon endorsing specialized vocational programs which invariably meant specific occupations, (e.g. clerical, fashion design, medical technicians, data processing). Most current efforts, however, view the task as more fundamental than advocating specific changes in the curriculum. Endorsed now are acquiring a general education, teaching basic skills, learning to cope with change, thinking skills, promoting standards of academic excellence, and improved financing of public schools. The thrust is far closer to recapturing an earlier era's ethos, aims, and practices of schooling wedded to the familiar fondness for technical progress. There are, of course, those coalitions in Boston, Washington, D.C., and the San Francisco Bay Area that hew closely to the older formula of creating technical high schools or promising entry-level positions to high school graduates that meet new standards jointly set by schools and business firms. Does political savvy mixed with an agenda somewhat different from previous business and industrial collaborative efforts suggest that the impulses toward cooperation are also different? 12

Yes and no. In reading the press releases, reports, and announcements of new joint ventures between schools and business concerns, I needed no nudge to recognize the strong likeness in drives between the present and earlier

periods. Plain references to foreign competition carving out larger chunks of the domestic market, the need for highly-skilled workers, anxiety over lowered productivity, and the pivotal role of schools—still blurred and unspecified—but somehow entangled in the current economic muddle ring familiar tones to the informed ear.

Motives

Disentangling the varied motives that have produced the present surge of interest in joint collaboration is beyond my charge but a brief overview may help nonetheless. Much has been written that clearly points to renewed corporate interest in public schools stemming from a growing awareness that public schools, like highways, are valued resources that contribute mightily to the standard of living and economic vitality of a nation—they can only take so much pounding before giving way. The infrastructure, that trendy, obtuse word so often used to mask meaning, is in need of repair. Thus, self-interest and public altruism merge. But there are other substantial reasons.

Efficient and effective use of tax funds for public purposes also tie the business community to schools. In most areas anywhere from twenty to forty percent of public funds are allocated to schools; astute management of those funds to achieve goals has perennially been of concern to the private sector. The sharp growth in industry-financed remedial classes for employees adds to the current dismay private sector employers express about public schools. Moreover, widespread acceptance by the corporate community of the view that eroding test scores, a convenient proxy for diminished school productivity

and a handy explanation for youth unemployment, has pumped vigor into the impulse toward efficiency.

The stubborn question of how to move high school graduates easily from the classroom to the workplace, an awkward but familiar issue to both educators and business officials since the turn of the century, has gained increased visibility with the accelerated pace of technological change in banks, offices, light industry, and scores of other businesses that are converting to computerized operations. Because schooling is always behind the workplace, (schools buy first generation word processors a few years after they are introduced into offices and crank up programs that graduate students who enter offices to face third generation word processors) many high school graduates who chose work over college were out of step initially with the changes. Out-of-sync high school programs became glaring omissions that needed correcting. Boston Superintendent Robert Spillane pointed out that when he arrived there were twenty-two carpentry programs but only one in computer literacy. 13

Another impulse toward collaboration is the hardy faith in improved schooling as a remedy for the increasingly inferior competitive position in which American corporations find themselves. Like earlier counterparts, Cornell Maier, chief executive officer of Kaiser Aluminum and Chemical Corporation, pointed out "other countries like Japan and Germany—two of our major competitors—put much more emphasis on math and science from the beginning." While Detroit automakers, steel, and other heavy industries have come in for some share of criticism for lowered productivity and failing to respond to altered market conditions beginning almost two decades ago, blaming

inept corporate management and the reward system that nurtures short-term gains over long-term development may be familiar to readers of Fortune and Forbes but has yet to reach readers of People and Readers Digest. Public schools, however, have a rich history of getting drafted to solve the nation's ills, especially during business slumps. Reforming schools to transform immigrants into Americans, abolish racial prejudice, end unemployment, prevent smoking and drinking of alcohol—need I continue the list?—are as familiar as a next-door neighbor. Not corporate incompetence. 14

In any catalogue of reasons for corporate involvement with schools, the belief in schools as a medicine for national illness is too evident to be ignored. Nor can the bite of irony be ignored. After earlier coalitions of business and educational leaders successfully achieved the vocationalizing of high schools, the present generation of corporate leaders now turn to the very same institution and ask that it become less specialized, less job-oriented and concentrate on offering youth a general education: basic skills, problem-solving, adjusting to change, awareness of complexity, etc. 15

For the moment set aside the obvious irony and examine the assumptions underlying those efforts that depart from the traditional support of specialized education for high school youth.

Assumptions

I now return to the California Roundtable recommendations to illustrate emerging ideas across the country encouraging a growing partnership between public schools and the corporate community. The assumptions buried in these

recommendations deserve examination because they mirror the beliefs shared by many who intend to alter the high school program. 16

1. Lack of appropriate training in high school causes unemployment. If graduates could read at a twelfth grade level, write sentences clearly, calculate accurately and swiftly, come to work on time and have a positive attitude toward work, business firms would hire them lickety-split. Schools turn out graduates that are unqualified to work so firms avoid hiring them. To state the belief so bluntly at a time when double-digit unemployment prevails, where doctorate holders drive taxis, and where social workers with masters degrees work in secretarial pools suggests that properly equipped high school graduates is merely one of a number of important factors in a complex equation. Schooling combined with corporate decisions, structural changes in the economy, governmental policies, demographics, and other variables suggests that unemployment cannot be solved simply by saying schools must do a better job than before.

Note, for example, how structural changes in the economy, like moving tectonic plates deep in the earth, fracture the job market—to carry the metaphor an uneasy step further—into unexpected cracks in the earth, i.e. plants close down while newspaper want-ads call for new hires in fields unconnected to those recently shut down plants. Further evidence of these structural changes turn up in current estimates from the Department of Labor that project 150,000 new jobs for computer programmers by 1990. That appears as a major increase but when compared to the massive jump projected for service jobs, it pales. For every computer programmer, nine service jobs (nurse's aide, janitor, fast food workers, etc.) are expected. If increasing

numbers of service jobs and an estimated smaller generation of young men and women will shrink numbers of jobless youth, will the high school be given credit for curing unemployment? If the estimates materialize, the economy and demographics, not the schools, will diminish joblessness. What schools contribute to the employment equation is important but by no means does schooling, imperfect as it is--produce or cure youth unemployment. 17

2. Improving high school performance on tests will produce better trained graduates. Standardized test scores are imperfect measures of academic performance, much less a predictor of future job performance. To the best of my knowledge, there is now no valid test given to high school students that will reliably predict how well graduates will perform in the workplace. Thus, transforming scores on paper-and-pencil standardized achievement tests, largely composed of multiple-choice items, into predictors of future job success is, at best, a high risk venture exceeding greatly what modest claims test developers assert for their instruments.

The problems with standardized tests given in high school can be located in the tests themselves, the grade in which they are administered, the students who take the test, the school program offered, or any entangled combination of these factors. I say this not to discredit tests but to reassert what is common sense: tests are limited, useful tools for prying out information about students' grasp of narrowly-defined skills and knowledge at one point in time. Placing excessive confidence in percentile ranks, grade equivalents, or pass rates leaves little room to examine graduates along other important dimensions. Few standardized tests, for instance, register students' creativity, imaginativeness, flexibility, problem-solving skills, and grasp of

analytic abilities. Furthermore, there is the perplexing issue of test scores going up.

Consider, for example that 85% to 95% of high school seniors pass most state competency tests. Often these pass rates are dismissed because the tests are viewed as too easy or that the cut-off scores for failure are too low. Or consider that almost a decade ago Chicago public schools installed a comprehensive set of tests geared to a custom-designed curriculum and specially-developed lessons. Elementary students scored high on the locally-developed reading tests. Results were reported with pride on how well Chicago students were reading. By the time they entered high school, however, large numbers of these high-performing students were diagnosed as having reading levels far below their reported scores. I do not suggest that this is the norm or that any hanky-panky occurred in Chicago. My only point is to underscore the limited usefulness of test results and suggest that as one important measure they cannot be easily stretched to become something they are not. 18

3.State mandates and better teaching will improve high school academic performance. Business-education coalitions are constructing agendas that call for stiffer graduation standards (e.g. more math, more science), longer school day and more days in session each year, tougher textbooks, tests for new teachers, improved recruitment and training of teachers, and the like in a determined effort to remake the high school by pouring steel into it.

Viewed historically, such efforts retrace the steps of earlier critiques of the high school and enthusiastic spasms of reform. Two historians reviewing major studies since the 1890s to reform the high school concluded that,

In conservative times—in the 1890s, the 1950s, and the 1980s, for example—the keynotes of 'reform' have typically been a focus on the talented (often justified by outdoing the the Russians or outperforming the Japanese), calls for greater emphasis on the basics and greater stress on academics in general, and concern for incoherence in the curriculum and a lack of discipline...19

Acknowledging that current suggestions for improving high school performance fall into previous reform patterns offers a useful perspective but ignores the gaps in the corporate agendas for high school overhaul. Missing from from these action plans are such fundamental issues as the quality of elementary schooling, the determinants of instruction in the high school, and what drives teaching performance. There is a profound difference between altering the conditions that shape what happens in schools from improving classroom teaching and student performance—a distinction authors of these efforts fail either to consider or judge as unimportant.

*few, if any, reports by school-business collaboration identify the essential role that elementary schools play in constructing the foundation for attitude and skill development. Virtually all plans, funds, and activities triggered by these coalitions concentrate upon high schools, with an occasional smattering of middle and junior high schools. The oft-repeated cry of high school teachers who say: "how can I teach twelfth graders, twelfth grade math or science when they read at the sixth grade level," cannot be met by simply tougher graduation standards, new tests, more science courses, etc. Paying attention to the elementary curriculum and instruction is an essential first step in shaping high school outcomes. Meaningful improvements in high

school performance begin in the first grade; to divorce the last four years of a student's school career from the first eight months, almost unintentionally, an oft-criticized business strategy: go for the quick, low-risk, high return and ignore the less flashy, slower but more profitable yield in long-term improvement.

*High school teachers who must prepare two to three different lessons for 150 to 180 students during five to six classes a day endure an exhausting work load. This work load harnessed to a required curriculum and to a daily schedule that shoves batches of students (many of whom would prefer to be elsewhere) from one class to another every fifty minutes shapes, to a large degree, what and how teachers teach. Thus, raising graduation requirements, demanding that new teachers take competency tests, securing textbooks that have more facts in each paragraph, and establishing a longer school day will appeal to citizens and policymakers politically attuned to the next election. But such actions will, I believe, have little impact on student academic performance or what teachers do daily in their classrooms. There is little substantial research evidence that would support such policies as reasonable responses to improving scores on standardized tests or elevating the quality of teaching.

To have a direct, sustained impact on student academic performance and teaching practice would require either structural changes in the conditions of teaching, a great deal of on-site cooperative work with teachers, school-site program planning and implementation, or some imaginative combination of these. There is a growing body of research and practical experience to support these strategies. In short, what I am arguing is that, in my judgment, the

assumptions about improving high school academic performance through external mandates or legislative fiat serve symbolic, public ends but miss the mark of providing a solid conceptual foundation for improvement policies. ²⁰

4. High technology needs demand major curricular changes in the high school. This belief is complicated by a two-tier approach to high school graduates that is assumed by its advocates. For non-college bound students, the argument runs, more math, science, and computer literacy courses are essential for graduates to work at entry level positions as programmers, repair personnel, technicians, etc. For college bound students, calculus, physics, electronics, and computer programming are pre-collegiate fundamentals required for careers in engineering, advanced mathematical and scientific research, etc. Problems arise with this line of thinking.

For the non-college bound students, taking more science, math, and computer courses may only be partially useful if the de-skilling of jobs continues. A number of writers have observed the breaking down of complex jobs performed by highly-skilled workers into a series of tasks that can be performed either by machines or less-skilled employees. Robots replace humans; highly skilled operators are let go in exchange for fewer workers to tend machines. Western Electric Company's Allentown (Penns.) plant once had 700 women carefully assembling transistors by hand. Today, according to Newsweek, a handful of workers monitor computer consoles. Skills contract although salaries may rise simply because companies need to attract responsible employees to tend expensive machinery. Similarly, word processing has deskilled the job of typing. If technology in the workplace produces less challenging, more monotonous jobs—as a number of critics assert—then

toughening the high school curriculum with more science, math, and electronics for non-college bound students may be premature, if not misguided. 21

For those students aimed at colleges there is the issue of an already crowded labor market of over-educated applicants. I mentioned earlier the sharp increases projected by the Department of Labor for computer programmers. Engineers, technical managers, researchers, designers of systems, and other highly-skilled positions will, indeed, expand. The problem is that in absolute numbers these positions are tiny fractions of the job market, far exceeded by demands in service and non-technical areas. A number of writers have pointed out the perils of numbers of over-educated workers exceeding available positions for which they are qualified. 22

Thus, it is unclear that swift technological changes in offices, banks, production, marketing, and distributing, and other areas of private and public sectors march in a linear, uniform manner. Public school policy will be better served by caution rather than calls for rapid curricular reform to meet needs defined by corporate or national commissions, particularly when policy decisions touch directly and intimately the futures of individual students.

A more fundamental criticism against a rushed embrace of more math and science courses is simply the error in assuming that extending student seat time in math and science classes will somehow, in mysterious ways, improve the thought processes of students. Requiring more courses is, I believe, a search for improved skills in thinking. But courses don't teach thinking; teachers do. How teachers question, the assignments they require, the opportunities they create for problem-solving and creative thought, whether they use the textbook as a source of authority or an object of analysis, how they listen

and respond to student questions, how they use writing to extend upper-level thinking skills—all of these teaching practices (and more) are linked to improved student thinking. It can occur in math, science, foreign language, English, history, and a dozen other content areas, provided teachers are aware and possess the skills to encourage such processes. Moreover, how many universities teach thinking in the subject matter areas as part of their curriculum? How many staff development programs in school districts target teacher questioning, training students to problem-solve, and a dozen other related areas? The answer to both questions is few.

5. Business support will help restore confidence in public schools. I am less critical of this assumption because there is no basis in either experience or research to provoke a serious examination of the statement. At no time in the history of public schools, including the common school movement of the mid-nineteenth century, has confidence in public schools registered such low esteem—insofar as records are available. Even during the 1930s in the midst of the depression, few critics questioned the performance of the schools. In fact, schools were viewed as the engines of change by radicals of the day. Whether the current ebb in confidence is rooted in facts of deplorable performance, perceptions that mirror increasing dismay with all public institutions, a keener awareness of what schools should be doing, or some complicated mix of these, I do not know. What I believe, however, is that a healing of the lesions in that faith is essential. I see some mending already underway which is why I believe corporate involvement in schools may be both timely and promising on this one issue of restoring the traditional faith in public schooling.

Enlisting the business community in an aggressive lobby to improve levels of public confidence offers a splendid chance for corporations to enter a conflict in which the schools have been gravely outclassed. Deterioration of public confidence, regardless of its sources, has weakened seriously the capacity of school personnel to deal with their daily jobs in a superior manner. Recall how a destructive spiral of lowered confidence provides the rationale for less school funding which, in turn, produces program and staff cutbacks that result in further angering school patrons thus eroding confidence even more. Lobbying by the business sector in behalf of improved schooling without further undermining the morale of school staffs can take the early signals of a mending climate of confidence and amplify them while screening out static.

After all, who supports local schools in a visible, persistent fashion as a central institution to a resilient, democratic society? And by support I do not mean blind, uncritical endorsement; I mean a sensitive awareness of the social glue that binds loosely-arranged democratic institutions together in an uneasy but creative coherence. Not the media where articles and 90-second stories often pillory schools. Not local government which often has to compete with the schools for tax funds. Not the federal government in the early 1980s where Administration initiatives often have chipped away at the credibility of public schools. Not the universities, save for a recent surge of interest by a small number of private institutions interested in high school reform.

Academics have blamed secondary schools perennially for inadequately preparing incoming students. And the general populace? If Gallup polls over the last decade register accurately their perceptions, support has declined. Except for

teachers, administrators, and parents who themselves are frequent adversaries and whose coalitions at tax levy time are generally discounted on grounds of self-interest, no segment of the private or public sector openly argues for the centrality of public schooling to the culture. The obvious rebuttals to these statements are twofold: strong criticism often generates improvement and is a form of support. Perhaps. But polemics and blame somehow seem to smother improvement efforts. Second, why should anyone support schools where academic performance has slipped, where only cries for higher salaries and smaller classes is all that is heard, where discipline is ignored, etc., etc.

The present corporate-school coalitions forming across the country have begun to develop a rationale answering these rebuttals. That is an encouraging sign, in my opinion. Corporate lobbying in the past for friendly legislation—need I offer specific instances?—has been marked by a high degree of success. Promoting corporate products on television, boosting business contributions to American's progress, and similar advertising are well-known. On occasion, self-interest and school improvement merge uniquely as, for example, in the recent Apple bill approved by the California legislature which will make Apple computers available at no direct cost to a school district while permitting tax write-offs to the Silicon Valley firm.

The potential for this assumption materializing is promising. And the need for a reaffirmation of the importance of public schooling to the social fabric and vitality of the nation by business and corporate leaders is an essential first step to any rehabilitation of faith.

Visible support by the business community will add substance to the familiar rhetoric of cooperation that educators have heard for decades.

Tangible support may come in a variety of ways, some of which are already occurring. Promoting fiscal formulas at state levels to provide stable and adequate school funding; establishing non-profit foundations targeting private resources on unmet school needs; launching advertising campaigns on television, billboards, radio, and in newspapers that point out the ties between schooling and a strong democracy; public recognition and awards to first-rate students, teachers, and administrators. Individual corporations and joint education-business councils can increase further traffic between workplace and classroom. Much of the above occurs but in a piecemeal, uncoordinated effort in any region. Tying together many of these fragments into a coherent effort has yet to be done.

Yet there will be critical moments when inevitable conflicts occur. Public school financial stability and corporate fiscal interests, for example, will clash as occurred in the 1980 campaign in Massachusetts to slash property taxes. The Massachusetts High Tech Council gave \$229,000 to the Proposition 2 1/2 campaign (or 60% of the total funds donated to get the referendum approved). Embittered local school officials watched corporations back a law that cut huge chunks out of school budgets, sent unprecedented numbers of pink slips to teachers and administrators, eliminated programs, drove up class size, and depressed staff morale even lower than it was. 23

Also consider the potential conflict between short-run corporate labor needs for bank tellers, technicians, office workers, and service personnel, the long-run national needs for a broadly educated and informed citizenry, and the personal aspirations of individual students. Historically, industrial demands for skilled workers generated public support for vocational schooling

to meet current labor requirements. Yet when industrial needs invariably changed workers were fired. Unemployed workers had limited flexibility in learning new skills, e.g. auto and heavy industries. Whether or not schools responded well to corporate demands generations ago while similarly responding to the best interests of the individual students, much less the nation, remains a question that historians debate. Yet the potential conflict lies an inch below the surface of current corporate-driven coalitions. Current policymakers need to be aware of the hidden conflicts between corporate firms, student careers, and national interests.

From sporadic clashes of conflicting interests in Massachusetts, California, and other areas, of course, no generalization emerges. But such conflicts over divergent interests will arise and which ways these joint ventures veer will test whether the promise of cooperation will be transformed into wrestling with core issues or remain at the usual periphery of plant tours, career days, and luncheon rhetoric.

Also, business support will come to school districts with some knotty strings attached. While the tug and pull of negotiation over what schools can and cannot do reopens a dialogue on public schools, offering a chance to diminish the current wisdom that schools-are-hopeless, business involvement will generate sharp criticism of certain school practices. A cliché jumps into mind: there are no free lunches.

Strings will be attached to corporate proposals for improved financing that may produce higher or more taxes. Calls for specific changes will, I believe, be inevitable. The California Roundtable recommendations, to cite one

case, include blunt references to the inadequacy of the uniform salary schedule, the need to reward superior teachers, weeding out ineffective ones, etc. Corporate criticism drawn from high tech industries around Route 128 outside Boston concentrated on similar points and went beyond to include the problems of tenure, inflexibility of teacher work schedules, administrative ineptness in managing public funds, etc. 29

With corporate involvement, new opportunities for imaginative collaboration appear. Jointly-sponsored external studies of local schools that go beyond the customary (but innocuous) ten year accreditation reviews offer, for instance, the chance to assess systematically a number of school outcomes that seldom get examined in depth or over time: drop-out rates, employment of graduates, college attendance and graduation, voter registration, community voluntarism, and yes, of course, multiple measures of academic performance—including test scores. Consider further business support of efforts to invigorate ties between classroom, community service, and the workplace. Any number of proposals have gathered dust on shelves that called for structural changes in how teachers and students allocate their time in secondary schools. Whether or not corporate cooperation would move in any of these directions is problematic but the opportunities for imaginative debate and action, at least, reappear.

Finally, corporate-driven coalitions lobbying for improved schooling have the unique potential for pumping up the gravely deflated morale of school teachers and administrators. That a significant segment of society, other than school staffs, believe in public schooling would go far in rescuing a morale that is sliding into apathy, if not cynicism. By helping to shift the overall

social climate from pessimism to cautious optimism, corporate involvement could provide a lasting contribution to school improvement.

Back in the Superintendent's Office...

Let me end this paper with a simple question: were I again a superintendent and aware of the assumptions embedded in the present enthusiasm of business-school cooperation, how would I enjoy the current romance?

The first thing I would do is join actively any foundation or business education council that is established to improve schooling and make it clear that both elementary and secondary levels should be included. I would make a special effort within the school district and the entire community to speak and write often that a broad and general education is essential to the workplace. I would take the often-used words of corporate executives about the pivotal importance of general knowledge and skills to press home the enduring value to personal and career goals of the fine arts, humanities, and the sciences to any student leaving school for further education or the workplace. When I served as superintendent, this issue was not on my radar screen.

Second, I would be leery of any set of competencies developed by the business community until I had scratched the surface of corporate enthusiasm for non-specialized schooling. At face-value, there may well be a conflict between a special-interest group preparing an inventory of expected skills and the multiple goals of schooling. I would inspect carefully what those business-scripted competencies are. My impulse would be to have corporate managers join parents and educators in creating skills rather than have one group do it alone. The fear I would have is that the competencies would be

dressed-up versions of previously produced lists of narrow skills directed to those occupations where labor demands currently run high. Schools need no further reintensifying of vocationalism.

Third, I would exploit the splendid opportunity offered by corporations interested in schools of expanding classroom and curricular efforts in thinking skills, problem-solving, or similar-sounding phrases. Without getting into the complexities of this innocent but potent phrase, I believe the present focus upon comprehension, analysis, and other complex intellectual skills including creative problem-solving, has captured one of the critical areas that schools are weakest in and need desperately intensive help from both university and corporate sources.

Few school systems in the country have attended to this issue in a concerted, comprehensive manner. Few academics outside of some cognitive psychologists are aware of the difficulties in implementing the simplest of programs geared to introducing thinking skills to the conventional curriculum. Even fewer commercial materials are available. When the Arlington School Board adopted a goal of improving thinking skills in 1975 and directed the staff to implement it, we had to start in defining what cognitive skills should be targeted, what existing materials in social studies, science, math, language arts (both elementary and secondary) were available, and then what tests could be used. Developing teacher capacities in learning how to find problems, break them apart into manageable chunks, questioning students and wait-time in responding to student answers, using textbook content to cultivate analysis, linking writing and homework assignments to thinking skills were just some of the approaches used. It was an especially tough set of tasks that yielded, I

confess, precious little in concrete outcomes other than an awareness of how complex the job really is. After five years of trying to integrate such skills into existing instruction across all grades in Arlington, I learned why both teachers and administrators move so slowly in this direction: inadequate knowledge and skills existed in schools, universities, and commercial publishers to translate such a policy decision into practice; inadequate administrative strategies undercut the translation of complex concepts into instructional activities plausible to principals and teachers. 25

Thus, recognition by non-school parties of the importance of concerted effort in helping schools work on thinking skills—however defined—is a critical first step in mobilizing aid in and out of the schools for a comprehensive examination of instructional practices and what needs to happen inside schools for these essential skills to improve.

Beyond these modest moves, I would be skeptical of the enthusiasm and rhetoric surrounding corporate involvement in schools. For the reasons offered earlier concerning what I view as flawed assumptions, I would not equate tests with predictions of future job performance; if anything, there should be reduced stress on tests from the hyperbole already surrounding them. Nor would I assume that external mandates from a legislature on more seat time in classrooms or more courses would translate into improved instruction or increased student performance. Finally, the assumptions about connections between schooling and unemployment need to be carefully assessed before embarking on major curricular changes. While the passion for quick political fixes to transform the school is an love affair between educators and reformers, seduction need not occur every time a glamorous coalition knocks on

the schoolhouse door. Moderation in striking a balance between conflicting and purposes of schools, insistent demands of varied constituencies, professional judgments about what's best for students remains the quintessential task facing school policymakers. Such a balance between parents, professionals, taxpayers, and business firms' agendas is called for now especially when a catchy melody is played by corporate pipers.

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An Equitable Framework for Corporate Participation
in the Public Schools

Richard Allen Caldwell
Director, Public Affairs Program
University of Denver
American Enterprise Institute
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I. Corporations, Schools, and the Courts

Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. . . .

If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. . . .

Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them.

- The National Commission on
Excellence in Education,
A Nation At Risk (1983)

To state the obvious, that the first duty of schools is education, turns out not to be self-evident. First, there is a strong tendency to equate education with teaching, transmitting skills and knowledge, which it is not; at least that is not the school's only major task. Second, there is a lack of understanding of how important character formation, education's core subject, is in itself for the purposes for which teaching is usually sought - as a source of basic skills for work, for mutuality, for membership in a civil community, and for effective teaching.

- Amitai Etzioni,
An Immodest Agenda (1983)

The value of education transcends its economic dimension, of course. Knowledge does not need to be justified in instrumental terms. But in our present period of fiscal belt tightening, it is well to remind ourselves of the connection between education and our collective well-being. A decline in our citizens' capacity to analyze, innovate, create, and communicate will condemn us all to a meager existence as it impoverishes our cultural and civic life together. . . .

. . . . in the emerging era of productivity, social justice is not incompatible with economic growth, but essential to it. A social organization premised on equity, security, and participation will generate greater productivity than one premised on greed and fear.

- Robert B. Reich,
The Next American Frontier (1983)

No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

- Amendment XIV, The Constitution
of the United States

No one knows who will live in this cage of the future, or whether at the end of this tremendous development entirely new prophets will arise, or there will be a great rebirth of old ideas and ideals, or, if neither, mechanized petrification, embellished with a sort of convulsive self-importance. For the last stage of this cultural development, it might be truly said: 'Specialists without spirit, sensualists without heart; this nullity imagines that it has attained a level of civilization never before achieved.'

- Max Weber, The Protestant Ethic
and the Spirit of Capitalism

This is a time of searching criticism of the values, goals, and outcomes of American education. How competent are the schools? What do we want them to accomplish? Americans have a basic faith in education and a constant hope that improvement in schools is linked clearly and directly to more profound improvement in the larger society. A central assumption has always been that a democratic society requires an educated citizenry so that individuals may participate in the full range of public life. A second assumption has been more utilitarian - that education systems are the foundation for continuing economic growth and development.

The most basic interests and values of society are represented in education policy. Yet, in a pluralistic society such as the United States there is often deep disagreement over which values should dominate. Since policy decisions that affect schools reach so deeply into the workings of the American community, conflict has always been an integral part of policy making. Thus many divergent interest groups contend regularly for leadership in determining the agenda for education policy. The interests of parents, professional educators, and businesses are always present in education, for example, but are

often at substantial variance with one another. Each contending group has a stake in the ultimate question: What should be the goals of education? Possible answers include the following:

- preservation of the existing culture and status quo;
- production of literate and informed citizens;
- production of consumers;
- production of trainable workers;
- production of scientists and technologists;
- production and shaping of elites;
- religious indoctrination.

Whatever goals are actually chosen, it is worth noting that education policy in the United States has usually been a function of two basic principles: first, education should be free, open, and universal; second, control over education should be centered at the local level. The irony of these guiding principles is that educational successes, failures, and controversies have always spoken to the national purposes of promoting a deeper commitment to social equity along with greater excellence.

Schools reflect an interesting point of convergence between private enterprise and public values. Americans want to believe that their society is a meritocratic one in which the most intelligent and talented people rise to the top. Since public schools are free and available to everyone, individuals should be able to go as high as their ability and drive will take them. In this view education acts as the great equalizer, providing opportunities for everyone to reach his

or her full potential.

It is arguable that this belief is too simplistic. It is equally true that the present school system may reinforce and perpetuate certain forms of inequality in society. Schools play a considerable part in choosing who come to occupy the higher-status positions in society. (Jencks, 1979). Conversely, school performance also sorts out those who will occupy the lower rungs in the occupational prestige ladder. Education is, therefore, a selection process, one that reflects both social class and an individual's ability and performance. It is not the bare fact that schools differentiate, however, that is most troublesome; it is the rules of the selection process - both written and unwritten - that determine whether the results of the process are acceptable in a democratic society.

Business, the prime consumer of the education system's products, is increasingly interested in the structure and function of education. Given the country's need for a technologically literate and economically productive workforce, it seems evident that the educational system cannot remain isolated from the demands and priorities of the corporate sector. This new interest in education comes at a time when many traditional ideas of the proper role of business in society and in relation to government are breaking down. The rather narrow set of expectations that business will restrict itself to making a fair return on investment while producing quality goods and services at competitive prices, paying fair wages, and obeying laws in a highly regulated administrative environment, is giving way to a broadened conception of private sector

activism in the public domain. Nowhere is this new activism more apparent than in the public schools. Interestingly, alterations in traditional divisions between public and private spheres of endeavor coincide with the strong movement toward socioeconomic egalitarianism as a goal of both social and legal policy.

The thesis of this paper is that the most significant legal barrier to the deepening involvement of corporations with the public schools is, ultimately, the problem of finding constitutional mechanisms for the fair and equitable distribution of corporate resources in aid of education. Given the widening perception of the failures and inadequacies of the public school system, businesses, in their role as employers, will become much more involved in setting the educational tone for America. More significantly, the private sector will be providing some of the actual resources for achieving a new set of educational goals - goals that are closely related to fostering the societal conditions that promote economic growth and enhance the ability of the United States to compete in a challenging international environment. It will be argued that such contributions to the schools are to be welcomed, if they can be made within an equal protection framework that does not enhance the position of some students, or some school districts, at the expense of others.

Corporate involvement with the public schools has already taken many forms, for example:

- In Los Angeles, an "Adopt-a-School" program, sponsored by Atlantic Richfield Co., has encouraged corporations to invest in

neighborhood schools by donating manpower, personnel who volunteer their time as teachers, tutors, and coaches.

- In Boston, the Boston Compact, recently ratified by the Boston School Committee, has created a partnership between leading city businesses and inner city schools. Many of the city's employers have promised good jobs for all Boston high school graduates, provided that they meet minimum standards for reading, writing, and regular attendance. This year, under the agreement, some 200 businesses will reserve 400 jobs for Boston graduates; two years from now, they will provide 1000 jobs.

- Corporations have provided free equipment to the schools to be used for a variety of instructional purposes. Microcomputers and related software appear to be the most popular items. In Denver, Atari has donated several dozen computers to one high school that has provided a high level of mathematics and computer programming training for more than fifteen years. In return, a number of students have developed user's guides and software development to Atari. Tandy Corporation is offering schools all over the nation a free staff development package to help teachers learn to use computers for instruction. Apple Computer Corporation, anxious to donate a computer to every school in the country, has been lobbying Congress and various state legislatures for an appropriate tax break.

- The "school foundation" movement has been spreading across the country, with more and more communities setting up tax-exempt organizations through which to solicit private and corporate donations for the public schools. In Pittsburgh and Dallas, school districts have set up

educational foundations which rely on contributions from corporations and wealthy individuals. In Beverly Hills, California, residents have been able to raise \$400,000 for each of the past five years through dinners, sales of a school guide and calendar, and movie premiers. The money has been used to save teacher positions in the wake of Proposition 13, to hold down the average class size, and to create programs in writing skills, remedial reading, and special education.

- Standard Oil Co. has granted nearly \$2 million to the American Association for the Advancement of Science to begin "Science Resources for Schools," a project to provide information and materials to improve the quality of classroom science.

- In 1978, the North Carolina General Assembly established the North Carolina School of Science and Mathematics, a residential high school in the Research Triangle area that currently enrolls 400 eleventh and twelfth grade students. The annual budget for this school is comprised of contributions from the state general fund (2/3) and from high technology companies in the area (1/3). The instructional staff is made up of teachers with advanced degrees in their fields (46% have doctorates), who need not be certified.

These types of corporate activities, and many others which are being developed and actively promoted, raise a series of concerns about increasing reliance on private sector initiatives in the context of the public schools. Serious legal questions in this area have as their basis a recognition of the gradual recasting of the fundamental relationships in education between private organizations and the public schools.

II. School Finance, Equity, and the Privatization of the Public Schools

Economist Charles E. Lindblom (1977) has suggested that the central question in any specified public policy issue is the degree to which the market replaces the government or the government replaces the market. He points out that all politico-economic systems employ three primary mechanisms of social control in order to reach certain ends - exchange, which is the fundamental relationship on which market systems are built; authority, which is basic to the formal organization of government; and persuasion, which is a ubiquitous commodity that lends itself to instruction in the "free competition of ideas" that typifies and underpins liberal democracy.

When confronted with the changing relationship between public and private sectors in education, what is most striking is the recognition that not all public problems are acted on exclusively by government. In a mixed system, one marked by perpetual and dynamic change in the relationships between public and private, public problems often reverberate in the private sector. Conversely, many private problems are acted on in government and many of these same private problems are acted on in government as though they were public problems. It is useful to recognize that most problems are not ultimately solved exclusively, if at all, by government, even though many are acted on there. Are some public ends more efficiently served by entrepreneurial involvement with public education? To what extent does such involvement, based on exchange, create specific legal dilemmas, which will necessitate the extension of governmental authority and control?

Declines in the perceived effectiveness and relative performance of the public education system are altering in fundamental ways the heretofore largely passive acceptance by corporations of the inadequate skills and limited future potential of recent graduates for learning and doing the complex tasks of a technological society. If corporations stand ready to act in the public interest and to do more for the schools, through direct involvement, financing, and planning, then specific legal questions arise with respect to the guidelines and constraints, if constitutionally required, that courts will place on business initiatives. This is especially critical if the benefits of these initiatives are unfairly apportioned among the recipients, or if they are purely for the furtherance of economic ends. In short, if a major priority of business is to shape school programs, which are now financed almost entirely by the taxpayer, how can an equitable framework for the channeling of private resources into the public sector be developed and maintained?

The notion that business has a responsibility to society beyond the production of goods and services is hardly a new one. Certainly, this responsibility has long been expressed in charitable contributions, public service functions, and fund raising activities of all kinds. What is new is the idea that coordinated private and public action may be required to advance society's best interests, that some issues, like education, are simply too significant, in terms of the national interest, to be left drifting at the mercy of old political categories.

A useful beginning in defining the nature of a public-private partnership has been made by The Committee for Economic Development (1982). The Committee points out that a "public-private partnership means cooperation among individuals and organizations in the public and private sectors for mutual benefit." One key to avoiding judicial intervention in such partnerships may very well be the idea of mutuality. If a framework of genuine and reciprocal cooperation is established to form a policy consensus on community goals, agreement on institutional roles, and support for action, then the state's interest in promoting the welfare of the whole community can be upheld. Legal issues may turn less on the perfection of abstract notions of individual rights to equality, and more on broader concepts of community benefit.

If simultaneous action in the public and private sectors is going to be required for the achievement of an important social end, if private initiatives for the benefit of public education are to be regarded favorably by the courts, then overall fairness and an intent to confer advantages on a broad base of recipients must be the hallmarks of public-private partnerships. It is the thesis of this paper that the process of legal review should not stand in the way of thoughtfully-constructed partnerships. Indeed, the legal system should be responsive to concerns about quality in education and should stand ready to facilitate those approaches that stand a chance of enhancing the functioning of the schools.

Early in the twentieth century, Austrian legal philosopher Eugen Ehrlich advanced the proposition that the "center of gravity of

legal development lies not in legislation, nor in judicial decision, but in society itself." (Ehrlich, 1912) At the heart of this statement is the recognition that law is dependent to a large extent on events, that it exists in a larger social framework, and that it is but one of a number of mechanisms for ordering discussion and management of significant policy questions. This basic emphasis on social reality was viewed by Roscoe Pound (1922) as requiring the development of legal institutions and rules that satisfied "social wants," which were linked rationally to the satisfaction of worthwhile purposes. What could be more worthwhile than the creation of legal rules that facilitated the revitalization of American public education?

The ideas of equity, fairness, and equality are central values and aspirations of the American ideological system. Equality, like justice, is basic to the organization of American society. Indeed, the Fourteenth Amendment to the United States Constitution declares that no state shall deny a person equal protection of the law. Yet, like justice, equality is not a term that is easily or conveniently defined. Equality is valued for its own sake, as an attribute of being human. It is also valued as an instrument to obtain other things of value. This lack of consensus has always been manifest in an education context. This is so because education can serve as an equalizing or leveling social force, or it can function as a selection mechanism that acts to perpetuate existing patterns of inequality and social stratification.

American courts have been deeply involved in deciding major issues of education policy. In the main, they have concerned themselves

both with eliminating segregation and with equalizing educational opportunities. Thus, the rejection of the "separate but equal doctrine," in Brown v. Board of Education of Topeka, 349 U.S. 294 (1955), has been followed in recent years with intense litigation about disparities in school finance. School finance reformers in many states have argued that state programs for funding elementary and secondary schools were unconstitutional because they violated the equal protection clause of the Fourteenth Amendment. Since the majority of elementary and secondary school revenues are generated by local property taxes, and since the amount and value of taxable property varies tremendously from one school district to another, the unequal distribution of resources works to the considerable disadvantage of residents of poorer school districts.

The legal battles over school finance equalization reflect the conviction that expenditures are closely related to the quality of education. While this rather commonsensical idea may be true, exact relationships are unclear. It does seem fair to say, however, that the level and type of expenditures do affect, either positively or negatively, the possibilities for overall educational success. Quite obviously, wealthy districts can pay teachers higher salaries, construct and maintain higher-quality physical facilities, and offer a wider range of educational programs. Districts whose activities are supplemented by corporate or foundation largess, may have possibly unfair advantages over those that are not so fortunate.

In a general sense, government action often entails the classification

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of citizens, taxing various income groups and different rates to effectuate particular social purposes, providing health care and housing to some and not to others, and admitting some persons to state universities and rejecting others, on the basis of merit or other demographic factors. In essence, equal protection cases generally require a court to decide whether specific classifications can be justified by their rational relationship to some specific and legitimate legislative purpose or state interest. (Cox, 1978)

Courts have found "suspect" legislative classifications resting on characteristics such as race and religion and have required states to demonstrate a "compelling" reason for using such classifications. Courts have also held that the equal protection clause protects certain "fundamental rights" more rigorously than other interests. When cases involve "fundamental interests," courts pass judgment on both the classifications and the purposes of legislation. (Berger, 1977)

At a minimum, the equal protection clause would appear to (1) apply to all persons; (2) prohibit discriminatory state actions; (3) prohibit state involvement in discriminatory private actions; (4) not be limited to formal legal rules, but to apply as well to both the intent and results of a law; (5) allow many types of classifications and differentiations, but force the state to treat all persons within the same class equally; (6) not tolerate "equal discrimination;" and (7) force consideration of whether a classification, in itself, is unreasonably underinclusive or overinclusive, i.e., whether a differentiation is a reasonable response to a problem,

given the totality of the circumstances. (Baum, 1981; Birkby, 1983)

Given these minimums, how far does the Fourteenth Amendment extend into the domain of public policy? How far should it extend in setting education policy with respect to private-public partnerships? The views of several noted legal scholars are instructive:

The judicial process is too principle-prone and principle-bound - it has to be, there is no other justification or explanation for the role it plays. It is also too remote from conditions, and deals, cases by case, with too narrow a slice of reality. It is not accessible to all the varied interests that are in play in any decision of great consequence. It is, very properly, independent. It is passive. It has difficulty controlling the stages by which it approaches a problem. It rushes forward too fast, or it lags; its pace hardly ever seems just right. For all these reasons, it is, in a vast, complex, changeable society, a most unsuitable instrument for the formation of policy. (Bickel, 1970)

The constitutional requirement of 'equal protection of the laws' cannot possibly mean that a State must treat everyone exactly alike. Classification is an inescapable part of government. The Fourteenth Amendment does not require a State to allow an almost blind man to drive an automobile because it grants licenses to those with perfect vision. . . .

(1) A classification is constitutionally permissible which has some reasonable basis in terms of some rational view of the public interest.

(2) If a set of facts could conceivably exist that would render a classification reasonable, their existence must be assumed. (Cox, 1978)

Since Brown, the Court has continued to expand, and to confuse the public perception of, its power of equity. The result has been to substitute social-science speculation for precedent and principle as the standard of both constitutional meaning and equitable relief.

. . . . The most prominent feature of this new concept of equity is the object addressed. Equity has now become the means of 'reconciling public and private needs.' What at the Founding was thought to offer relief to individuals from 'hard bargains' has become a judicial power to draw the line between governmental powers and individual rights and to attempt to create remedies for past encroachments against whole classes of people.

. . . . The formulation of public policy is an expression of political will. To be legitimate, such policies must reflect the will of the people, not the independent will of their deputies. The judiciary has no means available for ascertaining the public will in any meaningful sense. It is not, strictly speaking, a representative body. It must be assumed that the Court, when it moves to make decisions

with respect to such matters as immediate integration of schools, busing, low-income housing development, and remedial-education programs, is exercising not merely judgment: it is making policy choices; it is exercising its own will. It is exercising a power that the Constitution denies to it. The Court, under the guise of its 'historic equitable remedial powers,' has been endeavoring to formulate public policies for which it lacks not only the institutional capacity, but more important, the constitutional legitimacy. (McDowell, 1982)

The framers, it needs to be said at once, had no thought of creating unfamiliar rights of unknown, far-reaching extent by use of the words 'equal protection' and 'due process.' Instead, they meant to secure familiar 'fundamental rights,' and only those, and to guard them as of yore against deprivation except by (1) a nondiscriminatory law, and (2) the established judicial power and procedure of the State. (Berger, 1977)

These rather "conservative" views of the limits on the legitimate extension of judicial power under the flag of equal protection, lead to the following question: Are corporate contributions to the public schools vulnerable to attack on the theory that the Constitution requires equal spending per student by local school districts throughout a state? Will privately raised funds and in-kind aid make our public schools quasi-private? In this writer's opinion, this would be an unwarranted conclusion to draw from the school finance cases before us. Nevertheless, several cautionary notes are in order, as the range of private action in the schools accelerates.

Both state and federal school finance cases are important because corporate contributions to the schools may very well be likened to a unique kind of "finance," i.e., funding of a new type that could be the subject of judicial review by active courts. If such finance were truly inequitable, such review might well be justified. The central issue in the present discussion would seem to be the need to balance the possible right to an equally funded education against

what could be defined as an evolving state interest in promoting an education policy that results in demonstrable educational benefit to a large number of students, creates community solidarity, and enhances the likelihood of economic growth, higher productivity in the labor force, and reduced costs in the public sector.

Simply stated, there is clearly a state interest in encouraging quality education that relies, in part, on contributions from the private sector, even at the expense of abstract and utopian notions of perfect equality of treatment. Indeed, high-quality educational opportunities, made possible by enlightened, even self-interested, corporate contributions that are non-discriminatory in effect and beneficial in operation, may result in greater overall equity. If a better education for substantial numbers of students is the result of new kinds of partnerships between business and schools, then a strict judicially-based test of "contributational equality" may not be required. Without question, however, reclaiming excellence in education will require a continuing, long term commitment to essential equity on the part of corporations, in order to avoid the application broadened concepts of equal protection.

In order to make these positions clearer, it is worthwhile to consider the current status of school finance litigation. Proponents of school finance equalization have consistently argued that many programs for funding education violate the equal protection clause of the Fourteenth Amendment, because reliance on local property taxation constituted a classification of students according to a suspect

characteristic, the wealth of their communities, and this could not be justified by any compelling state purpose. It has also been forcefully argued that students have a fundamental right to an education and that this right should not be any less available in one community than in other. But is some degree of unequal financing a violation of equal protection?

In theory, while not a guarantee of equal educational quality, if schools spent approximately the same amount of money per pupil, this might satisfy some interpretations of the due process clause. This has not been accomplished nationwide, because wealthier states, or states with a greater commitment to education, are able to pay much more per pupil than are poorer states. According to the U.S. Bureau of the Census (1980), each student in New York is supported by a state subsidy of \$2,759, while a student in Tennessee receives only \$1,172. Since the federal government provides less than 10 percent of the money for the public schools, equalization across state lines is impossible.

Given the difficulty of creating a national school finance scheme and the tradition of local and state control of schools, litigation has centered at the state level. Since public schools have largely been financed through property taxes, rich school districts can spend more money than poor ones on each student, and at a lower taxing rate. State equalization aid, typically, only partially makes up for these disparities. This situation has tended to advantage suburban students over those in the inner city. Businesses

located in some districts tend to advantage those districts over agricultural areas; districts with natural resources are able to provide more per pupil than those without.

The movement toward equalization of school finance on the state level was accelerated by Serrano v. Priest, 487 P.2d 1241 (1971). In this case, the California Supreme Court ruled that education was a fundamental right, under the California constitution, and that it could not be compromised by the wealth of a child's parents or neighbors. The Court said that the state's school finance scheme violated both the United States and California constitutions. The system's substantial dependence on local property taxation caused wide disparities in local school revenues and meant that the quality of a child's education was a product of his geographical locale.

The rationale behind Serrano has not proven persuasive, however, on the federal level, or in other states. In 1973, the United States Supreme Court, in San Antonio Independent School District v. Rodriguez, 411 U.S. 1 (1973), ruled that education was not necessarily a fundamental right and that there was no need to show that the state education finance system was the result of some "compelling state interest," only that it was rational. The Court further stated that the only fundamental rights for the purpose of the equal protection clause are those "implicitly or explicitly guaranteed by the Constitution."

With respect to the issue of wealth as a suspect classification, the Court in Rodriguez said that differences in spending levels

could not be equated with "interference with fundamental rights," and upheld the use of property taxes in Texas by stating that there was no evidence that Texas children in certain districts were deprived of "an adequate minimum educational offering." The Court stated:

. . . . a sufficient answer to appellees' argument is that, at least where wealth is involved, the Equal Protection Clause does not require absolute equality or precisely equal advantages.

Recently, in Lujan v. Colorado State Board of Education (1982), the Colorado Supreme Court, in an elaborately reasoned decision, held that the state's system of financing public elementary and secondary education is constitutional, and reversed a District Court's ruling to the contrary. Under the Public School Finance Act, the state's schools are financed through a combination of local, state, and federal revenues. The Act establishes a financing formula whereby those districts with higher assessed property valuations are able to generate more revenue for educational purposes than those districts with lower assessed property valuations. In addition, the statutory method for funding capital construction projects - the capital reserve fund and the bond redemption fund - operate so that high property wealth districts can raise more revenue than low property wealth districts. In its ruling, the Court rejected the equal protection argument and the notion that wealth is a suspect classification in school finance:

. . . . Appellees argue that a "suspect class" is present here either as a "class" composed of low-wealth school districts, or as a "class" composed of low-income people. We disagree. The evidence in this case does not demonstrate that the school finance system operates to the peculiar disadvantage of any identifiable,

recognized class.

. . . . there is no distinct and insular "class" of poor persons as required for equal protection analysis. Under this analysis, we define a "class" as being a group marked by common attributes or characteristics. Here, however, the alleged class of "poor persons," while possibly linked by their respective income levels, have no common attribute relative to Colorado's school finance system. The evidence does not show that poor persons in Colorado are concentrated in low-property wealth districts, or that they uniformly or consistently receive a lower quality education, or that districts in which they reside uniformly or consistently expend less money on education.

Finally, the Court held that under the Colorado Constitution, the mandate that the General Assembly provide a "thorough and uniform system of free Public schools," did not mean that the educational expenditures per pupil in every school district had to be identical, so long as expenditures within a given school district were relatively uniform.

Equalization in school finance is a long way off, if it is attainable (or desirable) at all. Litigation over the issues involving equal protection continues and jurisdictions are often in profound disagreement. Not even the most vocal critics of various forms of private aid to the public schools have argued, however, that business involvement will eventually supplant public funding. Without question, the majority of actual school revenues will continue to be supplied by the taxpayer.

Specifically, based on a review of school finance litigation, on the inconclusive federal and state status of this litigation, and on an understanding of the limitations inherent in the limitless extension of the Fourteenth Amendment, a restrained perspective on the applicability of the equal protection clause to public-

private partnerships in education is in order. Such partnerships, which pertain to one district, or school, and not another, may indeed create some disparities; but these financial and operational variations, unless deliberately extreme or unfair in concept, probably do not pose substantial or extreme constitutional questions at this time. In addition, even if disparities are created by corporate actions and activities, even if one district benefits from a specific corporate program and not another, the tremendous range and diversity of private initiatives may tend to balance out in the end. It is important at this time, during the early developmental stages of many new and unique kinds of partnerships, not to build unwarranted rigidities into the legal system, or to look prematurely toward legal review of private initiatives in education. On the other hand, such initiatives involve state action, and it is critical that these actions be guided by a spirit of fairness and essential equity.

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Richard Allen Caldwell
Director, Public Affairs Program
University of Denver
Spruce Hall North 241
Denver, Colorado 80208
(303) 753-2468

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INCENTIVES AND BARRIERS TO PRIVATE SECTOR INVOLVEMENT IN PUBLIC
SCHOOLS: A CORPORATION'S PERSPECTIVE

Marcia Appel

Communications Manager
Control Data Corporation

Susan Schilling

Marketing Manager for Secondary
Academic Education Products
Control Data Corporation

After scrutinizing the American educational system for 18 months, the National Commission on Excellence in Education recently released a report which furrowed foreheads and knit eyebrows across the United States.

At a time when Japan's auto makers are making life miserable for Detroit's car companies and workers, the commission reports that only one-third of the nation's 17-year-olds can solve even the most basic mathematical problem.

Equally alarming is the commission's finding that nearly 40 percent of the country's high school seniors fail to draw inferences from written material and only a fifth can write a persuasive essay.

The report cites a functional illiteracy rate hovering near 13 percent among the country's 17-year-olds and a rate near 40 percent among the nation's minority students.

If soaring illiteracy alone doesn't upset a nation which prides itself on its educational system, the report also reveals that College Board Scholastic Aptitude Test scores in mathematics, physics, English, and other subjects have plummeted since 1963.

The report warns that the United States' world dominance in industry, science, and innovative thought is being challenged--if not already eclipsed--by ambitious, keenly educated global competitors.

Educational analyst Paul Copperman cautions in the report that the United States no longer moves toward a better-educated citizenry with each generation--a U.S. trademark since the country began.

"For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents," according to Copperman.

If the report's findings aren't exactly a "call to the lifeboats" for U.S. education, they are a stern warning that this country's educational system is listing heavily amid some terribly turbulent waters.

"Our nation is at risk," the report states, ". . . the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people."

And in its conclusions, the commission looks no further than the educational system itself to find the source of the trouble.

According to the commission, the system is rife with inherent weaknesses, some of which include: watered-down, "cafeteria-style" curricula; declining standards and expectations; shrink-

age in time devoted to schooling and homework, and a shortage of motivated teachers in an abusive system which grinds teacher enthusiasm to disillusionment.

As recommendations for revival, the commission stresses addressing the educational needs of individuals--allowing students the chance to soar to their own learning potential.

"We must emphasize that the variety of student aspirations, abilities, and preparation requires that appropriate content be available to satisfy diverse needs," the report states.

"Attention must be directed to both the nature of the content available and to the needs of the particular learners."

And in taking inventory of the "tools at hand" to accomplish system repairs, the commission counts the "ingenuity of our policy-makers, scientists, state and local educators, and scholars in formulating solutions once problems are better understood."

Although the commission's report only recently turned nationwide attention on the country's crumbling educational system, William C. Norris, chairman and chief executive officer of Control Data Corporation, sensed many of the same structural problems as early as 1962.

Norris was among the first to suggest that computer-based education could streamline and improve the educational process while placing the focus of education back where it belongs--on the development of each student to his or her maximum learning potential.

Norris also led the way in advocating cooperation among private industry, government, and schools to accomplish the necessary changes in the country's educational process.

In 1962, Control Data, the University of Illinois, and the National Science Foundation, began developing PLATO, a computer-based education system designed to train, educate, and aid persons in reaching their learning potential individually.

More than 20 years later, with many of Norris' suspicions reinforced by the 1983 commission's report, the company is striving to promote computer-based education--firm in its belief that computer-based education is the "tool" necessary for rebuilding the country's sagging educational and training systems.

COMPUTER-BASED EDUCATION--Changing the Process.

The traditional process of education in the United States buckles under its own weight.

As the number of teachers, students, courses, and dollars spent multiplies so also do the number of dropouts, poorly educated students and complaints about the country's faulty educational system.

Dr. William Ridley, Control Data's vice president for academic strategy, said that while "teachers blame the parents, parents blame society--everybody's blaming somebody--the real problem is the process itself. It's outdated."

While the process has many faults, the system's greatest shortcoming is the emphasis it places on "group" education at the expense of the individual.

Under the traditional process, about 30 students in a classroom are exposed to precisely the same amount of material for an equal amount of time. Students then are tested on the material, evaluated in terms of one another's performance and either promoted or discouraged depending on the results.

While it's been the accepted method of education in the United States for decades, the group process limits exceptional learners, inhibits slower students and requires the teacher to constantly walk an educational middle ground. Thus, traditional education negates the individuality and educational development of each student in favor of the orderly processing of the group.

In its report, the commission concurs on the need to re-emphasize the importance of educating each student rather than providing a "scatter shot" education for the group.

"The most gifted students, for example, may need a curriculum enriched and accelerated beyond even the needs of other students of high ability," the report states. "Similarly, educationally disadvantaged students may require special curriculum materials, smaller classes, or individual tutoring to help them master the material presented."

"When you have an educational standard that everybody's supposed to reach, some can't and they get defeated. That's what's defeating most learners," Ridley said. "The real competition should come only from their own potential, not from the student sitting next to them. Just about everybody will rise to that kind of competition because it's something they can reach."

The group process also places unfair demands on teachers, requiring them to tailor their lessons to satisfy the needs of a diverse group of students. Unfortunately, as the commission's study indicates, when thrust reluctantly into the role of "jack-of-all-trades," the teacher, predictably, proves to be "a master of none."

Ridley said the traditional system finds teachers graduating from college "and they're supposed to be an instant performer, subject matter expert, counselor, record keeper, they're given all those tasks. The computer can do some of them better, so why waste their time on that?"

Unlike group education, computer-based instruction permits tailoring an educational program to meet the needs of each student.

PLATO allows students to proceed through lessons at their own pace and in private, allowing the student to experience the joy of success while avoiding the embarrassment of failure. PLATO also offers immediate results, showing students how they are progressing and providing positive reinforcement.

In addition, the computer relieves teachers of many administrative chores, including record keeping, test scoring and other "administrivia," and allows them more time to provide individual attention for the students.

"The computer should be the silent servant in the background, under the management of the educators," Ridley said. "I've never seen a computer terminal lose its patience. It seldom calls in sick. That tool is just lying there waiting to be used."

THE CORPORATE PERSPECTIVE: Cooperative Investment in Human Capital:

Making computer-based education an integral part of the country's educational system requires fundamental changes in the relationships among education, business, and government.

A business world increasingly in need of highly educated employees cannot ignore the nation's troubled educational system. At the same time, in order to salvage what's left of the educational system, it must permit businesses to address the system's problems as profitable business ventures.

While government support of education is essential, continued investment in a system that fails to make use of advanced technology would be foolish, much like investing in a manufacturing plant with obsolete equipment.

A decline in the quality of education in the United States inevitably produces a maddening circle of events which affects all facets of society.

For example, the U.S. presently ranks fourth, behind the Soviet Union, West Germany, and Japan, in terms of science literacy. Russia graduates three times as many engineers as the United States, and tiny Japan produces 5,000 more electrical engineers each year than graduate in this country.

With the number of scientifically skilled graduates lagging and the quality of those graduates suffering as well, the United States finds itself increasingly inept in the field of science at the same time problems such as energy conservation, food production, and urban blight demand innovative and sometimes highly technological answers.

Convinced that the necessary improvement in the educational process cannot be attained without the use of technology, Control Data has made PLATO one of its major investments in the past 15 years.

At the same time, Control Data has continued to explore avenues that will enable it to make a fair profit and employ people.

A prime example of the proposed partnership approach is the Microelectronics and Information Sciences Center at the University of Minnesota.

By donating funds, facilities, and processing expertise, industry allows the Center to conduct highly technical research without duplicating spending on costly facilities and salaries.

This cooperation enriches the educational process while businesses--both large and small--reap the benefits of new technology. When applied, the technology can bring industry profits and competitive position in the world marketplace.

Another example of the cooperative effort necessary for improving education through the increased use of technology is Wellspring, a recently formed task force in Minnesota.

Drawing members from industry, labor, government, and academia, the Wellspring task force seeks to improve the state's education system through the widespread use of computer-based education and the cooperation of each group represented.

Control Data is also pursuing cooperative efforts with secondary and post-secondary schools, offering computers and courseware while the schools provide educational expertise, personnel and the basic raw material--students.

Through such cooperative programs--by testing, probing and eventually discovering the proper mix of technology and people--business, education, and government can get about the necessary task of improving education through computer-based instruction.

THE PATHS OF LEAST RESISTANCE: Getting Computer-based Education into the System.

As Control Data began developing PLATO in 1962, the fledgling company took a "practice what you preach" approach toward computer-based education by exploring the benefits of PLATO through in-house training programs.

Initial PLATO courses were used for training Control Data managers, computer operators and programmers to work within the rapidly growing company.

When the training programs proved successful, Control Data started expanding its courseware library and eventually began producing about 2,000 new course hours annually. PLATO now features more than 12,000 hours of courseware in a variety of subjects.

Since 1976, when Control Data first marketed its computer-based education system outside the company, PLATO has come to be used in small and large businesses, learning centers, computer technology schools, government facilities, and elementary, secondary, and post-secondary schools.

Because productivity is one of the greatest concerns within industry, and because industry spends more than \$100 billion annually on employee training, Control Data approached employee training early on as a problem within society which computer-based education could solve.

Control Data has established a network of more than 100 Learning Centers and Business Centers across the country where businesses and their employee trainees have access to PLATO instruction.

also scattered throughout the country are 27 Control Data Institutes, which train people for ongoing careers in computer programming, operations, maintenance, robotics, and other jobs.

Banks, airlines, and manufacturers are among the many other businesses which rely on PLATO for training tellers, pilots, and other personnel.

In Reading, Pennsylvania, a steel company sends its technicians to nearby Reading Area Community College, where a PLATO program was developed to provide training on maintenance of specialized recording equipment.

The training program offered by the manufacturer costs \$700 a day, lasts two weeks and lies a two-hour drive from Reading.

By bringing computer-based education to the public through its Learning Centers, Control Data also addressed the needs of growing educational phenomenon in the United States--adults, continuing education.

At a time when many colleges and school systems still looked askance at computer-based education, Control Data developed Fair Break, a program designed to meet the educational needs of youths, ages 16 to 20 who, for whatever reason, had dropped through the cracks in the traditional educational process.

The Fair Break curriculum features training in basic skills, including math and language arts, while also offering courses in job-seeking skills and life management.

At Scott High School, an inner-city school in Toledo, Ohio, more than 450 students participated in Career Outreach--a version of Fair Break--during its first year in existence.

The students spent one hour each day with a computer terminal, studying the basic skills curriculum to improve their math and reading skills. After several additional hours of schooling each day, the students then reported for training and work experience at various Toledo businesses.

Ridley said that through Fair Break, between 5,000-10,000 youths have been "lifted up out of unemployability into jobs. Those were kids who did not learn the traditional way. This kind of learning really lighted some learning 'wicks' in some of those kids. They had never known learning success before."

Fair Break has also penetrated the nation's prisons, where inmates in several states are using PLATO to learn job skills in anticipation of finding work after release from prison.

THE FINAL BARRIERS--Penetrating the Traditional Educational Process.

Although PLATO has managed to find its way into the nation's depressed inner cities and between the bars on prison gates, some segments of the traditional system of secondary and post-secondary education have continually offered resistance.

Other schools and colleges, recognizing the need for change and witnessing the benefits of computer-based education as applied in other areas, have welcomed the technology.

More than 100 colleges and universities use PLATO to serve both students and teachers. Elementary and secondary schools throughout the country are using PLATO programs to help teach math, science, reading, and more.

Though frustrating, revamping an educational process which has served a country for decades is not accomplished overnight. Opposition to computer-based education has come from teachers who fear for their jobs and school districts which dread the "de-humanizing" effects of computer-based education and shun the expense.

Many opponents, however, ignore the fact that computer-based education is designed to free the teacher from many administrative chores and permit more personal interaction between instructor and student.

Many schools now experimenting with computers are missing this point, using terminals as nothing more than sophisticated audiovisual devices instead of allowing computer-based education to change the process itself.

By laying technology atop the traditional process of education, schools provide themselves only a supplemental tool at an incremental cost. Needed changes in the educational process will come only when schools allow computer-based education to focus learning on individual students and free teachers from administrative chores.

Because salaries account for about 81 percent of the cost of education and with the projected costs rising, reversing the labor-intensive nature of the educational process is an essential part of the switch to computer-based education.

But teachers won't be ushered out the back door as technology steps in the front. Any shift toward computer-based education will be gradual, with no abrupt reductions in the number of teachers.

Teachers should also know that computer-based education is designed to make teaching more effective and less frustrating.

Additional emphasis on computer-based education would also demand the creation of new jobs in areas such as courseware

development, educational program design, and continuing education. The cost of many of these new jobs would be borne by industry, not by an already over-burdened educational system.

Fears about the effects of computer-based education were not the only obstacles Control Data encountered in its efforts to introduce PLATO to traditional education.

One college sought more Control Data technology simply to increase its computing ability, not to improve its educational offerings. Another feared that introducing computer education without further research could set education back 20 years.

In his 1976 speech before an annual gathering of the Society of Applied Learning Technology, Norris discussed the need for changing the traditional process and introducing computer-based education.

Before Phi Delta Kappan, a leading education magazine, published the speech, it sent copies to 20 leading educators. The replies included such comments as "wormed over and wanting," "educational moonshot?" and "an advertisement, not a help."

Despite the barriers computer-based education faced in penetrating the traditional educational system, there has been progress.

The American College, with more than 60,000 students in all 50 United States and 12 foreign countries, serves individuals who are already employed but are seeking career advancement through continuing education.

Control Data Learning Centers permit American College's far-flung student body access to PLATO while the system allows each student to proceed at their own pace.

At the University of Colorado in Boulder, PLATO is used in courses ranging from developmental English to physics. While electrical engineering students are using PLATO's sophisticated graphics to simulate the workings of microprocessors, teachers are freed from menial tasks and allowed more time for interaction with students.

With a musical synthesizer connected to a PLATO terminal, music students at the University of Delaware can practice and complete drills on their own while devoting precious class time to concept development.

And the University of Quebec has incorporated PLATO into its Teleuniversity system, which uses telecommunications to link a network of campuses spread within an area 1,300 miles in diameter.

Control Data is also working with school districts in several states in its efforts to introduce computer-based education to elementary and secondary schools.

In one Florida high school, for example, 200 students advanced an average of one grade level after spending only 14 hours working with PLATO. The students have been facing the prospect of not graduating because they were unable to pass minimum competency tests.

On an Indian reservation near Reserve, Wisconsin, a special PLATO program helps teach youngsters Ojibwa, their fading native tongue. The program, an innovative combination of graphics and words, was started in November 1980 and is available free to schools who use PLATO.

By working with selected schools on gradually developing an education process which features the appropriate mix of technology and people, Control Data hopes to develop a formula of computer-based education that can be applied on a broad scale.

At the same time, Control Data continues to develop a complete range of courseware for elementary and secondary schools. The courseware includes a Computer Literacy Curriculum, a Basic Skills Learning System, Reading and Mathematics Series and a Basic Algebra Curriculum.

CONCLUSION:

In many ways, acceptance of computer-based instruction into the educational process has been slow and sometimes grudging. The traditional process of education, riddled with problems, remains solidly entrenched.

But according to history, it was about 200 years after books were introduced before they were used by teachers. Taken in that context, the progress made in infusing the traditional educational system with computer technology is a bit more encouraging.

As the National Commission on Excellence in Education stresses in its report, "History is not kind to idlers."

With a major restructuring of our country's educational system in order, now is hardly the time to put off decisions to the next school board or the succeeding administration.

If the unfortunate pattern of declining educational quality continues, the next generation will be less capable than ours to find innovative answers for the problems facing education.

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BARRIERS AND INCENTIVES
TO
BUSINESS/EDUCATION COLLABORATION:
A CORPORATE PERSPECTIVE

by

Dr. Badi G. Foster, President, AETna Institute for Corporate Education

and

David R. Rippey, Senior Administrator, AETna Institute

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EXECUTIVE SUMMARY

The purpose of this paper is to discuss barriers and incentives to business/education collaboration from a corporate point of view. The paper is organized into eleven sections. The authors begin with a discussion of the purposes of corporate education and the genesis of the Aetna Institute (II, III). Corporate interest in non-corporate education is discussed (IV). Philosophy of and practice of corporate public involvement is then examined as it affects the development of the External Programs Unit within the Institute (V, VI). Program details concerning specific relationships between the company, area schools, colleges and universities, and community-based organizations are presented (VII, VIII, IX). The authors then suggest 12 principles and guidelines for collaboration (X). The paper concludes with a discussion of public/private research issues and questions (XI).

I. INTRODUCTION

When we were asked to comment upon the subject of business/education collaboration, the question that came immediately to mind was "What more can we add?" In the last few years, an impressive volume and array of literature on the topic has emerged from the work of scores of individuals, corporations, government agencies, foundations, commissions, task forces, and conferences. The original definition of collaboration had some specific technical dimensions. Since the mid 1970's, those dimensions have been expanded through popular usage to describe just about any process or activity undertaken by more than one individual or group. Beginning with the publication of The Boundless Resource in 1975, and continuing through the present, the level of public and private attention paid to the topic - as well as the topic itself - is an interesting phenomenon. We believe it reflects emerging appreciation of the common lot of the public and private sectors. The breakdown of traditional social and economic arrangements has given Benjamin Franklin's words new force: "We will hang together or we will hang separately."

The need for collaboration seems to have been established. The range of analyses and recommendations on the topic is plentiful. Model programs abound. In fact, the business of public/private sector collaboration has grown from that of a cottage industry to a major national undertaking. It occupies the local membership of over 200 Work/Education Councils, Industry/Education Councils or School/Business Collaboratives in communities across the country. The goals of collaboration would appear to be within reach of any responsible community.

Despite all this activity, enough is not happening to prompt many people closely associated with the process to ask whether it is making a difference; whether collaboration is just another word for some fundamental practices of responsible citizenship and good management, or whether it represents some new form of the social contract. These same people also sense that the barriers and incentives to collaboration have not been adequately identified and addressed. Donald Clark, President of the National Association for Industry/Education Cooperation, laments the

surfeit of "policy statements and research studies on the merits of collaboration." Clark voices the thoughts of many commentators that preoccupation with process has not yielded adequate results. According to Clark, there is no doubt that collaboration has merit. The problem is how to get on with it.

Clark's observation suggests an answer to the question of what more can be added. We agree that we need more information on the specifics of collaboration, not just its merits. Often, what passes for model collaborative programs are simply examples of outcomes of complex and vaguely understood processes. In discussion of model programs much attention is given to what happened, but not enough attention to how it happened - to the organizational, political, bureaucratic, financial and other dynamics which created those programs. It is encouraging to read that Program X was initiated by a Work/Education Council, for example, in Community Y. It is instructive only when we discover how the Council members actually got down to business, beginning with how they got to the conference table.

Our purpose in this paper is to discuss some of the dynamics of business/education collaboration from a corporate point of view and, more particularly, from the point of view of educators recently transplanted from academia into a very large corporation.

These observations are the result of much activity in the area on the part of the AEtna Institute. Time and experience - not to mention the opinions of others - will revise or qualify much of what is presented here. For now, we will stand by the facts as stated and take responsibility for opinions as stated. Where the distinction is troublesome, we ask the reader to assume the point of view to be our own.

II. CORPORATE EDUCATION

Before examining the issues of business/education collaboration, it is useful to understand something of the context within which education and training has grown in the corporation itself.

The term corporate education is a useful descriptor only insofar as it describes education which is not done in traditional educational institutions. There is no shared philosophy or methodology of education among all private-sector institutions. The educational programs businesses mount depend on whether the business is equipment-driven or labor-intensive, small or large, local or international, product or service oriented, and so forth. The type and extent of these programs also depends on whether or not the existing education provides for corporate needs. In some cases these needs are met; in many they are not.

Business currently spends roughly \$30 billion per year for education and training, reportedly more than all states combined spend for public higher education. Employer-sponsored education usually stems from one or more of the following business needs: (1) orienting new employees to the organization; (2) absorbing and generating rapid technological change; (3) maintaining professional vitality and competence among employees; (4) avoiding non-educational costs such as travel and released time for outside training; (5) exploiting the potential for increased employee motivation through extended on-the-job training; (6) fulfilling legal and social responsibilities to expand equal employment and advancement opportunities; and (7) stabilizing employee turnover.

III. THE AETNA INSTITUTE FOR CORPORATE EDUCATION

Scheduled to be completed in 1984, the main Institute facility in Hartford will consist of about 300,000 square feet, including a 400 bed dormitory, classrooms, conference areas, concessions, and a fitness center. When fully operational it will accommodate approximately 20,000 student employees per year. Students will be drawn from all areas of the company into a range of programs and services. These programs and services will

extend from work readiness for our lowest skills jobs through management and executive development.

The physical reality of the Institute, most importantly, is the result of the collection of ideas which forms the heart of it. The building was originally conceived out of the need for more space to do more of the same type of education and training as had been done in the past. Over the course of planning the building design, a number of factors converged which caused the company to rethink the assumptions and procedures which characterized education in the past. Some of these factors included:

1. The transformation of the company from one providing insurance to one providing financial services, at a level analogous to the transformation of the railroad business to the transportation business.
2. The reorganization and growth of the company. Aetna expects to grow from the present level of nearly 40,000 employees to almost 50,000 by the end of the 80's. This expansion will require emphasis on the maintenance of a corporate identity including the identity of education and training. Specifically, expansion will require assessment, implementation, and evaluation procedures for insuring high quality and relevance of educational programs.
3. The shift from national to international business as a result of the blurring of distinctions between foreign and domestic business issues. The value of the Mexican peso, the volume of oil extracted from the North Sea, even the name of some formerly obscure islands off the Argentinian coast - all may affect profit and loss statements as much as any "domestic" situation might.
4. The decentralization of human resources planning and development by moving these processes to administration at the lowest practical level.

5. The need to develop a cadre of management talent, not only in terms of creating new talent but also in the continuing education of managers and employees within the organization.

6. Burgeoning technology in both business and education.

In one sense our Institute for Corporate Education is a return to an older tradition of higher education. The academic pluralism that typifies a large university or a community college is, of course, a relatively recent phenomenon. The corporate institute is perhaps analogous to the denominational religious-based college. Like schools in that tradition we have, in theory at least, a clearly focused mission, a raison d'etre that transcends all other considerations. For us that mission, quite simply, is to meet the business related educational needs of AEtna Life and Casualty.

In other settings, education is an end in itself; in ours, it is a means. AEtna Life and Casualty does not have education as its central mission. The company exists to provide financial services and to make a profit doing so. The Institute was established as a vehicle for advancing the company's central mission.

While our mission as an Institute is quite clearly focused, at least in comparison to other educational institutions, it is by no means a narrow mission. Our corporate policy on education states that,

"The AEtna believes that education is an important means of developing our employees and producers. Education is a continuous and coherent process intended to enable employees and producers to acquire skills, knowledge, and attitudes necessary to grow in their present positions, to compete for a broadened scope of responsibility, and to improve corporate productivity and profitability.

"The Company also believes:

- that the educational process should serve the business needs of all its operations;
- that an important objective of the educational process should be to improve the Company's ability to plan for, absorb and promote change in the business environment;
- that the educational process should be available to employees for whom changes in job responsibilities can be anticipated, regardless of the employee's job classification;
- that the quality of the educational process should positively affect the recruitment and retention of employees;
- that a continuous and critical emphasis on research, development, and program evaluation is essential for maintaining high standards of innovation and excellence in education;
- that the educational process should involve some of the communities in which we do business in a way consistent with other policies concerning education."

Such a policy statement provides us with a mandate of considerable breadth. Like most corporate education programs, ours has certain characteristics. Obviously the vocational and technical emphases outweigh those of general education. While it may be learning that can be applied throughout one's career, we expect it to be applied at once. Our learning packages tend to be short term and intensive. Changes in the business environment and the society at large will always require us to be prepared to develop planned, appropriate and rapid responses.

In addition to internal factors, a number of environmental factors effected planning around education and training:

1. Changes in the labor force relative to age, skills, mobility, education, and racial and ethnic composition.
2. The predicted drop in the number of 18-20 year old high school graduates entering the workforce will create pressure to develop or retrain existing employees.
3. The challenge created by competition among the currently large cohort of 25-34 year olds for limited numbers of higher-level management positions. Many companies will be required to establish nonmonetary career rewards.
4. The crisis in public education. Ernest Boyer, President of the Carnegie Foundation for the Advancement of Teaching reports that "the public high school is the most seriously troubled institution in American education." As a labor-intensive enterprise, AEtna and companies like it are the largest consumers of public high school graduates. We cannot ignore the crisis threatened by the lack of basic skills among high-school age youth.
5. A commitment to corporate public involvement that goes beyond charity and good citizenship to become an integral part of our business.

IV. CORPORATE INTEREST IN NON-CORPORATE EDUCATION AND TRAINING

It is not news that many companies have a tradition of education and training intended to supplement what students learned in school. Neither is it news that many companies are now faced with job applicants who cannot read and write. There are basically four options which companies may pursue to address this situation.

Option one is for companies to strengthen the ways in which they currently supplement education. The question often raised about this option from the corporate side is why corporate dollars are being spent on some forms of education that do not seem to be effective.

Option two involves strengthening education itself through what is known currently as "school/business partnerships." These partnerships may involve adopt-a-school, work/study, summer youth internship, career exploration, teacher education, or similar programs. This option raises questions from all sides as to private sector legitimacy and effectiveness in this area. Where public schools are involved, business involvement is often seen as interference with public decision making regarding an enterprise which is viewed as a public trust. As argued by Howard Ozmon in a recent issue of the Phi Delta Kappan, there is a risk that the private sector may take on a disproportionate role in directing the philosophy and curriculum of the school. Ozmon and other observers comment that business influence must be no greater than that accorded to other community groups.

Option three is for companies to provide the equivalent of public or other education themselves. This option is generally least attractive to business and will probably remain so. Again, education is not the central mission of most profit making organizations. This is of fundamental importance to the discussion of any corporate educational enterprise. Even the AEtna Institute will be judged ultimately on how small our operations can stay rather than how large they can get.

Option four is, of course, to do nothing at all about the problems of education. In fact, business thus far has been able to recruit much like private schools; that is, simply not take the poorer students. However, demographic data indicate that this type of selectivity may end over the next ten years because of now-familiar demographic changes. Business will also be looking for better educated people within this shrinking work force. The problems presented by sheer demographics are compounded by the fact that there are few jobs left that lend themselves to unskilled

routine. Reading, writing and basic mathematical skills are necessary even in the lower level jobs. Many lower-level jobs are also requiring skills which must be integrated with skills for using computer equipment such as terminals. Finally, many people in the private sector do not expect improvement in the quality of public school education. Many feel that instead of finding better educated people, the private sector is likely to find just the opposite.

Implications of the rising demand for skilled workers, coupled with data on a decline in labor-force entrants in traditional categories, and the decline in levels of general education are alarmingly obvious. These implications have brought many companies, including Aetna Life and Casualty, to the view that involvement in public education is worth most of the conflict it generates. For example, more than 274 companies in Dallas have adopted schools. Adopt-a-school programs in Los Angeles have expanded to include 90 companies and 100 schools within the last four years. Private employers in Philadelphia support inner-city academies for potential drop-outs. The school/business collaborative in Hartford, Connecticut, has engendered private sector involvement in the expansion of data processing education, effective schools programs, and business teacher partnerships in a variety of areas.

As we have suggested, not all of these involvements are viewed as salutary. Ralph Nader's Center for the Study of Responsive Law has articulated some widespread criticism of business-prepared educational materials, alleging that they manipulate the socialization of children through subtle indoctrination to an assembly-line work ethic and gross sales pitches. On the other hand, many types of involvements are considerably less controversial, especially those involving funding of special education projects, remediation or work readiness programs. Even more acceptable to critics of private sector involvement is direct private sector support of school systems themselves. For example, a group of St. Louis companies recently pledged to substantially underwrite any deficit in meeting teachers' salaries during the first year of the union contract. A

number of St. Louis companies also led a campaign to raise the property tax in order to maintain educational standards.

AEtna Life and Casualty is seeking ways in which to be responsive to issues of education without being heavy handed. To this end, AEtna has developed philosophical and operational principles of corporate public involvement which govern its activity in education and training as well as in other issues of public concern.

V. CORPORATE PUBLIC INVOLVEMENT

The philosophical principles of AEtna's corporate public involvement are set forth broadly in the 1981 report of AEtna's Corporate Public Involvement department. The document states, in part:

"In terms of the effect which they may have on society, there is no longer a clear-cut separation between business, labor, nonprofit organizations, government or the public citizenry. We all touch and depend on one another. The AEtna Life and Casualty concept of corporate public involvement has evolved out of an awareness of this interdependence. Corporate public involvement means taking into account the many relationships that exist between business and society. That is, considering a corporation's activities from the view point of the total impact on others. Far from being unbusinesslike, it is a business oriented, thoughtful recognition of the fact that the well-being of AEtna over time depends on the health of society, and that it is in our best interest to help maintain that health. At AEtna we have long advocated corporate public involvement. Our experience has shown that considering the impact our role can have on others it is not a distraction. Rather, it strengthens our capacity to operate profitably."

Working definitions of corporate public involvement vary, and have only recently included education and training. Most corporations would agree

corporate public involvement begins with responsibility to consumers for product and service quality. One would find similar agreement on the public obligations of the private sector concerning taxes, employment practices, accounting systems, consumer affairs, and investments. Private sector consensus concerning other public responsibilities begins to unravel at this point. Says Milton Friedman, "the only entities who can have responsibility are individuals; a business cannot have responsibility. So the question is this: do corporate executives - provided they stay within the law - have responsibilities other than to make money for their stockholders? My answer is no."

The overall position of our managers on the use of Aetna's funds for what are called "nonbusiness" causes seems to fall somewhere between the position of Friedman and that set forth in the corporate policy statement quoted above. Most of our executives will agree that public responsibility and accountability are compatible with shareholders' interests. Nevertheless, internal debate on the extent to which the company's profit making capacity should be diverted to "nonbusiness" causes reflects something less than consensus.

Aetna's current leadership has done much to foster employee awareness that company success depends directly on public acceptance of its products and services and a generally healthy society. "Each of us must convince the other of our sincerity and willingness to cooperate" says John Filer, Aetna's Chairman and chief executive officer. "Only then will we be able to bring the full power of our society to bear on social problems. We are likely to see more and more cooperation between government and business in finding solutions to our social problems because neither one can do the job alone."

This concept is generally understood and grasped in principle, at least among top management. At the lower levels, the view of the world is often more circumscribed, particularly among middle managers and employees outside of our home office in Hartford. The environment in which our

middle-level managers operate is different in several important respects than that of corporate policy-makers. Responsibilities at the middle level are specifically operational and therefore mostly short term in nature. Most managers who are told that they must meet affirmative action goals, improve product quality and reliability, and otherwise respond to the many pressures and demands confronting business today are unlikely to devote many resources to these responsibilities unless certain incentives are provided.

Corporations have used a number of strategies to overcome the reluctance of middle managers to devote time and resources to non-traditional objectives. Some have revised executive training and development programs to emphasize the broader responsibilities of the corporation in society. Others have reshaped planning systems to require business managers to include social, environmental, and public policy objectives in their business plans. A number have reconstructed their incentive compensation systems for top and middle managers, giving significant weight to performance in non-traditional managerial roles. Still others have created new staff departments to help managers to achieve human resources, environmental, and other objectives. Whatever the particular strategy, the most successful appear to be those in which the senior management, first, has clearly communicated throughout the company its beliefs concerning corporate public involvement and, second, adopted policies and procedures which encourage managers to act accordingly.

In their book, Corporate Social Responsiveness: The Modern Dilemma, Robert Ackerman and Raymond Bower of the Harvard Business School write: "Drawing an appropriate relationship between the socially responsive and executive performance measurement and evaluation is an extremely sensitive and difficult undertaking. The challenge for management is to insert and calibrate rewards and sanctions for social performance in a way that encourages the desired degree of responsiveness with as few unwanted side effects as possible."

It seems to us that the relationship between individual executive performance and social responsiveness involves issues on three different levels. First, a definition of corporate public involvement in terms of its meaning for individual employees is necessary. Corporations need to determine to what extent they are speaking about benefits to the individual employee, the company, or the community when referring to corporate public involvement. Second, there is a spectrum of issues around implementation. How much time and whose time, should be devoted to corporate public involvement activities? What incentives should be provided for corporate public involvement by individual employees? What sacrifices or trade-offs in terms of production can be tolerated by the company? What structures are necessary to make sure that the type and extent of nonbusiness activity is appropriate to corporate objectives? A third set of issues relates to evaluation. How are nonbusiness activities of individual employees to be assessed in terms of their identification with corporate objectives for public involvement?

The following list outlines some necessary, albeit insufficient, conditions under which any corporate public involvement by individual employees might take place:

1. Corporate investment or sacrifice. Unless this condition is met, any nonbusiness activity can only be assessed in terms of the contribution of the individual employee, rather than the company, to the community. For example, participation in the local parent teacher organization can only be viewed as an individual contribution unless the corporation commits some resources of facilities, space, equipment, personnel or money. The argument that the company is committing personnel in the form of the individual can only be made if individual participation is supported by company resources. Thus, if the employee were afforded released time by the company to participate in any nonbusiness activity, this should be assessed as corporate public involvement.

2. No Individual Penalty. One penalizing condition is the phenomenon of a compressed workload resulting from any absence from the job. In order to both interest and allow individual employees to participate in nonbusiness activities, some provision should be made for workload sharing among other members of the department during the time when the individual employee is involved in a nonbusiness activity. Corporate public involvement activities should be built into, rather than separated from, normal employee workload.
3. Positive Recognition for the Individual. Bonuses or merit increases should be considered as such recognition.
4. Agreed-Upon Sets of Activities. As previously mentioned, it is important to differentiate individual voluntarism from corporate public involvement. Sets of nonbusiness activities appropriate to individual employees should be assigned and evaluated at the department level based upon corporate guidelines. This is important because the great diversity of talents, interests, and availability among employees across departments in any given company is best assessed at the supervisory level. Also, the extent to which supervisors have options in assigning and rewarding nonbusiness tasks is the extent to which there is corporate-wide commitment and ownership of public involvement.
5. Reporting and Assessment. Performance in nonbusiness activities should be systematically recorded and should be included in the total performance assessment. Thus, an individual employee would not have to risk the assessment of on-the-job performance as being less than satisfactory as a result of nonbusiness activity.

VI. EXTERNAL PROGRAMS OF THE AETNA INSTITUTE

For a variety of reasons related to Aetna's position on corporate public involvement, the Institute has a public function. Accordingly, a Department of External Programs was formed within the Institute. 197

The mission of the unit is to develop external, or non-corporate, education programs and services as integral parts of both Aetna's human resources development and corporate public involvement strategies. This is to say that the goals of external programs are focused both internally and externally.

The external focus is upon direct provision or support of education and training programs for non-employees and prospective employees. In building the educational capacity of the community, the department is in keeping with the more altruistic dimensions of corporate public involvement.

The internal focus is upon the more direct benefits of interaction with education-service providers. This focus is significant, and certainly more supportable internally, because it helps to (a) assure a well-trained labor supply, (b) assure a stable, harmonious work force, (c) realize company affirmative action/EEO goals, (d) assure an acceptable quality of life in order to attract and retain employees (e) enable managers to deal with a diverse work force and (f) carry out the corporate role under the "new federalism."

Conditions necessary for full realization of external and internal benefits of collaboration as it is initiated by the external programs unit are that our activities be:

1. Education-related, in contrast to other aspects of corporate public involvement and other public issues;
2. Informed by company policy concerning the type and extent of appropriate public involvement;
3. Comprehensive in considering communities beyond Hartford;
4. Consistent in our determination of who gets what educational programs and services when, where, how and why;

5. Balanced in terms of pursuit of short term and long term goals;
6. Reasonable in terms of not raising false expectations or over committing resources;
7. Anticipatory in reference to future educational needs in the company.

In the year that the External Programs unit has been in place, we have pursued a number of collaborative arrangements, the details of which are presented in the following three sections.

VII. AETNA'S RELATIONSHIP TO HARTFORD PUBLIC SCHOOLS

The Hartford School/Business Collaborative is an important, if not primary, arena for Aetna's interaction with the Hartford public schools. The Collaborative was first convened over a year ago. Its formation was prompted by a deepening concern and interest by the business community in public education in Hartford. The perception was that efforts of Hartford businesses to assist public education were fragmentary, unfocused, and unsustainable. Further, communication between the Hartford business community and the Hartford school system was perceived as being poor where it existed at all. Issues confronting the school system were an extremely high drop out and transfer rate and a lack of success in student mastery of the basic skills. The Hartford business community faced, and still faces, serious human resources problems - an aging work force, a deceleration in the growth of that work force, the need to continue to meet affirmative action goals, and increased competition for qualified entry level and mid-level personnel. Hartford continues to suffer a high rate of poverty and unemployment despite local business needs for skilled workers. However flawed the measures might be, Hartford is reported to be among the ten most distressed cities in the U.S.

Research disclosed a number of competing definitions of the problem, a lack of formal means of communication, a variety of operational and bureaucratic constraints on collaborative action, and a general level of despair among education and employment providers.

Based on the Report of the Hartford School/Business Collaborative Study, a nonprofit collaborative organization was formed under the auspices of the Greater Hartford Chamber of Commerce. The purpose of the group is to deal with concerns currently beyond the scope, jurisdiction, influence, or interest of any single community sector. The forum is organized to attain the following objectives:

1. To identify and facilitate the means of increasing levels of basic education in Hartford.
2. To stimulate and coordinate activities between the business community and the school system.
3. To analyze the transitions of Hartford youth both through the educational system and from education to the world of work.
4. To formulate recommendations for action.
5. To implement and monitor programs through member institutions and organizations, using existing structures where possible.
6. To monitor and evaluate such programs.

The collaborative has deliberately assumed a policy-making or indirect role rather than a direct service role. Currently, the School/Business Collaborative consists of an advisory committee made up of senior personnel executives from large employers in the Greater Hartford area, principals of local schools, and a number of representatives from community organizations. Aetna Life and Casualty participates on a number of levels..

The action objectives for the School/Business Collaborative during 1982 were as follows:

Business/Teacher Partnership

- Objectives:
1. To increase the number of Greater Hartford private sector businesses in teacher partnership programs by two; currently there are none.
 2. To increase the number of Hartford teachers participating in exchange workshops from 28 to 100 teachers.

Effective Schools

- Objectives:
1. To increase the number of schools participating in the Effective Schools programs by two. Currently there are two schools - SAND and Barbour.
 2. To conduct two Instructional Leadership/Workshop/Seminar/ Discussions (one at a Hartford school, one at a corporate site).

Volunteer/Role Model Program

- Objectives
1. To expand the number of companies participating in volunteer/role model programs by two; currently there are three.
 2. To increase the number of students and tutors participating in volunteer programs - students from 550 to 800; tutors from 95 to 125.

Computer Expansion

- Objectives:
1. To increase by one school the Computer Assisted Instruction (CAI). Currently there is one school, Weaver, with 12 computers.
 2. To increase the number of students in CAI from 1,867 students to 3,000 students.

These programs are expected to raise math and language arts achievement levels by one year as measured by Metropolitan Test (M.A.T.) and state proficiency tests which support the mission statement of the School/Business Collaborative.

The company is attempting to engage itself in issues of education by means other than the Institute and the School Business Collaborative. Aetna's office of Corporate Public Involvement is investigating grant making in four related areas of education and work.

The first is what has become known as the Effective Schools Movement. Efforts across the United States have recently involved the formation of broad-based coalitions working with the community's educational leadership to develop appropriate performance standards. Aetna grants may support efforts to increase the quality and quantity of this type of collaboration. Aetna is investigating affiliation with programs containing essential elements of planning and implementation as identified by leading private foundations. Some of these elements include shared decision making, school staff and school community development, collaboration between schools and colleges in establishing academic priorities, and coordination of school and community services which integrate work and study.

The second area refers to strengthening the management of public education. Supportable programs might include those which encourage and assist urban secondary schools to develop and implement a school improvement plan using the best that is known about effective schools,

school staff development, school/college collaboration, and school/community development. A sub-category of programs in this area are those involving school-based staff development where the objective is to develop teams of principals and other school site personnel.

The third area to be considered is that of computer literacy. Corporations realize that we are in the first stages of the exponential shift from an industry-based to information-based economy. Those responsible for learning and instruction may not fully understand this shift but they are aware that the educational systems upon which they depend are not giving them control over the skills and information they require to succeed. If urban students are denied access to the control of information, the degree of their disadvantage is increased and inequities already imposed by race and class are further exacerbated. AETna shares the view that the private sector must support the needs of the schools to develop programs for computer literacy.

The final area under consideration is Early Childhood Education. AETna is considering support for projects focusing on preschool children. One aspect might be on the early development of learning skills. Another would be on the resolution of developmental problems, such as health, which effect the ability of the child to succeed.

VIII. AETNA'S RELATIONSHIP TO AREA COLLEGES AND UNIVERSITIES

The concentration of colleges and universities which exists in close proximity to the AETna's Home Office was recognized by Institute staff as potentially enabling the Institute to bring to AETna employees a broad range of education resources which had previously gone largely untapped. However, since there had been few consistent lines of communication between the company and the higher education community, and since the announcements about the Institute and the Education Center had produced some negative impressions in that community, a positive program to build a climate of understanding and cooperation would be necessary if the Institute were to be in a position to draw on the resources of higher education.

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Following the public announcement made by Robert Phillips, Aetna's Vice President for Personnel, in a speech delivered at Wesleyan University in April 1982, and a series of protocol meetings which reaffirmed the intention of the Institute to actively pursue collaboration with higher education, recruitment began for members to serve on the Institute's Joint Advisory Committee. The JAC would serve as the continuing forum to bring company leaders together with higher education leaders to learn about each other, to discuss issues of mutual concern, and to support projects and activities of mutual benefit.

Senior officers of the company, including the heads of the four operating divisions, agreed to serve on the committee as did college and university presidents, the heads of state systems of colleges and consortia of independent colleges, and the Assistant Commissioner of Higher Education. The Assistant to the Chairman of Aetna Life and Casualty agreed to serve as committee chairman. Not only was the assembling of such a committee without precedent but, as one of the university presidents remarked at a JAC meeting, even a forum that brought together the whole spectrum of higher education, college and university, public and private, two-year and four-year, was extremely rare and therefore provided a most valuable service.

Two meetings of the JAC have been held in 1982. While much of the focus of the committee to date has been devoted to a process of getting to know more about one another in order to lay the groundwork for future collaboration, the committee has sponsored a working-level conference on non-traditional education programs and a representative task force on resource sharing in computer education.

While it is still too early to assess any long-term benefits that have resulted from the formation of the JAC, the degree of relaxed openness that the committee reached in its discussions by the end of its second meeting and the greatly expanded channels of communication that have been opened between Institute staff and the area colleges suggest significant

progress. At the very least it appears that the negative climate concerning the impact of the Institute on higher education has been substantially dispelled.

Issues that the Institute wishes to explore with higher education include:

1. Executive Education

- To provide both preparatory and continuing education
- To address AEtna-specific concerns relative to finance, marketing, strategic planning and so forth
- To include a liberal arts component

2. Recruitment activities in connection with graduates of area colleges

- to better prepare students from most area colleges for interviews.
- to allow recruiters to interview fewer people to find enough to meet the company's needs.
- to inform campuses about the company's needs.
- to clarify AEtna's position for the colleges with respect to cooperative education and student internships.
- to develop a program to recruit the older person who has graduated from a part-time continuing education, or evening or weekend program.

3. Consulting and research projects

- to meet company needs in areas like marketing and strategic planning.
- to utilize area college personnel for these activities.

4. Faculty and educational staff development

- to provide company personnel to serve as part-time faculty in high demand areas.

- to provide corporate assistance in building faculty competence in high demand areas.
- to enable colleges to provide additional incentives to retain faculty in high demand areas. Specifically; to provide corporate fellowship or internship opportunities that will keep faculty in the colleges rather than leaving permanently for more lucrative corporate employment.
- to increase student and faculty understanding of business operations in general. To provide opportunities in guest lecturing and even formal teaching opportunities for corporate managers on college campuses.

5. Remediation - to develop remediation programs that work, or better still, eliminate the need for both college and corporate remediation programs.

7. General Education

- to increase the percentage of technical and managerial level employees with college degrees.
- to give greater attention to the role of liberal arts in employee development.
- to expand the educational opportunities available to our employees through on-site College at Aetna programs and also through campus programs which employees attend with company provided tuition assistance.

IX. POTENTIAL AREAS OF COLLABORATION BETWEEN AETNA LIFE AND CASUALTY AND COMMUNITY-BASED ORGANIZATIONS

The Institute and the company are pursuing the following areas of collaboration in order to achieve the purposes of building community capacity in the area of education and training and the community-based management needed to do so.

1. Job Training Programs. To assist hard-to-employ residents in preparing for, finding, and retaining jobs in the private sector through job training programs targeted at high-growth employment positions in the local labor market.

In June of 1982, Aetna Life and Casualty began collaborative efforts with the National Puerto Rican forum and Hartford's Employment and Training Administration in the development of a clerical skills training program primarily for female bilingual single heads of households. The first six-month training session began November 9, 1983. Thirty students were selected to begin training in six courses, including typing, business English and math. Over 90% of the graduates of that class were placed in clerical positions within Aetna Life and Casualty. The program is now in its third cycle, and similar success is anticipated.

The Institute is also proposing co-sponsorship of a similar program involving the City of Hartford, the Employment and Training Administration, the Urban League of Greater Hartford, and Greater Hartford Community College. As proposed, this program will consist of instruction and practical application in mathematics, language skills, clerical skills, and work readiness preparation. As is the case in our relationship with the Puerto Rican Forum, we would intend to hire successful graduates of the training program.

2. Drop-Out Programs. To develop and support drop-out programs such as those based on the "street academy" concept.
3. Apprenticeship Programs. Sponsorship of on-site training involving one-on-one learning and supervision.
4. Minority Gifted Programs. Offer of competitive scholarships to gifted, low-income minority students.

5. Real Estate and Property Management. Provision of technical assistance in developing local capacity to manage real estate and property investments. Provision of technical assistance in rehabilitation, construction, financing and management of community properties.
6. The CBO as a supervisory training site. Enabling supervisory personnel to become familiar with the community environment of their employees.
7. Use of corporate facilities. Provision of facilities and equipment for community conferences, recreation, cultural events, etc.
8. Health Education Programs. Assisting potential employees in identifying and understanding health issues relevant to employment.
9. Government Relations. Sponsorship of aspects of citizenship education, e.g., understanding legislation, lobbying, energy, welfare, transportation, etc.
10. Career Exposure. "Environment extension"-type programs such as corporate site visits.
11. Data Processing. Design and development of computer literacy and computer-assisted learning programs. Training of CBO staff in computer-based office functions. Developing the use of technology in work readiness and skills training.
12. Parent Awareness Programs. Education of parents as to their role in their children's development (for CBOs involved in educational programs).

The Institute is investigating involvement in a parent awareness program proposed by the South Arsenal Neighborhood Development

Corporation in Hartford. The goals of the program are to increase parent knowledge of, and involvement in, the education system at the South Arsenal School. The proposal also discusses the development and implementation of monthly workshops for parents; an extension program of visits, trips, and exposure to various elements of Hartford's different communities; and the implementation and integration of the community-oriented curriculum into the South Arsenal School.

13. Organizational development. Corporate provision of consulting services for the organizational development of community-based organization.

The Institute will provide a range of resources necessary for community-based organizations to enhance their managerial capacity. A recent project involved a local nonprofit neighborhood organization and a consulting team from the AEtna Institute. Over the course of two months, the consulting team met with the staff of the organization in order to develop and recommend measures which might be taken to strengthen staff efficiency and effectiveness.

14. Food Service Training Program. The Food Service management and staff of AEtna determined the need for training for employees.

A needs assessment and analysis pointed out the following problems:

- low self-esteem
- a need for basic literacy and computational skills;
- a need for decision-making skills.

A job training program was designed to meet the needs of this labor-intensive environment with accompanying skills and department-specific curriculum. As a result, 31 trainees began the Food Service training program. Sixteen Hispanics were hired to participate in the program which provided:

- job-specific skill training;

- trainer training for supervisors;
- audio-visual material to support skill mastery;
- supplementary literacy and computational skill training; and
- an English as a Second Language component.

15. Minority Entrepreneurs. A minority enterprises conference was held at Aetna Life and Casualty with the hope of moving toward networking and utilizing community resources. The objective of the program is to provide a forum to facilitate the exchange of ideas and strategies for maximizing business opportunities. This program was jointly sponsored by:

- Aetna Life and Casualty,
- Greater Hartford Community College,
- Manchester Community College, and
- the U.S. Small Business Administration.

16. Contractor Collaboration. Thacker Construction Company identified that local minority business enterprises in Hartford needed specific training in the following areas:

- Management training which focuses on owners to better prepare them to plan, organize, accomplish and evaluate successful projects.
- Supervisory training to prepare them for the on-site role of intermediary between owners and foremen.
- Technical assistance to assist contractors in preparing for financial packaging, bid processing, qualifying for bonding, negotiating, etc.

As a result, a pilot training program will be established sponsored by:

- Thacker Construction Company, who will provide curriculum and program supervision;
- the Urban League of Greater Hartford, who will provide a grants administrator, oversee intake of participants, and identify trainers, all of whom are to be local;

- the City of Hartford/Brosen & Hutensky (local developers), who will provide a grant to fund the project; and
- the AEtna Institute for Corporate Education, who will provide (1) space for classes for a ten week period, six hours per week; (2) minimal administrative resources and services; (3) program monitoring and evaluation; and (4) membership in the Advisory Committee.

X. COLLABORATION ON ISSUES OF EDUCATION: A CORPORATE POINT OF VIEW

Most of these activities may be collaborative. As a result, we have developed some of our own perspectives on what collaboration is and how it works. The following discussion is an attempt to highlight some of these perspectives without being too redundant of the most commonly known and accepted principles.

1. The objective in any collaborative effort is to accommodate rather than exclude competing definitions of "the problem." The way a social problem is defined usually determines the kinds of policies and programs which will be proposed to address the problem. Competing definitions generate competing recommendations for solutions, and subsequent competition for scarce resources. The result is usually less than satisfactory. An example of this situation is that of youth unemployment. Lack of basic skills and work readiness, discrimination and the structure of the economy have all been advanced as reasons why youth unemployment continues to rise. Where communities have recognized that these factors are not exclusive of each other, progress has been reported. Where the "one best solution" is still being sought, little collaboration is occurring.
2. It is important neither to overestimate nor underestimate the capacity of any single organization, philosophy, or program to provide solutions to community problems. Successful collaboration

involves some sort of reciprocity. Not only should incentives be provided, but there should be a clear understanding of who benefits and by how much. Unrecognized incentives constitute hidden agenda which are often labelled as self-serving or conspirational. Says Floretta McKenzie, Superintendent of the District of Columbia Schools, "Productively working relationships seldom endure without a quid pro quo, as otherwise there is no accountability on either side. Managers of public resources should stop trying to pick corporate pockets and start helping private sector companies find cost-justified approaches to coupling the business interest of their shareholders with spending huge amounts for many of the same purposes. Why not pull resources and jointly design programs for equal or better returns for each partner at less cost? This, not voluntarism and not philanthropy, is the classical notion of partnership."

3. Measures of progress and success of collaboration need to be established. These standards should be understandable, achievable, and acceptable.

4. Collaboration takes time, but it cannot take forever. Constituent organizations in any collaborative effort will begin very far apart on some issues. For example, it is sometimes difficult for education to define what is wanted from business and industry. There is often confusion as to how business is organized and suspicion of the domination of special interests. For its part, industry is often confused about the mission of public education. Some individuals will be skeptical of the whole process. Others will be overoptimistic, and underestimate the complexity of the issues and the problems of planned change. Therefore, all collaborative efforts begin with issues categorized as "process." These elements are sometimes referred to disparagingly (and sometimes fairly) as being too philosophical. Similarly, the means of dealing with them are often referred to as "group therapy."

Nevertheless, they form the foundation for subsequent progress. The ways group members relate to each other and to their goals have to be established before interest begins to wane, funding conditions change, new community crises emerge, or other factors begin to erode commitments. Thus, it is important to generate some momentum early. This usually means picking some fairly small scale project that does not involve collaboration in the sense of any great sacrifice from any of the member organizations.

6. Process issues aside, all collaborative efforts face the questions sooner or later of "Now that we are organized, what do we do? And who pays?" In answer to these questions, strong program models should be developed and carried out under equally strong leadership. As mentioned, some reciprocity in terms of costs and benefits is almost a prerequisite.
7. Working in collaboration is much like playing baroque music. It sounds complex but it is mostly clever improvisation around some basic themes and principles. We have observed that successful collaborative programs do not necessarily require an inordinate level of esoteric administrative or managerial expertise. They often require a lot of time, but successful programs are organized in as simple and straightforward a manner as possible.
8. There are always good reasons not to do anything. The issue is whether they outweigh the reasons for doing something. We suspect that consensus often may not be the first order of business in approaching community problems including those of education. It is the responsibility of each participant in any collaborative effort to accept the complexity and competing definitions of any given problem be it youth and unemployment, the "crisis" in the schools, economic development or whatever issue.

9. Collaboration is facilitated by the establishment of "neutral" turf. In his book Raising the Bottom Line, Carlton Spitzer refers to searching for a neutral zone - a place "to consider, to relate, to sort out the trade-offs, to articulate local and national priorities in a democratic but non-threatening atmosphere." Spitzer maintains that this "neutral zone" is in the mind. We agree, but would add that it is also a place and a group of people, either discovered or created.
10. Collaboration requires buffering. Intermediary organizations such as community based organizations, a department of corporate public involvement, or an Aetna Institute for Corporate Education can serve to buffer one constituency or interest group from another.
11. Collaboration requires regular, if not full-time attention. Too often, good ideas languish for lack of staff to carry them out. Any discussion of collaboration should have the issue of resources in the forefront.
12. What is often ignored in the discussion about collaboration is the matter of internal collaboration in complex organizations as well as interorganizational collaborative arrangements. Decisions concerning areas of mutual and exclusive responsibilities among various departments must be made before a company can present a unified conceptual or operational framework to organizations with which it is joined in addressing community problems. We suggested the following criteria for deciding who does what internally:
 - a. Precedent. What administrative machinery already exists for corporate public involvement? What is the community and the company accustomed to as far as identifying corporate departments with community activities?

- b. Resources. Who can or should provide corporate money, facilities, equipment and people?
- c. Willingness. Who is interested in delivery or continuing to deliver any given program or service?
- d. Expertise. Who is sufficiently knowledgeable to carry a program through the assessment, planning, implementation, and evaluation stages?
- e. Mandate. Who is officially responsible for what types of programs? What is the relationship to other departments similarly designated?
- f. Good Faith. Who can work with whom?

XI. PUBLIC/PRIVATE RESEARCH VENTURES

Issues of research on the topic of public/private sector collaboration are challenging ones. Although much remains to be done, it all begins with a good sense of history.

Generating new knowledge involves first understanding the old knowledge. Such an understanding is not easy to acquire. The social programs enacted during the 70's generated literally hundreds of pilot projects and demonstration programs at a cost of hundreds of millions of dollars. Some did place an emphasis on evaluation which yielded scores of studies of all types.

Researchers need an historical perspective not only for its intrinsic value, but also in order to shape new or different questions. Achievement of this perspective will accomplish at least two goals. First, it will keep research from becoming an impediment rather than an incentive to action. Too often, repeated examination of an issue or situation is used

to forestall decisions on a specific course of action. Second, a sense of history will help avoid the reinvention of the wheel. The matter of perception and interpretation of "basic skills" strikes us as being one such wheel. Not that there is nothing to be learned about the topic. It is simply that, given the range of work being done in this area, the probabilities of a real contribution from yet another research effort are significantly diminished. For example, although a doctoral candidate might compete successfully with the College Board's "Project Equality" in developing definitions of basic academic competencies, the outcome is not likely to be a fresh contribution to the state of the art.

In addition to the renewed application of research discipline by individual researchers, the enterprise of research itself needs to be examined insofar as it pertains to public/private sector interaction. Problems arise because much of the language and many of the techniques of social science of research have little currency in the private sector. Techniques which may be regarded in the social sciences as being methodical and rigorous often strike private sector observers as compulsive attention to work rather than results, or worse, intellectual dilettantism which contributes little to the research client's understanding or capacity to confront the problems supposedly being addressed by the research. Conversely, academics often view business people as almost deliberately incurious and anti-intellectual. In fact, the nature of many managerial positions does force those managers to adopt techniques which meet their need not to know. These techniques include extensive staff delegation and the notorious one-page memo.

Given these opposing views of research, the issue of facilitating conditions which allow collaborative research becomes extremely important. Academics and private sector representatives can be partners in rethinking the design and implementation of research models.

This rethinking might begin with acknowledging some of the differences between the two environments. In academia, authority rests with the

professor or principal investigator; in industry, it rests with the manager. In academia, learning is heavily associated with the acquisition of knowledge; in industry it is on the acquisition of techniques which will allow applications of that knowledge. In academia, a premium is placed upon individual performance; in industry, teamwork is key. In academia, success is measured in grades or a tenure track; in business, success is measured by profit.

Considering these differences, corporations and academia might find some areas of compromise. For example, both graduate schools and corporations might reconsider the value of individual research. Many questions in the social sciences are so complex that team approaches are becoming increasingly valuable. As one businessman put it, "I don't need any more outsiders making a few low-level passes at my organization only to produce a report that either restates the obvious, oversimplifies the problem or misses it completely." There is a similar issue concerning synthesis and dissemination of research. Of the thousands of pages of research produced on public/private collaboration, little of it is in a form which is interesting, understandable or accessible to business people in key decision-making positions. Rigorous as they be, sophisticated research and reporting modes are all but unintelligible to non-research oriented clients. One executive said, "No statistic more complex than a percent ever makes it to the board room." The one-page memo is a discouraging fact of life but a fact nevertheless. Even where one-page memos are not the order of the day, research results need to be explained and displayed in the most comprehensible and economical way possible. Short of compromising their standards, researchers in academia and industry might do well to remember the dictum that everything that can be explained can be explained simply.

The issues of research methodology and presentation are more readily addressed if the purposes for the research are understood and accepted by those involved. To this end, we suggest an additional principle of collaboration. That is, that collaborative research implies some

willingness to adjust timetables. The so-called "pure" researcher must acknowledge some demands for applications. Conversely, the applications-oriented researcher or client might try to appreciate the value of pure investigation and be willing to consider a "wait and see" approach. It seems to us that the important issue here is to separate pure research from applied research on the matter of public/private sector collaboration, and to separate both forms from other kinds of intellectual or behavioral problem solving.

Given the above conditions, there are a number of questions concerning public/private sector collaboration which enter into the researchable category. The first group of questions concerns conceptual or policy issues around the topic of collaboration. For example, how is collaboration similar to or different from other patterns of collective behavior and what does it intend to accomplish? What is the appropriate type and extent of collaborative activity for any organization or individual? What constitutes incentives for a public/private collaboration? What constitutes a barrier as opposed to a legitimate condition of collaboration?

The second set of questions refers to the category of action research. For example, what are some planning and management models which could accommodate the work of two or more sectors? What forms of collaboration are most effective? How can existing research be more effectively displayed, disseminated and used? Research might also be developed around the relationships of corporations to various educational service providers. It is a fairly simple process to identify the types of relationships which are potentially valuable. What is lacking are strong planning, implementation and evaluation models which will move this relationship out of the realm of rhetorical agreement to real working partnerships.

CONCLUSION

It is difficult to summarize that which, for us, is already in summary form. We hope that some of the discussion is thought-provoking, and invite further response to be directed to our attention at the Aetna Institute for Corporate Education.

AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH
1150 - 17th Street, N.W., Washington, D.C. 20036
202 862 5800