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# School/business partnerships : a case study in an urban area.

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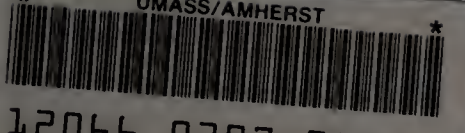
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# FIVE COLLEGE DEPOSITORY

SCHOOL/BUSINESS PARTNERSHIPS: A CASE STUDY  
IN AN URBAN AREA

A Dissertation Presented

by

MARLENE J. GENTILE

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

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School of Education

SCHOOL/BUSINESS PARTNERSHIPS: A CASE STUDY  
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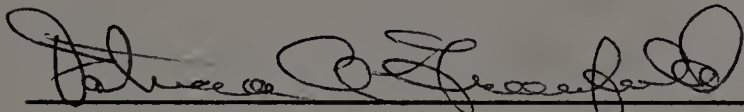
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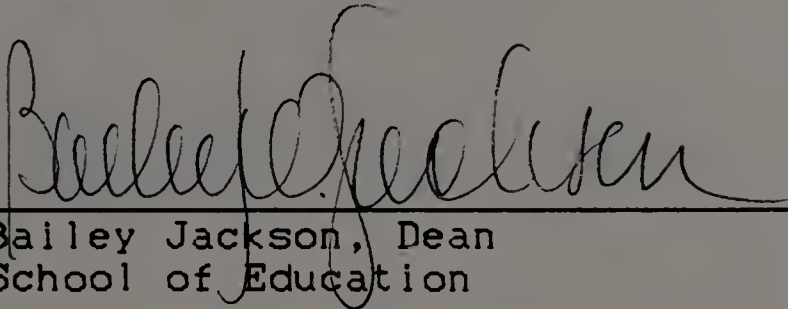
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## ACKNOWLEDGEMENTS

This dissertation represents the final step of a dream I forged over 9 years ago, with the help of the Everywoman's Center at the University of Massachusetts. At that time, I was an unemployed teacher, raising my infant son alone, and the prospects for improving the quality of our lives looked rather dim.

I met with a young intern from the Everywoman's Center one day over coffee, and she asked me what I would do, if I were able to do anything I wanted. I admitted I would get a Masters Degree to enhance my career possibilities. Eventually, she helped me construct a plan for my life that included not only a Masters, but also the Doctorate. I do not recall the name of this young woman, and I doubt if she is still at the University, but I wish to thank her. The hope and confidence she inspired in me that day have remained with me throughout these nine years.

I also wish to thank my mother, Mary Gentile, for nurturing my son so devotedly while I spent countless hours in classes, at the library, or at the typewriter. Her love and determination that I succeed sustained me.

Other members of my family helped me immeasurably. Joan, my sister-in-law often typed my papers. My brother-in-law, Otto, gave me financial support one

summer to stay at home and write my comps. My brother, Richard, drove me to Umass before I had a car. My sisters, Lana, Lois, and Debbie often entertained my son when I had to study, and they performed other innumerable acts of kindness.

I want to express my gratitude to the members of my doctoral committee, Professor Patricia Greenfield, Professor Robert Maloy, and Professor Robert Wellman, for the respect and professionalism they maintained toward one another and myself. In particular, I thank my chairperson, Dr Wellman, who has been a true mentor and unfailing friend.

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I have been richly blessed with family and friends who are kind, generous, and loving. I am eternally grateful to them all.

ABSTRACT

SCHOOL/BUSINESS PARTNERSHIPS: A CASE

STUDY IN AN URBAN AREA

FEBRUARY 1992

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Advancing technology demands workers who are equipped with the higher-order cognitive skills of analysis and problem-solving. Opportunities for upward mobility are increasingly reserved for those who possess the ability to learn how to learn.

Recent studies have shown, however, many of our students do not master these higher-order skills, and the graduate unprepared to meet the challenges of the changing workplace. Although traditional vocational education attempts to prepare students for work, high school shops are devoid of the vitality of real-life worksites.

If vocational students became interns in their field, they would have the opportunity to serve as apprentices in the types of real-world problem-solving



and decision-making systems they will enter as adult citizens.

In order to create this environment for hands-on experiences, I initiated a school/business collaboration between the Culinary Arts Department of a large, urban vocational/technical high school and a large food services organization and reported the outcome of my efforts in the form of a case study. Throughout the process of establishing the partnership, I kept detailed fieldnotes and journals, which later provided the basis for analysis and assessment of the collaborative experience.

Through interviews with student interns, the director of food services in the partner corporation, the culinary arts teacher, and the coordinator of cooperative education, I have attempted to examine the school/business partnership program from several viewpoints. Student interns reported their experience in the corporation made them feel independent and mature. Their supervisor noted employees enjoyed "taking the students under their wings." The Culinary Arts teacher and co-op coordinator agreed the partnership program cultivated essential life skills in student participants.

Analysis of the project from the perspective of Dewey, Rousseau, or Pestalozzi, leads to the conclusion

that apprenticeship-type programs, through their experiential nature, can contribute to the development of the kinds of cognitive and personal skills sought by employers in the 1990s.

Although school/business partnerships cannot be regarded as cure-alls for the problems in our schools, they can provide young people with opportunities to develop values and skills through meaningful activities in internship or apprenticeship programs.

For a summary of the lessons I have learned from this particular partnership, please see the first page of the appendix.

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# C H A P T E R I

## INTRODUCTION

### Background

Over the past two decades, evidence has been accumulating that the United States is steadily losing ground to its' competitors in the world marketplace.

This long-term trend has developed because of many factors, some related to actions by other countries which have emerged as aggressive competitors in global arenas, others related to repriorization of public policies and societal/demographic changes within our country. (Every Child a Winner!, 1991, p. 5)

With rising global competition and rapid advances in technology, the American employers' concern for skilled, educated graduates has never been greater. The "basics" are no longer sufficient. Business leaders now urge schools and teachers to institute an "invisible curriculum," that is, "policies and practices that are specifically designed to encourage self-discipline, reliability, and other positive traits." ("From School to Work", 1990, p. .11).

The National Alliance of Business' concept of "The Fourth R: Workplace Readiness," includes "thinking, reasoning, analytical, creative and problem-solving skills and behaviors such as reliability, responsibility and responsiveness to change." ("From School to Work," 1990, p. 11.)

While many business leaders finally recognize that "no nation has produced a highly qualified technical workforce without first providing its' workers with a strong general education" ("America's Choice," 1990, p. 4), the American education system, ironically, is currently hard-pressed to deliver even the three Rs. In the past, society has typically turned to the schools for cures to its' economic and social ills. The consensus now, however, is that the schools themselves may well be the problem:

It is clear that an important perhaps the most important factor contributing to America's difficulties has been the gradual slide of its' public schools' performance, relevance and effectiveness. This degradation has come about because of an inability or failure of the educational system, to cope with and react to change, and because the net effect of many federal state and local policies has been massive neglect coupled with over-regulation of the system which develops the. . . human capital, which is the central element of the nation's future. . . its' children. (Every Child a Winner!, 1991, p. 5)

Our society has changed dramatically over the past 20 years, and these changes are mirrored in the classroom. Two decades ago, the top disciplinary problems in the public schools were

. . . talking, chewing gum, and making noise. Contrast these with the problems seen in the schools today: violent crime, substance abuse, teen pregnancy, AIDS, suicide and learned helplessness. ("Education: The Next Battleground. . . ," 1990, p. 2)



One a daily basis, far too many of our nation's children come to school abused, hungry, neglected or emotionally unstable. Historically, the family, community, religious institutions and schools jointly assumed responsibility for youth development and attempted to show children the linkages between learning in school and success in later life. Today, as many of these once-influential organizations decline, schools alone are expected to compensate for their diminishing effects.

Changes in the way children are growing up place enormous pressures upon school personnel. Teacher "burn-out" is common, and the profession has failed to attract the host of bright, flexible recruits it so desperately needs. Promising careers in other fields have drawn minority graduates away from teaching.

While many minority persons choose professions other than education, the need for minority role-models within our schools is great. Statistics indicate a drop-out rate as high as 50 percent for minority youth living within some major U.S. cities.

In addition to social and personnel issues, our schools also suffer from structural problems. The bureaucratic, top-down design of public education is based upon a 19th century factory model which, intrinsically, can stifle efforts toward change.

Recognition of the crisis in our schools led the federal government to formulate a set of national goals designed to reestablish America's public education system as a leader in the 21st century. Fulfilling these goals will be a formidable undertaking, because,

. . . unlike most other countries, America welcomes cultural diversity, independence of thought, and sectional differences. These facets of American society forge the strength and fabric of the nation, but make achievement of broad education goals difficult to bring about by nationwide policies. (Every Child a Winner!, 1991, p. 6)

Why is education essential to the resurgence of America? We know that the United States must increase productivity, relieve pressure on social support systems, and attend to elements of the economy that are faltering in the face of change and competition.

Addressing these needs requires

. . . contributions by 'the engine of society,' the public education system. Good education relieves pressure on other social support systems; a weak education system stresses all other systems and services, including industry. (Every Child a Winner!, 1991, p. 5)

On the one side, then, we have business and government calling for literate, work-ready graduates; on the other, an education system bogged down with social, personnel, financial and structural problems. An obvious line of investigation for beginning to resolve the problems that beset both education and

industry is in bringing the school and workplace into closer alignment.

In recent years, numerous industry/education efforts have been implemented in an attempt to overcome the dichotomy that exists between what happens in the classroom and what is expected in the workplace.

Business, industry, labor, educators, parents and futurists are in agreement that schools, faced with enormous problems, are wise to infuse education with talent and resources from the local communities. (McCormick, 1991, p. 20)

Focused business/education partnerships have the potential to cultivate outcomes our economy needs to reenergize and effectively compete in a fast-moving world marketplace. They present an important and promising avenue for America's health and well-being. (McCormick, 1991, p. 20)

Students who have access to focused school/business partnership programs can make great strides in developing their capabilities as lifelong learners, creative problem-solvers, responsible citizens and effective member of the workforce and community. (McCormick, 1991, p. 20)

Although school/business alliances have inspired lofty rhetoric and initiated some exciting innovations, they have also raised many difficult questions.

Employers are often talking in the same terms as educators, and there is likely wide agreement that too high a proportion of students leave high school, diploma in hand, with inadequate skills. There are, however, significant areas where employers and educators are very likely talking past each other, leaving a large portion of the business/school

relationship in the shadows. Business partners are often asked to take a great "leap of faith" when joining forces with the education system. Some businesses are willing to embark upon the uncharted waters of industry/education collaborations, while others adhere to the tenet, "If it can't be measured, it isn't worth doing." (Gary C. Schuler, CEO, Stanley-Bostich Co., 1990, in McCormick, 1991, p. 20).

Accountability, tight budgets, grant procurement: these are some of the major themes surrounding the future of business/education partnership programs in the 1990s. Which positive outcomes from the Adopt-a-School movement begun in the 1960s are currently valid? To what degree can they be further developed? Where can recourses be steered to improve effectiveness, and which mindsets from an earlier era need to be dropped altogether? (McCormick, 1991, p. 1). These are just a few of the issues waiting to be resolved in the "uneasy marriage" of the public schools and business community. (Salodo, Watts, Feldman, 1989, p. 31)

### Statements of the Problems

Business leaders have begun to realize that their economic survival could very well depend on the products of a restructured, retooled, and more effective education system ("America's Leaders Speak Out. . .," 1989, p. 1).

Educators recognize that changing societal conditions, budgetary and personnel constraints, and antiquated forms of organizational structure have eroded the quality of our schools. Representatives from industry and education, in many cases, are eager to work together to improve the plight of public education, and, ultimately, contribute to the upgrading of the American workforce and economy. Both groups recognize, in particular, the weakness of the linkages between school and the workplace. Half our nation's youth do not continue their formal education after they graduate from high school. Although America's need for the skills of these young people is great, we do little to assist this "forgotten half" of our graduates in making important transition from school to work. "In no other industrialized country are the transitions from school to work . . . left so much to chance as in the United States." ("From School to Work," 1990, p. 6)

Recognizing this vital missing link in our system, President Bush and the nation's governors stated in the National Goals of Education: "Every major American business will be involved in strengthening the connection between education and work" ("From School to Work," 1990, p. 2).

We see that in addition to sparking debates amongst educators and business people, the question of industry/education relationships has reached even the level of policy agenda.

Although educators and corporate leaders recognize that (1) a disjuncture exists in the knowledge and skills required for the classroom and those needed for the workplace (2) it is to the advantage of all concerned to identify and address these differences, what remains to be accomplished is the establishment of a formula for prescribing the proper input from each party.

### Purposes

The Purposes of this study are: (1) to identify and explore the potential for school/business partnerships, (2) to determine the points of dissonance within such collaborations and (3) to make recommendations for both preventing and ameliorating these problematic points.

It is a societal expectation that something happens in the schools to prepare students for participation in the work world. On the surface, schools and businesses appear to have much in common; in particular, there is often a similarity in their structures. Both tend to be hierarchical in nature, with authority vested in either "bosses," principals or teachers. Productivity of students/workers is highly valued. Nevertheless, the behavioral expectations within the two organizations are often very different. Schools operate in place of parents. In the workplace, employees are not "mothered." Regardless of one's position in the company, workers must exercise some initiative and independence.

Industry leaders are now saying that the workplace has changed and that employees are being asked to do more problem solving and interacting with others. Even lower level positions are given considerable decision making authority. ("Curriculum Currents," 1991, p. 1)

An illustration of the conflicting behavioral expectations of business and education is in the recently-adopted attendance policy of a large urban school system in Massachusetts. In the past, high school students who were absent without excuse for more than 15 percent of the academic year were not likely to pass. Teachers reported percentages of absences to guidance counselors early in the school term so that

students at-risk could improve their attendance before it was too late. This attendance policy was recently abandoned. It is now up to individual teachers to decide if students' absences influence their academic standing. Some see this as a victory for students, because if they are able to pass their courses without coming to school, why should they be penalized?

However, what message does this "non-policy" send to young people? It implies that students do not have to "be there," and in the case of the high school I will study, they often are not. In the 1990-1991 school year, up to four hundred students, at least one-third of the school's population were absent each day. How will many of these adolescents make the transition to the workplace, where a person is, quite simply, terminated for frequent absenteeism?

Schools talk about preparing students for life, but, in actuality, they can often do nothing more than orchestrate feeble "dress rehearsals" for the real world. Teachers and administrators may themselves be out of touch with the modern workplace. Even when attempts are made to teach young people the "Fourth R" of responsibility, the fact remains, in Massachusetts, at least, that, no matter how irresponsibly a student might behave, the school system is required by law to



provide that student with an education until at least the age of 21.

Part of the philosophy of vocational training is to equip students with the skills and discipline necessary for employment. Many students who attend the school where I will do my study are focused upon a particular trade, do their best in the academic and shop areas and, after graduation, move on to successful careers in their chosen fields.

There are others, however, who because of inappropriate behavior, are shuffled from one shop to the next. Rather than hold students accountable for their actions, the school usually places upon the shop teachers the burden of "rehabilitating" some very troubled adolescents. Often, these young people are candidates for alternative educational environments, but, in most cases, there are no such programs available within the system.

Unlike some regional vocational/technical high school where students must compete for admittance, an inner-city vocational school often becomes a dumping ground for a city's most difficult students. When teachers and administrators are forced to focus so much of their attention upon school security and discipline problems, the goal of creating school-to-work links often becomes obscured.

There is a body of literature which suggests discipline problems, particularly in poor, urban schools, can often be attributed to the structure and curriculum of the school rather than to some flaw in the students or teachers. The "hidden curriculum" in many inner-city schools has become one of violence, dishonesty, and underachievement. Some educators argue that if we were to change the explicit, official curriculum, the tacit curriculum would transform also. Rather than using the traditional approach of trying to make students act responsibly, schools could provide young people with real-world situations where students would have the opportunity to engage in authentic activities. When they are given meaningful tasks to perform, and these tasks are connected to present circumstances, students often begin to construct their own value systems. Apprenticeship-like programs which link the students' school experience with on-the-job-training in businesses could strengthen the school-to-work transition, and, at the same time, help to eliminate the negative hidden curriculum. This vital area of school/business interaction will be the main focus of this dissertation.

In spite of its' many complexities, the inner-city vocational/technical high school has the potential to provide adolescents with both a quality education and

practical workplace skills. The school I am studying, for example, boasts a multi-million dollar physical plant and a staff of highly-qualified, dedicated teachers. One of the school's major problems seems to be that both students and staff tend to internalize the negative image associated with this school in particular, and with inner-city vocational institutions in general. Lessened expectations for vocational students can result in lowered self-esteem for all who are associated with the school.

Having been on both the academic and business sides of the workforce, I have observed that a gap exists between the needs of the employers and the preparedness of our students to meet those needs. I embrace the national movement toward "purposeful education," that is, an education which not only strengthens academic skills, but also provides opportunities through which students can gain mastery over attitudes and abilities associated with life-long success (McCormick, 1991, . 2).

School business partnerships can potentially foster and ease school-to-work-to-life transitions, enhance self-confidence, and ultimately, contribute to a responsible, well-adjusted citizenry. With these ideas in mind, I chose to initiate a school/business partnership in a large inner-city vocational high

school, focusing upon the school's Culinary Arts Department.

### Genesis of the Study

After many years of varied experiences in academic and business settings, I have gained a clear understanding of the climate, needs, and problems of these two environments. I am acutely aware of the discontinuity between what happens to students while they are in school and what is later expected of them once they are employed. This disjuncture in school/work skills is documented in a recent study, "From School to Work," by the Policy Information Center of the Education Testing Service:

While practically all high school graduates can do simple simulation tasks involving prose, documents and quantitative problems, they begin to fail as the information processing skills required become more complex, particularly on tasks involving documents and quantitative problems. (op. cit., p. 18)

Some researchers conclude that reading at work often takes place in the midst of another task, with relevant materials in hand and a number of extralinguistic cues from the immediate work setting (Sticht, 1977; Mikulecky and Elehl, 1980).

These sources of support from the environment, coupled with the necessity and motivation to apply what is read could facilitate literacy tasks on the job. It

may be that for task-embedded literacy, the real criterion is "usability," which overlaps, but is not limited to "comprehensibility" (Bloome, 1987, p. 238\*).

It is nearly impossible to create a true sense of "usability" through classroom texts. Even within the context of a vocational shop, literacy tasks do not closely resemble the reading requirements in the work world. A student baking a cheesecake to be served to fellow students, for example, may not experience the same sense of urgency to follow the recipe as precisely as she would if she were baking cheesecakes for a living.

Perhaps even more essential than workplace literacy skills are the personal characteristics described earlier as "the Fourth R." In a National Academy of Science publication, "High Schools and the Changing Workplace: The Employers' Views," the critical core competencies (in addition to the ability to read, write, compute and master other subject areas) were: ability to reason; experience with cooperation and conflict resolution in groups; and possession of attitudes and personal habits that make for a dependable, responsible, adaptable and informed worker ("From School to Work," 1990, p. 11).

An avenue for helping students develop these work-based literacy and personal strengths is through the creation of opportunities for on-the-job training.

With this goal in mind, I will set up a school/business partnership between the Culinary Arts Department at a large, urban vocational/technical high school and food services establishments in the area. Surely some employers recognize the need for skilled employees in our increasingly competitive global economy and will work with the school in helping to create the superior workforce our nation requires.

Of the many shops in this high school, the Culinary Arts Department is one of the most outstanding. Students spend three years in the program, during which time they rotate through the dining room, snack bar, and bakery, studying all phases of food preparation and service. I have frequently been a customer at the small restaurant run by this Culinary Arts Department; the delicious cuisine and friendly ambiance offer teachers an oasis from the dreary cafeteria fare.

While dining in the school-run restaurant, however, I noticed that many of the students lacked confidence and common sense as they performed their duties. Perhaps some of them had not had the kind of home environment that would expose them to the

vocabulary and skills necessary for their vocation. For example, when one teacher asked for "silverware" at the snackbar counter, the student/worker did not know what the teacher wanted. Once the teacher specified a "knife" and "fork," the student obliged.

Of course, the teacher/customers are very tolerant of student errors, but customers in the "real" world might be less patient. Unfortunately, this school had no program for students to participate in on-the-job training in the food services industry.

As I formulate a plan to initiate a school/business partnership for the Culinary Arts Department, I envision this first attempt leading to partnerships for other shops in this school.

When we discussed the idea of school/business partnerships, students were very excited about the prospect of communicating with real-life employers. It is my hope that this industry/education collaboration will raise the self-esteem of some students, increase work-related skills, open pathways to future employment, and improve the overall image of the school.

### Procedures

First, I will share my idea for partnerships with personnel directors and food services managers of hotels, hospitals, restaurants, corporations and colleges in the area. Under the guidance of a University of Massachusetts professor who is an expert on school-business partnerships, I will set up breakfast meetings with representatives from the organizations listed above. So that the business community can experience the Culinary Arts Department first-hand, these meetings will be held in the school-run restaurant. Through these meetings, dialogue will commence and a program plan will evolve. Eventually, the Culinary Arts Department will present the food production managers with a proposal for unpaid work-study experiences for 10th and 11th graders and, perhaps, paid co-op experiences for seniors.

Throughout the entire process, I will keep these written records: (1) correspondence to employers (2) minutes of breakfast meetings (3) Journal of conversations with employers; conversations with students; reports of incidents (4) reflections upon and analysis of the evolution of the project.

I will interview employers with the view of gaining insight into the specific requirements for jobs



In the food services industry and in the private sector in general. Once students are placed in work-sites, I will chat with them to see how things are going and eventually interview them as well. To the best of my ability, I will act as a mediator between the employer and student, attempting to strengthen the school-work connection.

Many of the students are already employed outside of school, but their jobs are rarely related to their shops. ". . . the school and work lives of students are entirely separate, and although the school and employer interact with the same student, little advantage is taken of this connection." ("From School to Work," 1990, p. 7)

Failure to exploit this vital connection is an opportunity lost. The school can gain knowledge of deficiencies in the preparation of students for work by communicating with their employers. Schools can also help students learn from work experiences by discussing these experiences with them in the classroom. Employers have the opportunity to tell schools what they perceive the educational deficiencies to be. "It is a chance for them to have a say in improving the abilities of young people they might want to hire full-time after graduation." ("From School to Work", 1990, p. 7)

I am aware that when organizations as different in nature as schools and businesses come together for the pursuit of seemingly common goals, areas of dissonance will arise. It is my intention to uncover these points of discord, analyze them, and make recommendations for preventing or, at least, mollifying them.

Although I am myself a teacher and a participant in this project, I must "walk a fine line" so that my intentions will not be misconstrued. For example, I do not want the instructors in the Culinary Arts Department to feel as if I am invading their territory. Also, I cannot infringe upon the role of the school's coordinator of cooperative education. The success of this project rests upon my maintaining a good working relationship with all involved.

I see my role in this study as principally that of an observer and data-gatherer. There is a considerable literature in ethnography concerning researcher as participant, or "participant observation." Although I am familiar with this literature and am using it as a context, I do not claim that this is a straightforward, structured ethnographic study.

The dissertation will be in the form of a case study. In short, I am going to initiate a project, then report and analyze the outcome of my efforts. The study should be instructive to others who seek to

formulate school/business partnerships, as I will highlight both the positive points and the pitfalls of my experiences with an industry/education collaboration.

## C H A P T E R    I I

### REVIEW OF THE LITERATURE

In the following pages, I will examine recent literature pertaining to four areas that impinge upon the relationship of industry to education: 1) American youth: their social problems, literacy skills, and issues of school-to-work transition. 2) The American workplace: the traits and education necessary for success on the job. 3) The American workforce: its' present status and projections of skills necessary for the future. 4) School/business partnerships: Current efforts on the part of business leaders and educators to improve our schools and upgrade the quality of our workforce.

#### Introduction

I draw upon my experiences as a parent and my 15 years of teaching as a basis for articulating some of the major problems in schools today. In particular, I have observed the following issues: the inability of the system to meet the individual needs of children; the increasing complexity of the problems that children bring to school with them; perpetuation of stereotypical thinking about race and poverty; the growth of a multilingual, multicultural populace within a school system which often endorses the polarization

of cultures and languages; the burn-out of dedicated teachers, particularly in the poor, urban areas; and the question of what constitutes outstanding teaching in the first place.

These problems point to the cleavage between schools and the social and economic systems in which they reside. In the Ecology of Human Development, Brofenbrenner notes that schools are

. . . compounds physically and socially insulated from the life of the community, neighborhood, and families the schools purport to serve as well as from the life for which they are supposedly preparing the children. (p. 230, as quoted in Jones and Maloy, 1988, p. 124)

Much of the current professional literature suggests this same point. As I mentioned in Chapter 1, a recent study, "Education: the Next Battleground for Corporate Survival: An Urgent Message from 21 Harvard Business Students," clearly states that as social problems in America become more pervasive and complex, the institutions that once helped to mitigate these problems, i.e. the family, churches and neighborhoods, are themselves deteriorating. Society now looks to the schools to fill the gaps left by other institutions. Even if our schools were equal substitutes for these once-vital support systems, the problems may still remain unsolved. The top-down, heavily bureaucratic structure of the American school system often stifles

the schools efforts to meet the needs of students. The managers of schools, their principals, usually have little or no say in setting goals, determining budgets, or hiring and firing personnel. Also, no group actively monitors and disciplines our educational system.

The stakeholders in education, namely taxpayers, parents, and businesses have not pushed the system to change. The majority of taxpayers fail to recognize the linkage between education reform and issues of crime prevention, drug education, and increased productivity. Instead, many taxpayers emphasize cutting back on educational expenses in order to lower the tax burden.

If our educational system falls apart, will our nation fall along with it? Let us travel back in time for a moment to catch a glimpse of what might easily become our future:

It is the 1852 industrial exhibition at the Crystal Palace in London. Britain is the dominant world power. The U.S. is number 2 and catching up fast. Made-in-America reapers, muskets and tools are the marvel of the show. British businessmen are amazed at what they see. Products are assembled from completely interchangeable parts. Here is mass production for the first time. So impressed are they that they name it 'the American system of manufacture.' Worried delegations of British industrialists set sail to investigate. Their findings? American manufacturing prowess is in large part due to a highly educated workforce. The Yankees have an astonishingly high literacy rate--90% among the free population. In the

industrial heartland of New England, 95% of adults read and write. In contrast, just two-thirds of the people in Britain are literate (Nussbaum, 1988).

As we project to the 1990s, we see that the United States has remained the dominant world power, but it is now tiny Japan that is number two and closing.

American business leaders marvel at the quality of Japanese products that flood world markets. Our CEOs board jumbo jets on pilgrimages to Tokyo. What do they discover? The manufacturing edge is definitely in favor of the Japanese. Behind the wonder of Japan's economy lies a better-educated workforce. In 1988, Japan's literacy rate was better than 95 percent. In America, the figure was closer to 80 percent.

One might say, why do we need to be number one? Maybe we should be satisfied with being number two or three. If, however, we do not face some hard facts about our future as a nation, we may risk losing the standard of living that many of us have come to take for granted.

From the 1950s to the 1970s, America's productivity grew at a healthy pace. The nation was getting richer, and workers lived better on what they earned. Since then, the rate of increase of productivity has dropped dramatically, and the distribution of income in the U.S. has become increasingly imbalanced. Those with a college

education prosper, but the front-line workers have seen the buying power of their paychecks shrink year after year.

The economy has grown, but this growth has come from the fact that more of us are working. During the 1980s, a higher percentage of Americans were working than at any other time in this century. The "baby boom" generation came into the workforce, and many wives went to work to protect the family income from the ravages of inflation. In addition, the U.S. has been borrowing at unprecedented rates to maintain our national income. We have underinvested in our infrastructure and allowed it to deteriorate. As a result, most of us are living as well as we did, but more of us are living on borrowed money, and, perhaps, even borrowed time.

In the future, we will be unable to boost the economy by putting more people to work, as we have done for the past thirty years. Fewer people are entering the workforce, and fewer still are predicted to enter in the years to come. The key to strengthening our economy is to increase the productivity of each individual worker. We will not accomplish this simply by using better machinery; low wage countries can now use the same machinery and still sell their products more cheaply than we can. We must mobilize our most



vital asset: the skill of the American citizenry--not just the 30 percent who graduate from college, but the millions of front-line workers who provide the goods and services essential to our survival (based upon The Report of The Commission on the Skills of the American Workforce, 1990).

Once again, we come full-circle to education. As I quoted earlier: "No nation has produced a highly qualified technical workforce without first providing its workers with a strong general education." (The Report of the Commission . . ., 1990, p. 6)

Who are these front-line workers who will have to increase their productivity in order to save our economy? The freshest crop of them will be the very students I am now working within this study. It is common knowledge among teachers that this school is the last dumping ground for the academic and social "losers" in the school system. Historically, students from lower socio-economic backgrounds were often channeled into vocational high schools. Seen as members of the "laboring" class, these young people were encouraged to work with their hands rather than their minds. Although this is a very biased and unfair distinction, it is one that is deeply ingrained in society. In her book, In the Age of the Smart Machine, Zuboff traces this repugnance for manual work all the

way back to the Greco-Roman legacy that associated labor with slavery.

Many of the students in this high school have internalized the negative image associated with inner-city vocational education. One young person commented, "Why are the teachers trying to make this new discipline code work? We came to this school because we are bad." He explained that the kids who were the "troublemakers" in junior high naturally headed to this school because of its' reputation.

Many of the staff members seem to accept this "loser" image of the students. They often lower their standards and pass students through, frankly, just to get rid of them. As one teacher commented, "When we do try to raise our standards, an irate parent storms Central Office, and an 'F' is nervously changed to a 'D'."

What we are failing to realize is that these "losers" are the very same individuals who will build our homes, fix our appliances and look after us if we are in nursing homes. What will the consequences be when Johnny cannot read well enough to decipher the instructions for handling flammable chemicals, or Mary doesn't know the difference between .5 and 5 ml. when handing out medications?

Education and the quality of our workforce exist in a symbiotic relationship. The problems that reside in our schools and, subsequently, in our workplace are complex and intertwined. Many skilled researchers have examined this dilemma and are continuing to do so. I cannot pretend to present the problems in their entirety, nor can I offer any magic solutions. My purpose in the remainder of my studies is to analyze in depth certain of these issues with a view to eventually exploring mechanisms for bringing schools and businesses together in a mutual education enterprise.

#### A Closer Look at American Youth

The foregoing statement of problems, both from my personal observations and review of some of the literature, are well-illustrated in a recent work by Patrick Welsh. A 15-year veteran English teacher at T.C. Williams High School in Alexandria, Virginia, Welsh commences his study, Tales Out of School: A Teacher's Candid Account From the Front Lines of the American High School Today, with the following poignant scene. Then Secretary of Education Terrel Bell has come to T.C. Williams High School to present one of the Reagan administration's first Excellence in Education Awards. For the previous nine months, Bell had been reporting that America is a "nation at risk" because of

its deteriorating high schools. On this day, however, the Secretary was extolling T.C. Williams as a school that was able to meet the needs of all its' students, despite the diversity of the student population.

Halfway through the speech, Welsh overheard some of his colleagues chuckling quietly, "Did you ever hear such bull in your life? . . ." "If we're in the top ten, can you imagine what some of the rest are like?"

Welsh doubts if Bell knew that he had been invited to address only teachers and administrators after school, rather than the student body, because there is always the fear that large gatherings of diverse pupils will get out of hand. Was the Secretary aware that the \$5 million Career Wing in which the ceremony was being held had become a depository for semi-literate Black and foreign kids, some of whom were learning such minimal skills as tire busting or stacking boxes? Did he realize that many of the teachers in the audience were in despair about their failure to reach the half of the student body that reads below grade level, and that others simply refused to teach these substandard readers--and got away with it?

In 1959, the President of Harvard University, James B. Conant, envisioned an institution like T.C. Williams as the ideal setting to meet the needs of all youth in the community. In his much quoted report,

"The American High School Today," Conant argued that size was a crucial element in a school's success: only the large, comprehensive high school could afford to provide a selection of courses and extra-curricular activities broad enough to attract kids with many different interests and needs. What went wrong with conant's apparently sensible vision of the comprehensive high school? Welsh responds:

The America Conant wrote about vanished during the quarter of a century since his report was published. It was swept away by demographic, cultural, economic, and technological changes that Conant did not foresee, and the American high schools (and American families) are only beginning to recognize. (1986, p. 6)

We are witnessing the coming of age of the "latchkey" generation--kids who have spent much of their lives letting themselves into empty houses after school. These teenagers have lived through a divorce epidemic, economic pressures that caused millions of mothers to move from the home to the workplace, and a decade of social turmoil. It is hardly surprising that the attitudes and behaviors of teenagers have been shaped by these societal changes.

Since the 1950s, television and the electronic media began to rival and then far exceed the influence of the classroom teacher. In 1960, parents and teachers were the leading influences on thirteen to nineteen year olds. By 1980, teachers had dropped to fourth place behind peers, parents and media. (Welsh, 1986, p. 37)

Television has served to promote, (if not truly originate) a distinct "teenage" identity that has inspired our young people to become the most voracious consumers of all age groups. Christopher Lasch's characterization of the modern American is applicable:

Acquisitive in the sense that his cravings have no limits, he does not accumulate goods and provisions against the future, in the manner of the acquisitive individualist of 19th century political economy, but demands immediate gratification and lives in a state of restless, perpetually unsatisfied desire. (Lasch, 1979, p. 23)

Teachers complain that students seem to be looking for the same stimulation and entertainment in class as TV provides at home. One girl explained to Welsh, students talk in class the same way they talk at home during a T.V commercial, ignoring the teacher as if he or she were merely an electronic image.

Welsh's description of some aspects of teenage life in Alexandria are alarmingly similar to what I have observed in my years of teaching:

We have 13 year olds who drink heavily and throw up in the bushes in some of Alexandria's most prestigious neighborhoods. Older kids party through the weekend at houses from which parents have seemed to have disappeared. Alcohol flows, drugs are routinely available, and there are plenty of empty beds upstairs. As of June, 1985, 115 of T.C.'s 1,200 girls (and another 22 in the two junior highs) became pregnant since the previous September. This figure includes only girls who used public health services and decided to have their babies. (Welsh, 1979, p. 23)

Heavy drinking and partying have become widespread even among young teens, Welsh maintains, in part because some parents have caved into the old con line, "Everybody's doing it."

As the statistics of teenage pregnancy suggest, more than drinking and drugs, sex is probably the element of the '90s youth culture that poses the greatest challenge to families and schools. The school nurse at T.C. remarked "it's standing room only" at the V.D. clinics in the Alexandria area. This observation is corroborated by a school nurse at a high school in Western Massachusetts, who notes even syphilis, long considered to be a disease that was under control in the United States, is appearing frequently within the student population of this school.

Decisions about sex--whether to become sexually active, and how to take responsibility for birth control--require correct information and clear thinking about personal values. How teenagers handle the emotional pressures of sex is bound to effect academic performance and personal well-being. Although national surveys suggest that at least one third of girls and half of boys between the ages of fifteen and seventeen are sexually active, many schools have been unable to provide students with guidance in the area of sexuality. The cleavage between the schools and the

society in which they reside is most apparent in the debates over sex education.

I recall a reasonable film that was being considered for use in an AIDS education campaign in an urban school system in Massachusetts. At first, all the couples in the film decided against premarital sex, but, eventually, one couple chose to have sex, with the use of condoms. The film was considered inappropriate for high schools in this locale because it seemed to suggest that it is acceptable to use condoms. The dominant religious groups in the area would be offended by media which did not promote abstinence.

The changes in society have placed tremendous pressures on those who work in schools. Naturally, schools have always had a function beyond that of just educating the minds of students. Building character, reinforcing the values taught at home--values such as honesty, diligence and respect for others--have long been a part of any good school's mission. With the issues of sexuality and drinking however, school personnel assumed that the family shouldered the main responsibility. That is not so clear any longer. Many parents want and need more from schools than grades and reinforcement.

I see many parents who want a quick fix for their kids. Parents are tired. It's the fast society we live in. Young people are crying out for help.



It's an across-the-board phenomenon, from the wealthiest to the poorest. So many people who are the picture of confidence and success in their careers are desperate when it comes to their own children (Welsh, 1979, p. 39).

In many secondary schools the record of responding to parental expectations is mixed. High school guidance departments often provide merely a "band-aid" approach. At T.C. Williams, for example, there is only one guidance counselor for every 270 students. Typically, guidance counselors spend most of their time doing paperwork. Many talented individuals who could surely help students, instead serve as hall monitors, lunch duty staff, or perform a host of other "custodial" tasks around the school.

Welsh notes that school guidance departments and the teaching staff often reside in separate worlds, rarely sharing helpful information about the lives and problems of students.

If parents have legitimate complaints about the quality of help they are getting from the schools, Welsh argues that teachers have real concerns about the quality of parenting many students receive. Having a college degree or being a pillar in the community does not assure success.

Great kids come from homes where parents are divorced as well as from 'stable' homes; from poor families as well as rich ones. In fact, it is the values of middle-class families with plenty of advantages that I often find myself questioning.

They've tried so hard and so successfully to control their lives, careers, mortgage payments, and their employees that some of them begin believing they can 'manage' their kids, too. Their children become just another badge of material success. I suspect, in fact, that a lot of the youthful behavior that worries us--the drinking, sex, drugs, and low motivation--is really a rebellion against parental attitudes that seem to value a kid's achievement more than his or her worth as a person (Welsh, 1979, p. 41)

My own experience in a middle-class suburb confirms Welsh's point: I have witnessed the unrelenting pressure placed upon children by some parents. Frequently, I hear of parents who will allow nothing lower than a "B" in their homes. From early elementary grades, outside-of-school activities are chosen according to the level of prestige they will reflect on a "resume" one day in the future.

In his essay, "Why Youth is in Revolt," Bruno Bettelheim wrote:

The modern middle-class family still feels that it's justification has to be from what it produces, but the only thing it produces now is children. Their perfection should justify the labors, if not the very existence of the family. . . . Perhaps we were all better off when children were seen as a gift of God, however they turned out, and not something the high quality of which provides justification for our family (in Welsh, 1979, p. 41).

Although drugs, drinking, pregnancy, venereal disease, and other youth culture issues touch the lives of teenagers in every racial and economic group in society, there are other problems which weigh most heavily upon minority groups.

In 1954, the Supreme Court struck down segregated public education in America, and rejected the hypocrisy inherent in the concept "separate but equal." Today we have an education system in which the schooling of African-Americans, Latinos and Whites might be described as "together but unequal." (Welsh, 1979).

How else can we explain these statistics?--

1. Among White 18-to-21 year olds, 13.6% have dropped out of high school. Among Blacks, the rate is 17.5%, among Latinos, 29.3%.
2. The high school drop out rates in major cities, where minorities are concentrated, range from 35% in New York to as high as 50% in Washington. (Bureau of Census data in Human Capital report, 1988)

In the spring of 1985, Alexandria Virginia's first graders took the Science Research Associates test in reading. Whites averaged in the seventy-fourth percentile nationally, while African-Americans averaged in the thirty-fifth. As African-American children move through the Alexandria school system, their progress on this test is amazingly predictable--so predictable, in fact, that school officials speak of the "Alexandria curve." For the first three grades, African-Americans slightly improve their ranking in relation to others, but then they steadily lose ground until, by eleventh grade, they rank below where they started in first grade. According to Welsh, slightly more than half the

African-Americans in T.C Williams class of '85 had a "D" average or worse.

As in all social issues, family backgrounds, peer pressures, cultural and economic factors contribute to the final picture. There is a remarkable correlation between test scores and family income. The average income of an African-American family in Alexandria is \$14,700 a year, the lowest in the entire Washington area. In neighboring jurisdictions, where income of African-American families is higher, so are the test scores of African-American children. Some educators criticize this correlation as a self-fulfilling prophecy perpetuated mainly the White middle-class. Dr. Peter J. Negroni, Superintendent of the Springfield Public Schools, says that society has developed "a belief system that poor children don't learn well" (Springfield Sunday Republican, September 8, 1990, p. 1).

William Carr, an African-American psychologist who gained his insights working as a counselor of young prisoners, told Welsh that poor Black kids sometimes identify achievement with Whites and want no part of it. "The street" sets obstacles in the way of young inner-city Blacks and Latinos who might want more from life than what street culture offers. Bad behavior in

class can often be part of a highly stylized game of "dumbness" used to win points with friends.

Analyzing the problem from any angle, we still cannot escape the fact that improving the academic outlook for poor minority children may be the single largest task facing education. Some African-Americans have already said the unsayable: that African-American children received a better education before schools were desegregated. These words are a warning: the legacy of inequality did not end at the schoolhouse door in the 1960s.

It would be unfair to conclude that schools are totally failing minority kids, or that reforms introduced in the '60s and '70s have accomplished nothing. Certainly, Head Start and other programs continue to make a difference. At the present rate of progress, however, it could be generations before Blacks and Whites leave high school with an equal chance "to make a good life."

The tracking system in many schools continues to serve the needs of the middle class.

Since desegregation, the priority of White-dominated school systems has been to maintain the support of the middle-class, while complying with laws that require children of disparate backgrounds and abilities to attend school together. (Welsh, 1979, p. 75)

America is becoming less White and more Spanish-speaking. Birth rates among African-Americans and Latinos exceed those of Whites. Immigration, mainly from Latin America and Asia, accounted for one-fifth of America's population growth in the 1980s. Compared with native-born citizens, immigrants are younger, and their families are larger. "The pool of young workers is shrinking, but more of its' members will be Black, Hispanic, or Asian" (Ehrlich, et al., 1988).

A disproportionate number of young people are growing up in families that are poor or headed by single parents. In minority communities, many of today's adults lack the skills to find decent employment, and their children face worse prospects in a time of dramatic technological change. These young people represent a growing minority "underclass" which has been isolated from the nation's economic and social mainstream. Welfare mothers and unemployed males who reside in poor, inner-city neighborhoods number at least 1.5 million (Garland, et al., 1988).

About one-fourth of all children in America are born out of wedlock to parents who are "poorly educated, frequently young and unskilled," says George Washington University's Sar Levitan (Ehrlich, et al., 1988). In the United States, about 44 percent of all

marriages end in divorce. Female-headed households are more than four times as likely to be poor than are two-parent families. A startling one in four members of the Class of 2000 is presently living in poverty. Fewer than half of the fathers not living with their children pay anything toward their keep. In 1985, mothers with child-support orders received less than the full amount due; in fact, the average annual payment was \$2,315. Another factor in the poverty problem is that women's earnings still average only 70 percent of men's.

Harvard sociologist David Ellwood predicts that more than two-thirds of children who grow up in a single-parent home will spend at least some of their childhood in poverty. Some researchers conclude that these children are three times more likely to drop out of school, and they are sometimes more deficient in skills. Black and Latino children, while a minority of the poor, are nearly three times more likely to be poor than Whites (Ehrlich and Garland, 1988).

Some researchers predict that there will be a labor shortage in the future, while others say that recessionary times will continue, and the job market will grow even tighter. Regardless of the trend that proves to be true, society must deal with the reality that many new workers will be from "groups

disadvantaged by discrimination, lack of education, and language barriers." (Former Labor Secretary Ann D McLaughlin in Human Capital Report, 1988, p. 110)

In the preceding pages, my observations as a parent and educator, combined with a review of the professional literature, provide a backdrop for the problems that beset our educational system and society. Although the situation may appear grim, articulation of the issues is the first step toward discovering solutions. A healthy union between business and education may well lead to the reversal of the negative conditions now shadowing our prosperity.

### The American Workforce

As detailed in Chapter 1, some issues that serve to separate schools from the larger society are:

- Schools are increasingly called upon to stand in for absent parents, substitute for welfare departments, work with teenage parents, deal with drug and sexual abuse, provide afternoon day care and undertake a host of other social services that, in its' present state, our educational system is unable to provide.
- The changes in the ways children are growing up have placed great pressures on school personnel. Teacher "burn-out" is common, and the profession



has failed to attract the host of bright, flexible recruits it so desperately needs. Alluring career opportunities in other fields have drawn minority graduates away from teaching.

- By the year 2000 or so, minorities will make up one-third of the population and a higher proportion of the workforce. Yet, many schools are not serving minorities well. Desegregation and affirmative action without academic gains represent a hollow victory for minority groups.
- Although there have been some genuine first efforts, much of business' involvement with the public schools collapses into "fuzzy altruism." Schools often fail to understand the nature of the workplace in the 90s, while business leaders are confused about the role industry can play in the improvement of public education.

The situation is complex. Perhaps it requires nothing less than a total reshaping of our present system of delivery. As I have emphasized repeatedly, unless we address the problems that beset our schools, we will continue to produce "gaggles of graduates with the forbearance needed for unskilled manual labor, but devoid of the problem-solving skills necessary for today's competitive workplace." (Perry, 1988, p. 43)

Reports issued by the Department of Labor continue to emphasize that the business community's concern for a skilled, educated workforce has never been greater. In survey after survey, employers have identified the need for workers with strong basic skills to accomplish tasks in the workplace of today and to adapt to the workplace of tomorrow.

Workers need basic literacy skills which include cognitive skills that enable an individual to continue to learn and adjust to new work situations. For example, recent studies estimate that the 'occupational half-life,' the span of time it takes for one half of workers' skills to become obsolete, has declined from 7-14 years to 3-5 years (national Research Council, 1986). In fact, for some companies, this time period is much shorter (Van Erden, 1989).

A study by William B. Johnson of the Labor Department estimates that between now and the year 2000, a majority of new jobs will require at least a year of college. Current jobs require a median of 12.8 years of education, up from 12.5 in 1975. Jobs created in the next 10 years will require 13.5 years of education. Yet only three out of four seventeen year olds in America obtained high school diplomas. In Japan, the rate is 95 percent.

While about three-quarters of American young people graduate from high school, that leaves about 25 percent who lack what experts see as the minimum requirement for the workplace of the future. Ronald

Kutscher of the U.S. Bureau of Statistics said that he would place the proportion of young people not meeting the minimum requirements somewhat higher because many students are getting high school diplomas that do not mean much in terms of real knowledge and skills. Some critics argue that even the college diploma can be a mockery:

Modern society has achieved unprecedented rates of formal literacy, but at the same time, it has produced new forms of illiteracy. People increasingly find themselves unable to use language with ease and precision, to recall the basic facts of their country's history, to make logical deductions, to understand any but the most rudimentary written texts, or even to grasp their constitutional rights. . .

Even at the top schools [universities] in the country, students' ability to use their own language, their knowledge of foreign languages, their reasoning powers, their stock of historical information, and their knowledge of major literary classics have all undergone a relentless process of deterioration. According to the [then] Dean of the University of Oregon, 'they don't read as much, they haven't been given enough practice in thinking and composition. The net result is that when you walk into a classroom, you can't expect as much as you could, say 15 years ago. That is a fact of professional life.' (Lasch, 1979, pp. 226-27)

Nathan Associates, a Washington-based economic and management firm, predicts that in the '90s, U.S. businesses will have no choice but to hire every year, one million new workers who cannot read, write or count, and 30 million current workers will need massive retraining to keep pace with changing job requirements

(Nation's Business, September, 1990, p. 27). The U.S. Department of Education estimates that 23 million Americans are "functionally illiterate," or unable to use printed information to function effectively in society.

While many corporations are still clustered in metropolitan areas, where the need for skilled, educated workers is acute, the drop-out rate in some inner-city high schools is as high as 60 percent.

"We're forced to hire the best of the worst," complains Irving Margol, an executive at the Los Angeles-based Security Pacific Corporation. Thousands of applicants interviewed each year for entry-level teller jobs at Security Pacific cannot add or subtract well enough to balance their own checkbooks. Says Margol, "I'm almost taking anyone who breathes."

Human Resources horror stories abound. Chicago's Campbell-Mithun-Esty Advertising Company finds only one applicant in 10 meets the minimum literacy standard for mail clerks jobs. About 80 percent of all applicants screened nationally by Motorola fail an entry level exam that requires 7th grade English and 5th grade math. In 1988, the New York Telephone Company received 117,000 applications when several hundred full-time positions opened up. Fewer than half of these

applicants qualified to take the basic employment exam, and of those, only 2,100 passed (Lopez, 1989, p. R12).

There are no reliable estimates of the dollar amount companies lose as a result of undereducated employees, but many educational researchers and economists say that lack of basic literacy skills has caused costly mistakes, reduced productivity, increased the need for supervision, and led to accidents.

For example, in Rockville, Illinois, a metal finishing company calculated that one of its' employee's cost the company \$12,000 in one month because he could not read instructions properly (Belsie, 1988, p. 9).

Metal Fab Corporation, a manufacturer of bellows in Ormand Beach, Florida, estimates that it could save up to \$1.2 million a year if its' employees had stronger math and reading skills. Because some employees have trouble measuring, the company's level of wasted materials is higher than it should be, said Personnel Director, Debbie Coe (New York Times, 5/1/88, p. 26).

Rather than provide training, some companies devise ways to make workers' tasks less dependent upon reading and math. In one plant where employees often botched assignments because many could not perform simple measurements, the company got workers to use

strings marked for various lengths. This approach to employees' skill deficits is referred to as "dumbing down" the job. Efficiency is increased, but the level of competency required is reduced. The risk of this practice is that it could create a gap between those who are educationally equipped to advance within their companies and those who will remain mired in entry level jobs.

Many companies respond to workers' deficiencies by providing remedial instruction, high school equivalency, and English-as-a-Second-Language classes (Spanish-speaking workers will comprise 22 percent of the growth in the labor force in the next ten years). Companies who have begun educational programs say that their efforts are paying off.

A case in point is a Rochester, New York General Motors Plant that employs about 4,500 people. In the mid-1980s, G.M. switched the plant's main product from carburetors to fuel-injection systems. When G.M. started to train the workforce for the transition, they discovered that the basic skills of employees had to be upgraded. The company, in conjunction with the United Automobile Workers and two public high schools, began a program offering high school equivalency, basic reading and writing courses, and English-as-a-Second-Language. From 1986 until 1989, more than 500 employees

participated. As workers improved their ability to perform simple measurements and to read and comprehend work instructions and manuals, the plant cut its costs considerably by reducing scrap and rework.

Of course, retraining workers is not cheap. The total cost of training is hard to estimate because much is informal, on-the-job instruction. The American Society for Training and Development recently assessed an expenditure of \$210 billion annually, not far below the \$238 billion the U.S. spends on formal elementary, secondary and college education. Some \$30 billion can be easily identified because it represents formal programs either in-house or using outside resources. Employers provide at least 17.6 million formal courses to almost 15 million trainees annually (Melloan, 1988, p. 39).

Business' heavy investment in training corresponds to the changing definition of "functional literacy." "Around World War I, a fourth-grade reading level was good enough to be considered functionally literate" says Archie Lapointe, executive director of the National Assessment of Educational Progress. "By World War II, this was up to the eighth-grade level, and now we're talking about a high school diploma. Undoubtedly, the bar will continue to go up. We'll probably be talking soon about two years of college."

Numerous studies in recent years have shown that in terms of the most basic reading skills, American schools have succeeded in making the United States one of the most literate nations in the world. The National Assessment, a federally-funded organization that sample student achievement, conducted a \$2 million literacy study in 1987. This report showed that American schools had succeeded in bringing 95 percent of young adults to a fourth grade reading level, which is the international standard. But studies have also found that schools are still failing to teach many students advanced reading and thinking skills such as the ability to infer knowledge that is not explicitly stated. The classic example is the National Assessment's "menu" question. "Just about everyone could read the menu and add up the cost of a bowl of soup and a sandwich, but only 38 percent could go one step further and calculate the amount of change they should get," said Mr. Lapointe. (Fiske, 1988, p. A27)

Some economists argue that the spread of technology is increasing the level of skill required for employment at all levels. Others say that while highly skilled jobs might be increasing at a proportionately high rate, the greatest number of jobs in the future will require little more than a high school degree. These varying opinions about literacy



requirements result, in part, from the fact that the term "literacy" itself is illusive, often used to describe widely differing things. Since the 1870s, the Bureau of the Census has been asking citizens whether they and other adults in their household could read and write. By this standard, fewer than 1 percent of Americans are classified as illiterate. Likewise, the United Nations Economic, Social and Cultural Organization uses a standard of literacy that most American teachers would recognize as a fourth-grade reading level. This means the ability to "decode" or sound out the written symbols that are already part of one's speaking vocabulary. Another more recent definition used by researchers is "functional literacy," or the ability not only to read and write, but to apply these skills in performing everyday tasks, such as getting information from a train schedule. When literacy is defined in this way, the National Assessment estimates that 13 percent of our nation's 17-year-olds are functionally illiterate. Other studies of young adults put the figures above 20 percent.

Various reasons have been suggested for the persistence of functional illiteracy--from poor schooling, to the influence of television and other forces which place a premium on oral rather than

written communication. Governor John Ashcroft, chairman of the Task Force on Adult Literacy of the National Governors' Counsel, said the most significant characteristic of literacy is that it is "a moving target, and one set by the marketplace. . . In broad terms, this means that the education system and the literacy movement have to give students and adults the skills that enable them to keep on learning, to continually meet the rising standard of literacy." (Fiske, 1988, p. 27)

In the past, workers with poor skills might have been able to hide their shortcomings throughout their entire work career. Today's workplace requires a greater level of accountability and cooperation. Eventually, someone will find out what one cannot do. Consider the following anecdote:

Forty-eight-year-old Lavester Frye works at an assembly table for 8 hours a day, building automobile horns--setting a metal plate on a metal dish with one hand, adding a tiny ring with the other. In the 22 years that Lavester has worked at the Ford Motor Company, it never really mattered that he did not finish high school. Suddenly, it matters. To improve productivity, the company is initiating an intricate statistical system of quality control. Under the new system, Lavester will be expected to keep charts. He

is nervous about his new responsibilities and troubled by the fact that he has forgotten so much of the math he learned in school many years ago.

On the factory floor, amidst the assembly lines, the huge hulking furnaces and the din of metal on metal, the ability to put a decimal point in the proper place suddenly has become a ticket to a job. (Vobejda, 1989)

As technological changes and intensifying global competition force companies to overhaul their production lines, the workplace is often transformed. Today's jobs often require greater flexibility and mental agility from workers.

"The plant of the past required individuals. . . to perform a task within very specific parameters, very routine," said David Merchant, vice president for personnel at the Mazda plant in Flat Rock, Michigan (down the road from Lavester Frye's Ford plant). "The plants of the future, which are the plants of today, require people to do a lot more than that. . . Education is important in terms of preparing people to do that." (Vobejda, 1987, p. A1)

In the Flat Rock Mazda plant, employees are expected to work in teams, to rotate through various jobs, to understand how their tasks fit into the entire process, to spot problems in production, to trouble-shoot, articulate the problem to others, suggest improvements and write detailed charts and

memos that serve as a road map in the assembly of the car.

Of course, the Mazda plant is Japanese-owned and managed in the cooperative style that has proven successful in Japan. Although it is not typical of the American approach to plant management, the team concept is becoming more prevalent in the United States, as we experiment with techniques that will help us to survive in the increasingly competitive world marketplace.

Curtis E. Plott, a former Los Angeles teacher and current CEO of the American Society for Training and Development, describes what business is up against as it adopts more complex manufacturing and management practices. "It's not higher levels of the old-time religion (reading, writing, and arithmetic) that are required, it's new interpersonal skills, teamwork skills, the ability to learn, problem-solving skills, critical thinking skills." (Melloan, 1988, p. 39)

The Massachusetts Institute of Technology Commission on Industrial Productivity recently completed and published a large-scale study on the decline of productivity in the United States, "Made in America: Regaining the Competitive Edge." This work examines practices in a number of American industries since World War II. Included in the areas studied are ways in which firms invest in human resources. As the

earlier discussion of training expenditures suggests, a number of American firms see the importance of upgrading the skills of workers. Unfortunately, the best practices of these firms are not being filtered down quickly or widely enough. Many small and mid-sized companies lack the resources necessary to provide training, and others are concerned about losing workers they have trained. The study concluded:

While there are a few positive signs that emerging patterns of labor-management bargaining may focus on training, they do not seem sufficient to overcome the legacy of long neglect. Because of widespread reluctance on the part of firms to invest more substantially in training and to reorganize the workplace in ways that promote continuous learning, we believe that the natural diffusion of best practices will not work broadly enough or rapidly enough to produce the kind of educational effort that is needed. (Van Erden, 1989, p. ii)

Finding solutions, according to the report, will require national political leadership. As we learned from the desegregation laws, however, improvement cannot be simply "legislated." Educators, business people and ordinary citizens alike must recognize that the problems plaguing our schools, industries and society in general belong to all of us. Economist Lester Thurow (MIT), in an interview for the PBS series, "Learning in America," emphasized:

Members of a nation all play on the same economic team. If America loses its' middle-level jobs to more educated workforces abroad, it will cost us all . . . quite literally. Our income will go

down, as we pay for goods and services from overseas, unless we can find a way to educate all Americans, just as we're supposed to. (Solman, WGBY magazine, no date)

### Industry and Education Collaborations

An obvious line of investigation for resolving, or at least beginning to resolve the problems that beset our schools and industries is in bringing the school and the workplace into closer alignment. In recent years, a number of industry/education efforts have been discussed, and in some cases, implemented, in an attempt to overcome the school-workplace dichotomy. In this section, I will explore certain of these efforts and analyze their efficacy. This work will ultimately provide the background for a study of a specific school/business partnership at a large urban vocational high school in Massachusetts.

A Fortune conference of corporate leaders, educators and politicians provided this comparison:

It's like Pearl Harbor. The Japanese have invaded, and the U.S. has been caught short. Not on guns and tanks and battleships--those are yesterday's weapons--but on mental might. In a high-tech age, where nations are increasingly competing on brainpower, American schools are producing an army of illiterates. Companies that cannot hire enough skilled workers now realize they must do something to save the public schools. Not to be charitable, not to promote good public relations, but to survive (Perry, 1988, p. 42).

In many ways, today's education problems are more difficult to address than the grim situation in 1941,

when American troops had to train for war with wooden rifles. Within four short years, U.S. industry created a war machine that helped conquer two heavily armed foreign powers. Today's problems cannot be solved simply by building new plants and designing new equipment. "Yet," says Proctor and Gamble's John Pepper, "I wonder if we are talking about this issue the way the U.S. sat down to talk about what to do after Pearl Harbor. Do we have the same degree of intensity, the same degree of absolute determination that there is no way we are going to fail?" (Perry, 1988, p. 42)

Many individuals do have such determination, but momentum has been slow to build, partly because the save-the-schools movement has been an uncoordinated effort. Albert Shanker, president of the American Federation of Teachers, a union now comprising a fourth of the nation's educators, said: "We have hundreds of people struggling to find the same answers. We need a system of sharing and communication."

In an effort to establish this communication system, Fortune magazine convened a two-day summit in September, 1988. More than 100 leaders from business, government and education met to discuss specific steps business could take to help the schools. It was an action-oriented conference, focused upon solutions.

Participants addressed two questions: What should business do to make the schools better? What should business not do? The best answer to the second question came from Mary Futrell, president of the National Education Association, the largest teachers' union. She said, "Don't come to us and say, 'This is the plan.' If you do, the education community will resist. But if you come and say, 'We will work with you to help determine what the plan should be,' you will have 100 percent cooperation."

In a rare display of unanimity, executives, educators and politicians called for the complete restructuring of the school system. Said former Secretary of State, William Bennett: "What we need is something approaching a revolution." Shanker added,

We must start thinking of students as workers, which means we've got to deal with the same issues business does. One of the most helpful things you (business) could do is talk to us about the kinds of problems you found and the kinds of changes you brought about in your own companies. (Perry, 1988, p. 43)

Restructuring the schools will not do much for the 20 percent of U.S. children who enter school so far behind that it is impossible to catch up. "We are talking about the child who was not properly nourished, who has never had any intellectual stimulation" says Owen Butler, retired chairman of Procter and Gamble. "To put that child in first grade unprepared is like



taking a husky 22-year-old who has never seen a football game and putting him on the field against the Cincinnati Bengals. . . In five minutes, that youngster will learn to hate football." (Perry, 1988, p. 43)

In the early 1900s, corporate America collaborated with the schools to change public education. (Justin and Kameen, 1987) Since those initial efforts, however, business has not considered public education its business. Ninety-seven percent of the \$1 billion a year that corporate America has been contributing to both public and private education goes to colleges and universities. In 1984, Phi Delta Kappan reported that only three cents of every dollar was "invested" in precollegiate education. "The billion dollars that business grants to higher education each year helps only the survivors of the public schools." (Justiz and Kameen, 1987, p. 380)

Prompted by concern over labor force quality, private sector interest in the public schools is now booming. A recent White House survey found 140,000 school-help "partnerships," more than triple the level of five years earlier. About 60 percent of these partnerships involved businesses. If numbers like that continue there will be more private initiatives to help schools than there are schools (Putka, 1989). Clearly, there is no single cure for what ails the schools, but

business is trying to approach the problems from many different angles. In the subsequent pages, I will outline some of the business community's major efforts toward making schooling more effective. Many industry/education collaborations have been in existence long enough to show results, but more have been established too recently to measure. It is not within the scope of this dissertation to evaluate the outcomes of the varied school/business partnerships. I will simply sketch what has been done to this date, assuming the outgrowths of these projects will be discussed in the media in the years to come.

### Restructuring the System

If 80 percent of the products a company turned out were defective, the chief executive would not solve the problem by asking employees to work 20 minutes longer each day. Most likely, management would ask the question: "How can we fundamentally alter the structure of this organization?" Many researchers believe that our education system is producing "lemons" because schools function much like the 19th-century factories they were originally designed to resemble. According to TheodoreSizer, chairman of the Department of Education at Brown University, this mode of operation is obsolete. "CEOs must realize that there

are serious systemic and structural problems in the schools. . . the culture must be changed, and the change must be radical." (Perry, 1988, p. 43)

Sizer, who promotes smaller classes and longer class periods, less special education, and untraditional methods of assessment has found a friend in the business community. The Exxon Education Foundation approved a \$600,000 grant to The Coalition for Essential Schools, a group of 56 high schools around the United States that Sizer organized to experiment with his new approaches to education. Southwestern Bell pledged \$1 million to the Education Commission of the States' efforts to disseminate Sizer's ideas (Putka, 1989, p. A9).

In a bid to revive Boston's ailing school system, Boston area companies struck a bargain known as "The Boston Compact." Business promised jobs and scholarships to every Boston high school graduate. In exchange, the schools promised improvement in test scores, attendance and drop-out prevention. At that time (1982), 33 percent of the student population was dropping out. Instead of improving, however, the dropout rate climbed to a grim 40 percent by 1987, and slim attendance gains failed to meet Compact goals. Dismayed with the poor results, the corporate community established new terms for the Compact in 1988. There

would be no more incentives unless the central bureaucracy of the school system was dispersed, students were permitted to attend the school of their choosing, and parents and teachers were given management powers.

In addition to serving schools directly with money and manpower, business sometimes lobbies for legislation that will bring about school improvement. In 1988, a California roundtable group headed by an executive of Whittaker Corporation, called for year-round classes, freer choice of schools, management roles for parents, less district authority and optional use of private contractors as teachers. A new business-backed bill in the California legislature would set up demonstration schools incorporating some of the roundtable group's agenda.

Pacific Telesis Group did not wait for the legislature's approval. Instead, it established a \$2 million education fund to set up models based upon the roundtable's ideas.

Chicago-based companies lobbied vigorously for a new law that would transfer budgetary, curricular and hiring power from the central school authority to hundreds of community-based and parent-teacher committees.

Lacking faith that this law would do enough, a coalition of 50 companies, including Quaker Oats, McDonald's and Sears & Roebuck spent \$2 million creating a private, tuition-free elementary school for inner-city children: The Corporate Community School. It opened in the fall of 1988 with 150 children from ages two to eight, chosen from a random 2,000 applications.

"My game plan is to change the system--the massive, obsolete, ineffectual system," says Joseph Kellman, president of Globe Glass Company and originator of the school. He has pledged to spend no more per student than the Chicago public schools, and Corporate Community School children will take the same battery of standardized tests. The differences in the school include a social worker on site, year-round scheduling, grouping children in two-year clusters, and "evaluations" instead of graded report cards. The aim is to demonstrate that, with the same resources, Corporate/Community kids will do better, and, hopefully, public schools will imitate some of Kellman's practices.

In Minneapolis, Cray Research, Inc., General Mills and others have also decided that current public education structures are ineffectual. These businesses have persuaded the school board to let them create

public schools with waivers from regulations so that new learning approaches can be implemented. One innovation, the Public Academy, supported by General Mills, opened in 1989 with nine teachers and 140 students from kindergarten to fourth grade. It offers no special education classes, nor fast-track or compensatory classes. Its' theory is that students, whether gifted or slow, will learn better with lower student-teacher ratios.

From these examples of corporate commitment to long-range educational goals, it is obvious that many American companies have, at last, made education their "business."

#### Mobilize State-by-State

How can the efforts of 16,000 school districts turn into a national restructuring of the public education system? Many business and education leaders recognize that due, in part, to our nation's great diversity, centralization of effort has to come at the state level. As stated in Chapter 1, there is probably a better chance for coordinated reform within a state than for reform of a national system. In South Carolina, for example, the governor, business community, parents and educators were involved in enacting a one-cent sales tax increase in 1984 to pay for the

state's widely acclaimed Education Improvement Act. South Carolina set up a division of public accountability to monitor progress and assure that the state would stay involved. Business people served alongside educators to draw up an education-reform package. In a cry for better-educated workers, the president of Montez Real Estate in Charleston said, "We knew our lifeline was at stake." Some companies had serious reservations about expanding in South Carolina unless voters passed the Education Improvement Act. In spite of great corporate and public support for the Bill, on the opening day of legislative session, the Education Improvement Act had virtually no support. Business leaders persisted by sponsoring television ads promoting the proposed reforms, ranging from higher teacher salaries to management training for principals.

Finally, the legislature gave in to pressure from business and passed the Act. Since the Education Improvement Act was passed, the average combined math and verbal SAT scores in South Carolina has risen 35 points to 838--the largest increase in the nation. Teachers' salaries, once among the lowest in the nation, have risen 48 percent (Perry, 1988, p. 43). Business leaders are aware that this first wave of improvement has not fixed the schools completely. To keep the reform effort alive, the same two committees

who drafted the original Education Improvement Act are already planning well into the 1990s.

### Give Parents a Choice

A recent Gallup poll claims that 71 percent of Americans think that parents should be able to choose which public schools their children will attend. Yet, because of virulent opposition from the education community, only one state, Minnesota, is daring to try the free-market approach to school selection on a state-wide basis.

"In industry your customers vote every day on the quality of your company by either buying or not buying your product. We ought to have some competition in the education system," says Joseph Alibrandi, chairman of the Whittaker Corporation and a member of the California Business Roundtable. (Perry, 1988, p. 45)

Michael Kirst, a professor of education at Stanford University notes, "Everybody is waiting to see what happens in Minnesota. If choice works there, it could be one answer to the radical need for reform." (Perry, 1988, p. 49)

### Lower the Dropout Rate

Some representatives from business see it this way: If you think education is expensive--taxpayers spend about \$4,200 per year to send a child to



school--try ignorance. It costs \$14,000 a year to keep a prisoner in jail; 62 percent of all prison inmates are high school dropouts. Welfare families receive an average of at least \$4,300 a year; dropouts head more than half of these families. The cycle of ignorance, poverty and crime seems unremitting: despite an abundance of remedies prescribed over the past several years, 25 percent of all high school students drop out before graduating--about the same percentage as 15 years ago.

In the heart of Appalachia, Kentucky's Ashland Oil Company has been waging a campaign single-handedly to lower the dropout rate and to encourage other educational reforms. Since 1982, the \$6.9 billion-a-year oil refinery has put its entire corporate regional advertising budget into education. The cornerstone of Ashland's campaign is a series of commercials directed at children and their parents. The National Advertising Council and the Council of State Governors were so moved by the poignant commercials urging children to stay in school that they are now using these ads without the Ashland logo in a nationwide public service effort aimed at reducing the dropout rate.

### Raise College Enrollment

As discussed previously, a high school diploma does not buy what it used to. According to a recent study by Harvard economist Richard Freeman, well-educated males, those with some years of college or with special skills are doing well financially. Those with less education and fewer skills are struggling.

"We're not talking about drug addicts, homeless people, or kids who are part of groups in the ghetto," says Professor Freeman. "These are hardworking people." (Francis, 1989)

Some researchers say that American students are two years behind their peers from other countries when they graduate from high school; for them, college is a chance to catch up. Governor Clinton of Arkansas remarked: "The U.S. has the highest college-going rate in the world (57%), and it is still too low because of the deficit our kids carry out of high school." It is particularly important, says Clinton, to get more poor young people into college (Perry, 1988, p. 50).

In rural Lowndes County, Alabama, a largely Black area with a high illiteracy rate, General Electric has committed \$1 million to triple the number of college-bound youngsters in the country over a

five-year period. The money will pay for SAT-preparation classes, teacher-enrichment programs, a Saturday academy in math and science conducted by Tuskegee University professors, and scholarships to Alabama colleges for high school graduates.

General Electric has a compelling reason to help educate the children in Lowndes County. The company has invested \$700 million to develop a plastics plant in the area, and as Tuskegee President Benjamin Payton observed, "Right now there isn't a single Black person in Lowndes County who has sufficient education to work as a chemical engineer in that plant." But, he adds, "I promise you that in five years there will be."  
(Perry, 1988, p. 50)

### Recruit Better Teachers

Historically, teachers have been revered as the guardians of young minds. In recent years, however, the public has begun to question the qualifications of our nation's educators. Consider these statistics:

- The SAT scores of high school students who plan to become teachers are, on the average, 23 to 40 points below those of students interested in other professions.

-- In Massachusetts, only one in five elementary school teachers has had any college math or science.

-- By 1995, if current trends continue, American schools are projected to have a shortage of 700,000 qualified teachers.

Prompted by what appeared to be a crisis in teacher supply and quality, Richard Kemper of the University of South Carolina and John Mangleri of Texas Christian University studied more than 4,000 high school students in 1983. Their goal was to discern students' level of interest in teaching as a career. Kemper and Mangleri found that only a small proportion (9 percent) said that they were "very interested" in teaching, and the percentage of women was more than twice that of men. Those respondents who did not indicate a desire to teach tended to say that better salaries for teachers, more rapid salary increases and opportunities for professional advancement would make the profession more attractive to them.

A second investigation was conducted by the researchers in 1987, with the primary aim this time to discover the level of interest in teaching among high school seniors who ranked in the top 50 percent of college-track students. As was the case in the first study, a relatively small percentage (8 percent) of the

high school seniors surveyed said that they were "very interested" in teaching as a profession. This finding suggests that the teaching field will continue to experience a shortage of recruits from among the high-achieving secondary students.

The study also suggested that unless efforts are made to change young people's perceptions of teachers' roles, kindergarten and early elementary grades in the U.s. will continue to be staffed predominantly by women, and men will continue to make up the majority of the teaching force at the junior and senior high school levels.

Just as sex differences exist in preference for teaching at certain grade levels, sex differences also dictate preferences for certain subject areas. English is most often perceived as a subject for women to teach, and mathematics for men.

Current efforts to recruit more science and math teachers appear, from the findings of this study, to have been more effective in the area of mathematics than in the area of science. The researchers cite the MESTEP program at the University of Massachusetts as a laudable effort to rectify this situation.

Finally, Kemper and Mangleri noted that higher salaries appear to be a factor in attracting to the teaching profession significant numbers of academically

talented individuals who would otherwise not be interested.

In his article, "Who Will Teach Minority Youth?" Wali Gill of the University of Nebraska's College of Education wrote:

Although there is an increasing number of minorities in the general population--an estimated 21 percent--they make up only 17 percent of the enrollment in higher education. Of those enrolled in colleges and universities, few intend to enter the teaching field, now that other higher-paying careers are open to them. The data on education majors documents this. During the 1980-81 school, 17 percent of education degrees went to Afro-Americans and Hispanics, while during 1984-85 only 10.4 percent were conferred on African-Americans, Hispanics and Asians combined. (1989, p. 83)

Convinced of the gravity of the teacher shortage, some businesses are working to bring more and better teachers into the schools. Gannett, Hearst, Primerica, and Time, are among the companies that have contributed to Rockefeller's organization, founded in 1986, to persuade talented young men and women to become teachers.

In its' concern about the shortage of science and math teachers, Polaroid has developed a program it hopes will serve as a model for companies nationwide. "Project Bridge" enables a maximum of ten Polaroid employees a year to change careers and become math and science teachers. Participants enter a one-year certification program at Harvard University or Leslie

College in Boston; expenses are borne by Polaroid. The company gives these recruits their full base pay during the certification period. Employees who have "graduated" from Project Bridge range in age from 37 to 68. Polaroid money also makes it possible for teachers on sabbatical to work at the company, where they can learn more about the industrial applications of math and science.

### Promote Job Training

When four New York banks tried to fill 250 entry-level teller jobs in the summer of '87, they found only 100 qualified applicants. The banks' problems raised a compelling question: Aside from teaching the 3Rs, how can schools help prepare students for the workplace? In an attempt to find answers, American Express and Shearson-Lehman-Hutton began an Academy of Finance, in cooperation with the New York City Public Schools. This two-year program for high school juniors and seniors combines classroom instruction with on-the-job experience. In addition to their regular school subjects, Academy students take classes in economics and finance, and attend seminars that stress good work habits. Between their junior and senior years, students work as paid interns at financial service institutes.

In New York, 50 companies help participating high schools with everything from financial support to curriculum planning. Nationwide, the American Express Foundation sponsors 30 Academy programs in 30 high schools in 14 cities, at an annual cost of \$450,000. Because the demand for Academies is beginning to outstrip American Express' resources, the company will establish a National Academy Foundation. Composed of educators and business sponsors, the Foundation will expand the academy concept to other industries such as insurance, retailing and travel.

The Academy of Finance may be doing its' job too well--in an unexpected turn, 90 percent of its graduates have gone on to college--leaving New York City banks still struggling to find enough entry-level tellers (Perry, 1988, p. 48).

### Promote Preschool Programs

No investment in education seems to offer a higher return than preschool programs for the poor. A study by the High/Scope Educational Research Foundation in Ypsilanti, Michigan showed that one year of preschool before kindergarten cuts the likelihood that a child will become a dropout by one-third. Yet, preschool programs, such as Headstart, reach fewer than 20 percent of children poor enough to qualify.



Business leaders can lobby state and federal governments to spend more money on early childhood education. Says the NEA's Mary Futrell, "When CEOs speak about the need for Head Start, America listens."

Lack of funds is typically a problem. A shortage of trained teachers is another. Irving Harris, a Chicago businessman and philanthropist who has invested \$20 million in programs for poor children warns, "We're never going to get the job done unless we have trained people to do it."

A special project under way in Arkansas could provide a partial solution to the twin deficit of teachers and money: The Home Instruction Program for Preschool Youngsters (HIPPI). Developed over 20 years ago in Israel to prepare immigrant children for the rigors of Israeli schools, the program utilizes parents as teachers. Working with storybooks, and worksheets, mothers teach their 3-and-4 year olds 15 minutes a day, five days a week, 30 weeks a year, for two years. The parents are trained by paraprofessionals who visit the homes once a week. Training and salaries for the aides constitutes the main expense for the program, which averages \$500 to \$600 per child a year in Arkansas; traditional preschool programs cost \$4,000 annually for each child.

In Arkansas, 1,400, mostly low-income, parents are participants in this program. Tests in one school district showed a 33-month gain in educational level among children who had been in the program for 16 months.

After one year of working with HIPPIY, nearly half the mothers in two Arkansas counties--all of whom were on Welfare--went back to high school, got a job or applied for enrollment in job-training courses.

### Inspire the Students

In 1981, New York industrialist Eugene Lang addressed a sixth-grade class at his Harlem alma mater and offered college scholarships to all pupils who stayed in school. Lang paid for remedial counseling and became personally involved with the kids. Of the 54 original pupils who remained in New York, 50 finished high school, and 34 are now in college.

Pacific Northwest Bell adopted a school and gave responsibility for it to the new educational relations manager, Gary Frizzell. Frizzell was having problems of his own. His 14-year-old son was apathetic about school and even talked about dropping out. In order to reach his son, Frizzell wrote him a series of letters. Eventually, these letters and the many heart-to-heart talks he shared with his son inspired Frizzell to set

up CHOICES, an outreach program encouraging kids to stay in school. Since then, volunteers from 65 participating companies have addressed more than 300,000 eighth and ninth graders in 41 states (Ehrlich, 1988).

The presence of business leaders in the school can often do more for children than the dollars that industry contributes to education. In a Western Massachusetts town, for example, each school site-based management team includes a member of the business community. The Director of Community Relations in a local Utilities Company attends her site-based management meetings at an inner-city bilingual elementary school faithfully. She is very enthusiastic about her involvement with this school, and her expertise in management has inspired many positive changes for the staff. She, as well as other employees in her company, go into the classrooms weekly to read aloud to the children. Exposure to these professional role models may have a positive influence upon some youngsters. Perhaps the most meaningful dimension of this industry/education collaboration is the deepening of communication and friendship between the partners. Appalled by the condition of the furniture in the teachers' lounge, the Community Relations Director arranged for some new chairs to be delivered to the

school. It was a small change, but one that made the teachers happy. When teachers are content, they will obviously do a better job in the classroom. A family night dinner, inspired by this Community Relations' Director, had the largest turnout of any social event ever sponsored by the school. Parents, children, teachers and their families, and representatives from business came together to show their support of a good school that stands with dignity amidst a drug-ridden violent area of town.

Perhaps the most obvious role for business is to help bridge the gulf between high school and what comes after. That is, not pushing old-style vocational education but bringing some notion of work life and promise of opportunity to kids floundering on the margins. (Ehrlich, 1988, p. 118)

As the previous examples show, the business community is marshaling resources, energy and influence in a grand effort to improve education; thousands of partnerships have emerged across the country.

Understandably, not all educators welcome corporate largess. "We've been in the business of education for 126 years," says Robert Astrup, president of the Minnesota Education Association, which represents 80 percent of the state's teachers. "We would like business to be advocates--not leaders" (Ehrlich, 1988, p. 119).

Other skeptics wonder if business will have the patience to stay the course. When times get tough or management changes, a corporate commitment can easily evaporate. For example, Primerica, formerly American Can, adopted the Martin Luther King Junior High School on Manhattan's Upper West Side in 1982. William Woodside, then chief executive, suggested that this would not be one of those partnerships where business donates cash and walks away. In addition to a \$25,000 annual grant, there would be job training, scholarships and top-management help. Sadly, Martin Luther King Junior High School did not fit the philanthropic agenda of American Can's subsequent two bosses and the partnership deteriorated.

Another issue that worries educators: Because reform efforts are so diversified, how will we measure their effectiveness on a large scale?

In an attempt to evaluate the efficacy of school/business partnerships, Public/Private Ventures, a Philadelphia consulting group, studied nine widely-publicized business-aid efforts, including the Boston Compact, in 1988. "It found no evidence of gains in learning attributable to any of the nine projects" (Putka, 1989, p. A-1). "We went out looking for the good news, and we couldn't find any," said the firm's president, Michael Ballin.

The work of Public/Private Ventures leads to another question about evaluation: When we set out to measure success, what instrument do we use?

Many educators and researchers feel authenticity resides only in test scores and percentages. Of course, when dealing with the business community, there is a desire to conscientiously quantify results. I am confident that the children who participated in the above-mentioned projects experienced gains on some level, but their growth was, perhaps, immeasurable by conventional standards. A good case in point is a business-aid project at a high school in Western Massachusetts. In 1989, two local corporations donated \$160,000 to establish a computer lab in the school, to aid students who had failed the Massachusetts Test of Basic Skills in Reading, Math, or Writing. The rationale for the lab was that students would improve their performance on the Basic Skills tests through the use of special computer programs in reading and math.

I can predict that test scores may not increase dramatically; for as all educators understand, many variables contribute to the outcome of standardized tests. If the test scores do not improve considerably, however, the project's sponsors might believe their money was wasted. In fact, this is not the case. Several beneficial outcomes were obvious. For example,

something of a "Hawthorne effect" occurred: Because the business community showed interest in a much-maligned school, the self-esteem of staff and students increased. As students became "computer literate," they proudly shared their expertise with one another, inspiring a feeling of collegiality. Also, transmitting messages to their classmates through electronic mail improved students' writing skills.

Timothy H. Hyland, Superintendent of Schools in Champaign, Illinois explores four additional business-aid issues in "Avoiding the Dark Side of School-Business Partnerships."

First:

. . . rhetoric regarding school-business partnerships too frequently includes the premise that schools must seek out these new sources of support because of inadequate funding from state or local tax bases. Few of us would argue that we receive adequate funding in order to provide the type of preparation our students will need to succeed in the 21st century. However, I think it is a critical mistake to let the state off the hook in this regard. (1988, p. 108)

Second, Hyland worries that school-business partnerships may serve to exacerbate the problem of unequal distribution of resources. Districts or schools having access to businesses with the motivation and resources to engage in partnerships will be able to provide advantages to their students that rural or impoverished areas will not be able to access. This

could widen the gulf between the "haves" and "have nots," since rural economically disadvantaged areas are already struggling to keep up.

Hyland's third area of concern, the promotion of corporate America's self interest through involvement with education, is illustrated by Norman Corwin in Trivializing America: The Triumph of Mediocrity. In the late 1960s, military establishments poured \$758 million into defense contract research done by 12 universities in campus labs by university personnel. An additional \$288 million were spent at the same addresses on classified contracts.

Nearly 20 years later, DuPont, Mallinkrodt and other pharmaceutical houses, conscious of the commercial implications of the New Biology, put millions into university research on molecular genetics and other aspects of biotechnology. Presidents and top scientists from Harvard, MIT and Stanford are now attempting to deal with the hazards of turning science into the handmaiden of industry, and thereby corrupting the very nature of basic research.

One side effect of subsidizing the New Biology has been to make millionaires of a few select professors and to promote others to high corporate offices while they are still teaching. At U.C. Davis, graduate students complained that the vice-president of a



company abruptly switched their research projects after they had spent two years on them.

Although Corwin's examples deal mainly with higher education, companies concerned with promoting their own self-interest can have equally negative effects upon elementary and secondary education. An increasing number of noneducational businesses that market products and services ranging from hamburgers to utilities sponsor a variety of promotional materials and offer incentives that purport to encourage desired educational behavior on the part of students. Some business-sponsored materials are biased, or provide a pretext for product advertising. A danger of incentive programs is that they tend to support simplistic views of teaching and learning in which material reward is tacitly accepted as the principal for enhancing student motivation ("Guidelines for Business Involvement In the Schools," 1990).

Also, after donating generous amounts to education, could business apply pressure to public school systems to emphasize certain subjects over others or to hire corporate-endorsed personnel? Would schools feel obliged to accommodate their benefactors?

Finally, Hyland notes that often an element of hypocrisy is present. When a company aggressively seeks to exempt itself from equitable property taxation

amounting to thousands of dollars, and then poses with the local school principal presenting a check for \$200, the schools have become the victim of a hoax.

At the other extreme, some companies do not ask enough from the schools. Business comes in

. . . offering to help and wanting to be liked. . . so the problems get framed by the people who run the schools. . . and business gets involved not with the central issues in education but with a classroom here, a school there, a district somewhere else. (Kolderie, 1987, p. 1)

Kolderie sees business' involvement today as "misdirected kindness." Improvement is not something you can "do," it is something that happens when you "do the fundamental things right."

Yet much of business' attempt to help the schools amounts precisely to 'doing' improvement. Donating computers. Giving science teachers summer training. Recognizing outstanding teachers. Motivating students to graduate by promising them a college education. Helping pass a law extending the school year to toughening teachers tests. It is hard to criticize such efforts. Presumably, they are well-intentioned--good at least for the students, teachers, schools, and districts lucky enough to be chosen. But resources are always limited. So the test is whether these efforts change the system. The critical questions are: Do the improvements last? Do the improvements spread? Too often the experience is that isolated, episodic improvements do not spread. And they last only as long as external financing lasts. (Kolderie, 1987, p. 2)

Kolderie feels that businesses should be tougher on education. When approached for support, executives should ask the central question: "If these issues are

so important, why are they not important enough for the system to do itself?"

Something is wrong with the fundamentals of a system that does not do the things it says are most important. If business were thinking strategically, says Kolderie, it would assure that schools received the opportunities and incentives to innovate on their own.

Kolderie compares public education to a "cartel," where members cling tightly to the "givens" of the system. Education has not had to innovate in order to survive.

If schools are to succeed rather than barely survive, however, there has to be some reasonable connection between the success of the system and the success of its' students, some reward for schools that do improve and some sanctions against those who do not try.

Kolderie agrees that by allowing students to enroll in the public district or school they and/or their parents believe would best meet their needs, schools would respond to this competition by initiating reforms.

Changing the school administration to a freestanding corporation, implementing school-site management, and allowing small groups of teachers to

form professional practices are changes that Kolderie deems essential for genuine reform. Business needs to understand and encourage these broad structural changes and

. . .not comfort schools with partnerships that simply give the standpatters inside public education new reason to claim there is no need to change after all. It should press the schools to deal with the challenges they face and then offer to help them do so. (Kolderie, 1987, p. 62)

Although changing public systems in fundamental ways is not easy, Kolderie admits, it can be done. He advises: develop your own independent understanding of the situation; find strong staff committed to change; look for points of leverage, where a one-time action will change the system for good; concentrate not on enacting particular change, but on increasing the system's capacity for change.

Business leaders and educators appear to be unanimous on one issue: to be effective, new approaches to school reform must be shaped by teachers, parents and principals--not policymakers. Myron Lieberman in Beyond Public Education, offers an interesting perspective. He warns that educators at any level are not above the same self-interest for which business executives are maligned:

Over thirty years ago, President Eisenhower's nominee for secretary of defense evoked widespread mirth on the nation's campuses by asserting that 'what was good for General Motors was good for the

country.' Still, in the intervening years, I have yet to meet a professor who did not believe that what was good for his institution--nay, his department or even himself--was not also good for the country. (This may seem unduly cynical, but it) really understates the obstacles to reform resulting from the governance structure of higher education. Almost invariably, one or more academic interest groups stand to lose from a proposed reform. Neglect of this fact underlies much of the naive optimism about educational reform. For instance, in higher education, higher standards are likely to result in fewer students, regardless of whether the higher standards apply to programs or individual courses. Fewer students mean fewer job opportunities, less job security, and smaller budgets. The dynamics of this process are similar at all levels of education. In higher education, however, the interests threatened by reform are more strategically situated to block it. The reason is that 'faculty self government' is the accepted system of governance of higher education. For most intents and purposes, higher education is governed by faculty whose welfare and interests are directly affected, potentially at least, by decisions about standards, programs, and courses. As long as this is the case--and I see no prospect of change for a long time to come--higher education will support educational reform only insofar as such serves professional interests. Inasmuch as reform is usually adverse to such interests, it can be written off as a lost cause as far as higher education is concerned (1987, pp. 116-117).

In the foregoing, I have presented some of the problems that exist in our schools and examined the literature from business and education which offers suggestions for accomplishing change. Is it possible that the sum total of these many approaches might add up to only a partial solution?

Terrance E. Deal provides a refreshing alternative to the popular reform rhetoric. He begins:

We have tried almost everything conceivable to improve public schools. . . invested millions of dollars in staff development--only to watch new skills disappear among old routines. We have changed roles, decision-making, evaluation, and other structural configurations--and watched traditional arrangements quickly reappear. . . We have tried to empower teachers and parents, hoping to give them a stronger voice in determining the course of instruction. Yet power and coalitions among the disenfranchised do not seem to make much of a difference either. When one strategy fails, quickly we try another--usually selected from one of the categories above. . . After a while, new reforms look suspiciously familiar (1990, p. 6).

Deal suggests that if we view change as an expressive event rather than an outcome-drive activity, we may experience a greater sense of success. Reform efforts do inspire hope and confidence, but a very large investment has not, according to Deal, yielded a sizable return. "For the most part, wave after wave of reform has left deeper characteristics of schools and classrooms unchanged." (Cuban, 1984) Even worse, there is evidence to suggest that some attempts to improve schools have had to opposite effect (Chubb, 1988).

Chubb concludes that some recent reforms have suppressed rather than increased high school achievement test scores. In Tennessee, the Career Ladder has created divisions within schools and fallen short of its' promise to raise teacher morale and commitment (Kresavage, 1988, Nixon, 1989).

Even more distressing is the impact of constant change on the culture of schools and spirit of educators. "The telltale phrase, 'I'm just a teacher' reflects an erosion of meaning that has left many schools empty and joyless places to work" (Deal, 1990, p. 6).

Deal suggests that now may be the time to step outside the cycle of reform and see whether a look through other conceptual lenses will yield some fresh approaches. Reframing the concept of reform may provide an opportunity to make needed improvements without creating more resentment or causing additional harm. We must seek creative solutions that will, first of all, make schools better places for teachers, students and administrators.

At the very least, Deal maintains, we must treat education organizations as complex social organisms held together by symbolic webbing, rather than as formal systems driven by goals, official roles, commands and rules. The current restructuring movement, for example, very often ignores the political, cultural and human resources realities of schools (Bolman and Deal, 1984). If anything, these important dimensions are sometimes seen as barriers for the restructuring movement to overcome. Yet, tinkering with formal roles and relationships will not

necessarily make a significant difference in the lives of students or teachers.

For the most part, efforts to improve public education have concentrated on correcting visible flaws such as lack of goal definition, disorganized teacher evaluation and reward systems or instructional issues. Such "first-order" changes overlook more durable and stable cultural values and mind-sets behind everyday behavior (Deal, 1990, p. 6).

These deeper patterns provide meaning and continuity, but they are also the source of many problems and frustrations. Modifying these patterns involves "second-order" changes, a level that most reform efforts have missed (Cuban, 1984).

Deep structures and practices cannot be reformed, Deal maintains; they must be transformed. To transform an organization is to alter its fundamental identity and character. Instances of such revolutionary changes in organizations are rare. When they are successful, however, they are extraordinary.

A recent experience helped me to understand Deal's concept of transformation. A few weeks ago, I set out to find a nursing home for my sick aunt. This mission inspired fear and dread in me, for I had visions of foul-smelling institutions where elderly people are treated like infants, or even worse, animals. Some of



the facilities I visited fulfilled my nightmares. One, however, was a joyous surprise. Skylights, plants, songbirds, gentle pastels of peach and turquoise were just a few of the physical features that made this facility so pleasant. The "unseen" qualities, however, had the strongest impact. Without exception, the employees demonstrated an attitude of respect and kindness toward the elderly residents and one another. This behavior was not a mere facade for visitors. I have since met several employees of this nursing home who all agree that it is a wonderful place to work, and most said that they wanted to live there when they are old. Somehow, the managers of this special place have accomplished "second order" changes. "Social constructions shape the way individuals approach settings." (Jones and Maloy, 1988, p. 124).

Transforming schools entails a fundamental renegotiation of cherished myths and sacred rituals by multiple constituencies: parents, local politicians or residents, as well as administrators, teachers, staff and students. The entire community must reweave or reshape the symbolic tapestry that gives meaning to the educational process, and this takes time (Deal, 1990, p. 9).

Few educational organizations have moved through a successful metamorphosis. Clark (1972) offers vivid examples of transformed colleges, but elementary and secondary schools have been difficult to transform under the best of circumstances.

Broffebrenner (1979) argued that social roles 'evoke perceptions, activities, and patterns of interpersonal relation consistent with role expectations' (p. 92)

In schools, for instance, people rarely question the meaning of 'student' or 'teacher;' and the isolation of education from the community has perpetuated these roles. . . The influence of setting on behavior suggests why empowering teachers through group projects is a necessary but often insufficient step toward reconceptualizing learning for future societies. Ordinary strategies and structures of classrooms have shaped and constrained everyone's thinking about learning. Whatever their preparation, motivation and experience, teachers share a remarkably coherent set of ideas about the purposes of schooling and their behaviors. No wonder beginning teachers frequently report they love teaching but hate school--its organizational mission and bureaucratic structure seems beyond their control (Jones and Maloy, p. 124).

Deal argues that our schools will become fundamentally different only when we stop correcting surface deficiencies and recognize that transformation involves a collective renegotiation of historically-anchored myths, metaphors and meanings. Such radical changes pass through three distinct stages.

1. A period of decline in which first order changes are attempted without significant results.
2. An awakening in which both crises and new possibilities of metaphor become part of the collective awareness.
3. The trapeze-like process of letting go and grabbing on. In this reordering stage, people let go of old values, beliefs, and practices and begin to experiment with new forms. In doing so, individuals must successfully negotiate the space between clinging to

tradition and embracing a new worldview. In order to transform schools successfully, educators need to navigate the difficult space between letting go of old patterns and grabbing on to new ones.

Policymakers and other change agents have had ample time to improve educational organizations through empowering, training and restructuring. Perhaps we must now focus attention on the assumptions and practices of the reformers, rather than the practitioners.

Deal concludes, "in large measure, the core problems of schools are more spiritual than technical." (1989, p. 12)

Cox sums up what Deal envisions as the needed remedy:

We have pressed modern people so hard toward useful work and rational calculation they have all but forgotten the joy of ecstatic celebration, antic play, and free imagination. Their shrunken psyches are as much the victim of industrialization as were the bent bodies of those luckless children who were once confined to English factories from dawn to dusk. . . people insofar as they are touched by the same debilitation, must learn again to dream and dance (1969, p. 12).

In the same way, educators must rekindle the basic stories, rituals and other symbols that, historically, have inspired teachers to impart their joy of learning to young people. At the same time, the education community must let go of the dialogues that hinder the preparation of youth for a rapidly changing world.

Organizational structures must be reconstructed through group processes and team-building activities that shape new purposes and substructures of school improvement. Effective partnerships support those processes and new perspectives. [my underline] (Jones and Maloy, 1988, p. 124).

Second-order changes are more likely to occur when faculty and students are given the opportunity to interact with the outside world and one another in new ways.

The next goal in my studies is to look closely at a school/business partnership effort at a large urban vocational high school in Massachusetts. This vocational/technical school seemed the ideal place to set up a school/business collaboration. As stated in Chapter 1, the Culinary Arts shop, in particular, is efficient and productive, with its own small restaurant on site. Although students receive excellent training, it is impossible for a vocational "shop" to function as a true microcosm of the real world. To bridge this gap, shops usually set up co-operative programs, where students enter paid internships in the private sector. The Culinary Arts Department, however, had had limited success in placing students in co-op positions, and other vocational programs in the vicinity had also failed at attempts to connect with the Food Services industry.

One reason that food production facilities may be reluctant to take on high school student interns is that, very often, these organizations are under the "profit gun." In a busy restaurant, for example, a chief cook expects the assistant cook to work at a high rate of speed and efficiency. There is no time to "train" a hiree.

I decided to canvas a variety of public and private food production organizations to determine their level of interest in industry/education partnerships. Perhaps these businesses would be willing to work with us if we approached them with an offer of unpaid apprenticeships for our students in their companies.

By organizing meetings between school faculty and representatives from the food services industry, I hoped to secure opportunities for Culinary Arts students to obtain on-the-job experience. In such an arrangement, students gain confidence and expertise, while employers expand their pool of potential employees.

I could see that contact with the business world led to immediate shifts in self-perceptions for many school employees involved in the plan. The insiders of schools--teachers and administrators--often recognize only the problems which imply their own solutions.

"Differing organizational perspectives may bring new ways of understanding the complexities of school cultures and conceptualizing change." (Jones and Maloy, 1988, p. 43)

## C H A P T E R    I I I

### METHODOLOGY

#### Introduction

Because of my concern for adolescents, and an interest in school-to-work transitions, I chose to initiate a school/business partnership between the Culinary Arts Department of a large urban, vocational high school in Massachusetts and local food production establishments.

The dissertation will chronicle the evolution of this partnership effort, from its' first brainstorming session in 1989 to its' present status as an on-going venture. My role in this study will be principally one of observer and data-gatherer. Although I will draw upon my knowledge of ethnographic research as a context for my work, I do not claim that this is a straightforward, structured ethnography. The data will be presented in the form of a case study. In brief, I will initiate a project, report upon and analyze the outcome of the effort, and make recommendations to those who seek to establish similar partnerships.

## Data Gathering

### Fieldnotes

Using James P. Spradley's Participant Observation as a guide, I will collect "fieldnotes" in a manner similar to one suggested by Spradley in his book. First, I will maintain a written "condensed account" of every activity associated with the partnership (meetings with key business personnel, tours of work-sites, interactions with students). These notes will be taken during each period of "field work," or immediately thereafter. As soon as possible after making a condensed account, I will fill in details and attempt to recall things that were not recorded on the spot. Spradley refers to this recollecting as the creation of an "expanded account." In addition to keeping notes that arise directly from observing, interacting, and interviewing, I will also create a journal to record the fears, mistakes, confusions, ideas, and breakthroughs that arise during my work.

Finally, I will develop another category of notes which will provide a link between the record-keeping and the concluding written report. These notations represent a kind of "thinking on paper," and incorporate generalizations, analyses of events, insights and interpretations. Although I adapt my



methods of record-keeping from those detailed by Spradley, I will not delineate amongst categories of field notes as precisely as he recommends. More often than not, my condensed accounts, journal, and analysis will be interwoven. Samples of my notes will be included in the appendix of this work.

### Other Written Materials

The nature of this partnership project will require that I produce written materials in addition to field notes. For example, I will have to compose invitations to the business community to attend informational meetings about the partnership; write letters of thanks for attending the meetings; create partnership proposals and contracts; put together orientation packets for students; write memos; and devise work schedules. Samples of these materials will also appear in the appendix.

### Assessments and Interviews

Since this project is a first-time effort, we are not establishing long-term time frames nor looking, as yet, for specific, measurable outcomes. However, as business becomes increasingly involved with education, results-driven projects with focused systems of accountability will likely become the standard. In line with this future trend for school/business

partnerships, I will consult the work, "From Shotgun to Rifle: A Manual for Focusing and Measuring School Business Partnership Projects," for recommendations to improve the planning and evaluating processes of school/business partnerships in general and assessing the efficacy of our own project in particular.

I will capitalize on interviewing opportunities, both formal and informal, that present themselves during my role as data gatherer for this project. As Spradley recommends, in order to uncover themes and cultural meaning, I will make use of similar questions with various informants. I will also ask contrast questions, encouraging participants to uncover the differences that exist, to use Spradley's term, in selected "cultural domains." For example, by asking students what was different about their experience in a corporation compared to their experience in the classroom, I can begin to bring to light many of the problem-solving skills and affective behaviors that might be stimulated in the workplace.

I will interview students who participate in the partnership program, their teacher, their boss, the coordinator of cooperative education and additional representatives of the business world. All interviews will be audio recorded and transcribed by me. Some will be presented in the dissertation in near entirety,

others will be summarized, and others will be used as data within the body of the paper. By including the perspectives of individuals who represent the school and the local and national economy, I am attempting to approach the relationship of industry to education from several different angles.

### Recommendations

One of the major goals of this study is to create a pilot project for work-based learning that can be emulated by other shops in the vocational school under examination, or by the education community in general. Employers agree that the best job prospect is the person who possesses both theoretical knowledge and practical experience. By establishing opportunities for young people to participate in "real life" work settings, we are contributing to the development of a new kind of "stripped collar" worker; that is, "one who possesses not only advanced skills, but also a variety of skills and who is able to reason and operate in both decision-making and production-oriented environments" (Hull and Marsalis, 1991).

Of course, when institutions as diverse as schools and corporations attempt to work together, there are many issues and problems that arise. The informal ethnographic nature of this study should help me to

underscore points of harmony as well as discord and make recommendations for avoiding future snares. I hope to gain insight into the nature of schools and businesses as organizations, and, perhaps, suggest a kind of prescriptive roadmap that one might use in dealing with the other.

## C H A P T E R    I V

### A SCHOOL/BUSINESS PARTNERSHIP 1: A PERSONAL ODYSSEY

#### Introduction

At a very early age, I learned that "skills pay bills." We had five children in our family. Since my dad, a shoe repairman and factory worker, was frequently unemployed, I knew if I were ever to go to college, I would have to find some way of financing my own education. Although I longed to go to the more prestigious college-preparatory high school in our town, I chose the "commercial" high school, where I could acquire secretarial as well as academic skills. With part-time jobs in offices, I transcribed and typed my way through an expensive private college.

Some academicians spurn the business world. I, on the other hand, embrace it as a supportive partner, that indirectly, helped a bright, but poor, granddaughter of unschooled immigrants fulfill the American dream.

With this spirit, I entered the "teacher in Business" program one summer. A large utilities company hired me to research possibilities for their corporation to get involved with the local schools. That summer I became somewhat of an expert on school-business partnerships and recognized the need

for business/education collaboratives in my own school system.

When I returned to teaching in the fall, I was inspired to set up a partnership between the Culinary Arts department at our area vocational high school and local food services providers. I chose the Culinary Arts shop because of my own love of cooking, the excellence of this department, and the camaraderie I felt with the Culinary Arts staff. The faculty and administration liked my ideas and encouraged me to consult with one of my professors who had conducted extensive research on school/business partnerships. With this professor's guidance, our effort was launched.

I canvassed local hotels, colleges, restaurants and other food services providers to determine the level of interest in our school/business partnership proposal. Enthusiasm was high, so I organized a partnership breakfast meeting at the Culinary Arts Department restaurant, featuring my professor as a key-note speaker. More than 75 percent of business people who promised to attend did not show up. I thought the snowstorm had kept them away, but in sunny June, when we held our second meeting, only one invited guest arrived. In this first academic year of the project, we got to know more about the food production

industry, established ties with key organizations and formulated a proposal for student internships in corporations.

Because I was seriously ill for the fall semester of the second year, the project was in limbo until I returned to work. Business' enthusiasm for our program rekindled, but when the final count was in, just one corporation was truly committed to working with us. By the spring semester of the second year of the program, students were finally "on the job."

In Chapter Four, I will give a detailed, journalistic report of establishing a cooperative between a large, urban vocational/technical high school and a major food services provider in New England. During our three years with the project, we have had both encouragements and embarrassments. I believe our story will be of use to teachers and business people who, like me, recognize the combined strengths of industry and education can do more for America's students than either institution could ever hope to do on its' own.

As described in the methodology section, I kept detailed journal notes throughout the project. After studying my journal in its entirety, I find events arrange themselves organically into the following issues.

### Recruitment of Corporations

One of my favorite childhood fables is the story of "Henny Penny," the industrious hen who wanted to bake bread and solicited the help of her barnyard friends. Although each loved the idea of a steaming loaf of fresh-baked bread, all became suddenly very busy when the time came to pick the wheat, mill the flour, and prepare the recipe. Eating the finished product was easier and much more delightful.

The moral of this simple tale is the message I too, wish impart: Be prepared that many will like your idea, but few will be around to see it through.

Business is frequently criticized for its preoccupation with public relations to the exclusion of meaningful interactions with other institutions. This self-interest may have been part of the reason so few representatives from the Food Services industry formed an alliance with our school. Or, some companies, after taking a closer look at what they would be expected to do, may have decided it was not possible for them to participate. Others may have had good intentions but were too busy to follow through.

I can be philosophical in retrospect, but I must admit, at the time, I was discouraged by how much work it took to accomplish what seemed like so very little. For example, I spent several weeks, on my own time,



compiling lists of the food services providers in the area and contacting each by letter and telephone. I sent out a preliminary mailing announcing that I would soon be planning a breakfast meeting to bring businesses and the school together. Finally, I designed a flyer inviting food production managers and personnel directors for breakfast in the school-run restaurant.

This meeting was crucial to the success of our program, for here we could make contacts and create a favorable first impression.

I worked out every detail of the morning in advance--consulting my professor about the agenda; checking on the menu; assembling information packets for the guests; rehearsing my own speech and prompting others to prepare theirs; even ordering flowers for the table. For a person who organizes social functions as part of her job, this may seem a small undertaking. Sandwiching these tasks between the responsibilities of teaching reading to at-risk high school students, however, proved to be a challenge for me.

One can imagine my disappointment when after weeks of planning, only four business people turned out on that uncharacteristically blizzard-like morning in March. Although only four, however, they represented two major hospitals and one of the largest hotels in

the area. From the composition of this group--two food production managers, one assistant food production manager, and one hotel personnel director--I learned the importance of targeting the right people in the hierarchy of the organization. We had the best results with the food production managers, since as middle management, they work most directly with the employers who supervise student interns. Although the personnel director was truly supportive and even helped place a student in a paid cooperative job in the hotel kitchen, her position keeps her far from the day-to-day happenings in the food services department of her hotel. When our student had a serious misunderstanding with the chief cook, for example, the problem escalated to enormous proportions before we could intervene, since we did not have a contact in Food Services. This student position had been "mandated" from upper management, and I suspect the employees responsible for training the young man resented the extra work which had been thrust upon them. In most cases, the Food Services Director or Food Production Manager (some institutions have one or both), would not be the students' "boss" either. To avoid resentment, whoever will be most directly responsible for the students' performance must be included in the process from the beginning.

From the first breakfast meeting with business representatives, I realized because our organizations are so different, teachers, principals, professors, food service managers, and personnel directors do not see things through the same "lens." Comments from the meeting illustrate this difference in perspective.

School Principal: "We need to know what your [business] needs are. We want to prepare our students not only with the technical skills necessary for work, but with the mental framework to become good employees."

Assistant Principal: "It is often the grassroots efforts of teachers that can make changes in our school, since the teachers work so closely with the students. . . 'Top-down' changes are not necessarily the only effective ones. . . What we need is active, participatory (business) advisory committees that will give us input and feedback on an on-going basis. . . Your needs are our goals."

Hotel Personnel Director: "I look for workers who are dependable, cooperative, loyal, and trustworthy. Every employer takes a high risk when hiring a new employee." To lessen this risk, the personnel director said she sets up employment "networks," or places and people that can put her in touch with potential workers. She admitted that she rarely hires someone

"off the streets." A problem that she had had with cooperative programs in the past was, once students were trained in many phases of food services in the hotel, they would often leave for jobs which offered more money. She suggested we emphasize to students "the need to get the experience they need as they progress in their field." "Sometimes it will take a bit longer to stick with one employer and go through all the necessary training, but in the long run, it will be more beneficial to one's entire employment portfolio. . . Stability in job history is very important to employers."

Food Production Manager: He said we should emphasize to our students the importance of "first impression." Nothing disillusioned him more than having someone show up totally unprepared for an interview. His "pet peeves" are seeing a job candidate dress sloppily, bring friends along for the interview, or fail to have a pen to fill out an application. Strong basic skills and maturity are also expected.

Food Services Director: This woman had previous experience with students from the vocational/technical school, when girls from the health shop interned briefly in the dietary department of her hospital. The students performed well during the in-service experience, but once they were hired as full-time

employees, they proved unreliable. We all agreed that inspiring a sense of commitment and responsibility in our young is no easy task, but one we must all address. Perhaps more extensive on-the-job training programs would provide students with "the freedom to fail" in a supportive, yet true-to-life environment. Out of the context of meaningful experiences, students might gradually learn to take charge of themselves and construct relevant, personal value systems.

Professor: My professor closed our first meeting by drawing attention to the group of students busily preparing to open the snackbar where teachers can have breakfast. In praise of this "hands-on" approach to education, he said, "How many other classrooms are so alive at 8 o'clock in the morning? The typical scenario is a teacher standing up in front of sleepy students with all concerned struggling to keep awake." He continued, "an astounding 210 billion dollars a year is spent on training and reeducation of employees. If we could provide students with the very specific skills that they will need in the future, there may be less of a need for employers to pour so much money into training." The commitment from the administration and teachers at the vocational high school had helped to establish this first "connection" with the business community. My professor emphasized that people on the

"inside" and those on the "outside" of the school must continue this dialogue. Outsiders must begin to see themselves as educators. It is not a matter of "let's look to business for extra cash. Instead, we must see what we can change in small ways that will improve our schools."

As the previous comments suggest, one's role in an organization directly influences one's perspective.

As a teacher, I view myself as a nurturer, helper, and guide concerned with the health, well-being and success of individual students. I aspire to encourage young minds and help prepare children for adult life. Good teaching at every grade level involves a certain amount of parenting.

While principals are frequently interested in nurturing young people, they are often forced to assume the role of disciplinarian. School administrators serve, primarily, as links between the body of students (not necessarily individual students) and the outside world; public relations is an important component of any principal's job.

The role of an employer does not require that he or she see students as children. Employers view potential employees as adult individuals who must fit into the organizational structure and contribute to the common goals of the corporation.

Finally, the professor can step back, take a look at the larger picture and reflect upon the roles of individuals within schools, corporations, and society in general.

Of course, this is a simplistic analysis of multi-faceted roles, but it attempts to uncover some basic differences in positions. For a true dialogue between business and education to unfold, we must first recognize that we do not speak the same language. I look at my students and think, "adolescents." The principal might think, "emmisaries." The employer, "workers." Each perspective brings different expectations.

Teachers must begin to understand that business is profit-oriented, and therefore, outcome-driven. Long-term planning, philanthropy, and sensitivity to an individual's personal problems may not be high on the list of corporate priorities. When dealing with representatives from business, educators must be "business-like." For example, some rules I made for myself were: When visiting a corporation, dress appropriately. Outline your proposal in precise language, with timetables and goals clearly stated. If you invite business representatives to meet with you in a group, prepare a formal agenda and stick to it, keep the meeting short, and serve coffee.

I do not mean to imply that teachers behave in an unprofessional manner. Experience in both academic and business settings has taught me the professions are essentially different, and the culture of each has its own rules for behavior. For example, the majority of school or university faculty meetings I have attended are not timed, and, most often, are not led by any one particular person. Brainstorming, in-depth discussions and verbosity characteristic many academic meetings.

When I have met with business people for a pre-determined length of time, by the end of the session, regardless of how far we may have strayed from the main item of discussion, we have ended where we had said we wanted to be. Who is to say which approach accomplishes more in the long run? These are matters of style, and to argue over which is superior, invokes the wearisome quantitative/qualitative debate.

Teachers may ask why education should make concessions to business. Until the world recognizes that we are all responsible for the well-being of children, the fact remains, education needs business more than business needs education. Teachers must deliver to corporations the urgent message, "Saving our children and schools means saving the future of America." If we approach business people on their own



terms and attempt to speak their language, they are more apt to listen to us.

We can hope, too, as we work more closely with business partners, some "qualitative" characteristics of education might influence the perspective of corporate management. Although we do our best to provide companies with responsible interns, for example, teachers cannot guarantee "fully-formed" adults. Adolescents are becoming "grown," and educators can sensitize business people to the pain of this process. As mentors and role-models, whether teachers or CEOs, we must together invest in and care for our nation's youth.

#### Selling the Idea to the School

Before a teacher can consider a project linking the school with the outside world, he or she has to solicit the approval of the principal and perhaps the superintendent. Administrators must be convinced that by engaging in "extracurricular" activities, a teacher will not neglect the responsibilities of the classroom. I was fortunate, both the superintendent and principal involved were great advocates of school/business partnerships; it was not difficult to "sell" my idea to them. Some principals, however, resent "outsiders" invading their school, or teachers not knowing their

"place." If administration is not open to school/business partnerships, teachers can do little to initiate such efforts on their own. As in all hierarchical situations, the "pecking order" of schools is clearly defined.

I first consulted the principal about my vision of a partnership between the school's Culinary Arts shop and area food services industries. Obviously, this project would help me to complete my doctoral degree, but it would also open a necessary line of communication between the school's foods' department and the "real" world of restaurantering. If this project were fruitful, it could serve as a model for other vocational shops. The principal suggested that I work closely with the school's coordinator of cooperative education. This person helped me understand an essential point: While pecking orders in schools are precisely demarcated, so, too, are territorial boundaries. With the co-op coordinator's help, I was able to cross those boundaries unscathed.

Historically, academic and shop teachers have not enjoyed the warmest of relationships, and I worried the Culinary Arts teachers would feel that as a reading teacher, I was invading their domain. Throughout the process, the co-op coordinator and I were careful to leave major decision-making to the Culinary Arts staff.

We simply provided the script; they filled in the characters. Shop teachers often face more demanding schedules than academic teachers and have no opportunity to leave the campus during the school day. How could the Culinary Arts teachers find time to visit businesses and plan programs, when they are responsible for overseeing a student-staffed restaurant of their own? I sensed the teachers were grateful that we sought opportunities for their students.

Connecting with the co-op coordinator, was probably the best thing I did. He had been in the business of finding jobs for vocational students for the past twenty-five years and was a great source of information and guidance. Since his work schedule was more flexible than mine, he often did the "legwork" of keeping outside appointments. He spoke the language of business and accompanied me on intimidating visits to corporations. He was the "diplomat," the steady, objective buffering agent that linked administration, the Culinary Arts Department, business and myself. With time, the co-op coordinator and I became close allies, and I am certain our harmonious, respectful relationship ultimately contributed to the credibility and success of the effort.

### Roles of Participants

Picture school as a hulky, weary, but benign elephant lumbering along with staff and students hanging on for the uncomfortable ride. Many complain, but who would think to jump off, push or pull the creature, or even more radically, consider an alternate conveyance?

Schools are institutions that have taken on a life of their own. We feel they have been, will always be, and always remain the same.

Although principals are supposed to be the managers of schools, power to hire and fire teachers, set policy agenda, and establish performance objectives belongs, in most cases, to the central office. Behind the closed doors of classrooms, teachers reign supreme; step outside that door and sovereignty vanishes. Site-based management is one attempt to address issues of authority and autonomy for school people, but change is slow to come. Some view school-based management as mere appeasement; the superintendent, in fact, has the final say. Most still hang on to the old elephant for dear life.

Within this climate of powerlessness, it is no wonder, teachers might view one another with hostility and suspicion. As I progress in my studies, for example,

colleagues continue to challenge the integrity of the doctoral program with which I am affiliated. My idea to establish a program outside the territorial boundaries of my own subject area was considered invasive by some staff members. While working on the school/business partnership project, I was constantly looking over my shoulder, wondering who was approving or disapproving, worrying whom I may have unwittingly offended.

I recommend, when tackling a project which stretches and blurs the boundaries of one's role in a school, as much as possible, decide in advance who has authority over whom and who takes responsibility for what.

### Selection of Students

This a broad topic which can be divided into the following themes.

#### Who participates and why?

When we finally developed a program plan for student internships in the food services department of a major investment corporation, we were faced with the dilemma of selecting students. Traditionally, young people entering paid co-operative positions must maintain a "C" average in their academic classes, have good attendance, and demonstrate a positive attitude.

The co-op coordinator suggested we follow similar guidelines when selecting students for our program. After all, students are emissaries of the school; we could not choose youngsters who would embarrass us and risk alienating the business partner.

As much as I fully accept the rationale for choosing students who meet certain criteria, I wrestle with the fear we will never reach those adolescents who desperately need a chance. These disenfranchised young people often have troubled personal lives, sporadic attendance, abysmal grades and eventually drop out of school. Who will take a risk on these, as one business person called them, "lost causes?" Teachers understand the dynamics of poverty and underachievement and should be in the position to make judgements based upon educational, not psychological, or personal issues. Perhaps we should be willing to gamble on some of the "lost causes" and hazard the corporation dropping us.

In our partnership, we were not that brave. When selecting interns, our Culinary Arts teachers were careful to include students of both gender, all races, and varying degrees of ability. The common denominator of these students was, no matter how their personal lives fared, they were all fairly well-adjusted, cooperative, and reasonably reliable. They had the seeds of what it takes to be good workers; they needed

only nurturance. Perhaps one day we will find corporations who will say, "Give me your worst." Until then, we will continue to choose those who we feel deserve to be rewarded and puzzle over what to do with the "throw aways."

The closest we came to meeting the needs of a marginal student was when the Culinary Arts teacher chose a young woman who was "at-risk" of failure, but showed potential. While I worked with this student preparing the paperwork for the internship, she seemed enthusiastic about going over to the corporation. On the day she was supposed to start her internship, however, we were told she never showed up. I finally caught up with her a few days later and asked her what had happened. She told me she had changed her mind and wanted to stay in shop with her friends. Apparently, she had not intended to inform anyone of her decision.

I do not view this young woman's failure to tell of her change in plans as necessarily related to her "at-risk" status. Irresponsible, immature behavior, as teachers well know, sometimes comes with the territory of being an adolescent.

As I mentioned earlier, the hotel personnel director offered us a paid-co-operative position in the hotel kitchen, and a very skilled and seemingly mature senior was chosen for this job. In two weeks, he quit.

Why? He said he wanted to have more time to devote to school wrestling, but more significantly, he had had a fight with one of the other employees. When he was first hired for the cooperative position, the hotel was impressed by the number of different recipes he could make. According to this young man, he received no training from his supervisors in the kitchen, but things were going well. One day, however, he was asked to make "beef burgundy." When he said he did not know how to prepare that dish, a man said, "What are you, dumb?" The student pushed the man against the wall and said, "No one calls me dumb." He quit the job immediately following this confrontation. The student admits he should not have lost his temper, since name-calling and swearing often go on in kitchens. He said some other person may have just overlooked the incident, but he cannot handle it when he is called a name. I asked how he thinks he might react if this were his permanent job, and he said, in that case, he would not have acted the way he did.

This incident raises several issues: What are employer expectations, and how do they differ from student expectations? How do we provide orientation for both students and their bosses? Who is responsible for mediating problems that arise at work-sites? How do we make internships and co-operative positions feel



"real" to students? These and other general issues will be explored in more detail in Chapter 6.

A final anecdote conveys the differing perspectives of employer, student and teacher. One young food services intern in our partner corporation was doing quite well, in spite of her shyness. Suddenly, however, she failed to show up for work for three days. Her supervisor called the school, and the co-op coordinator decided to take a ride out to this student's house to investigate. He discovered the young woman was ill but did not have a telephone to call her supervisor. Teachers are familiar with such roadblocks in students' lives, but the employer was unable to fathom that anyone today would be without a telephone. The young woman's failure to call in sick negatively influenced the performance evaluation she received from her superiors at the end of the program.

#### Logistics

As illustrated by the description of our first breakfast meeting with business, all the best planning still does not guarantee that things will run smoothly. Unforeseeable circumstances arise, human error sets in, and the most solid of plans can begin to unravel. The process is never precise and neat.

Our first visit to the food production facility of a major hospital is a good example of a logistical problem. We welcomed the invitation to tour the hospital's food services department as a major milestone in the Culinary Arts partnership effort. Fulfilling his promise to keep in touch with us, the Food Production Manager who had been at our first breakfast meeting, offered us an informational seminar, a tour of the hospital kitchens, and luncheon for at least 16 students.

Students signed up for the tour in advance, but on the day of the field trip, we encountered a minor disaster. Many of the students who had planned to attend the tour were now unable to leave their classes because some teachers were giving final exams. We could not select alternate participants at the last moment, since students need permission slips signed by parents in order to leave school grounds for a field trip.

We were forced to go on the tour with only two students and three faculty members. When we arrived at the hospital, the table in the meeting room was set with material packets for sixteen students. The food production manager had made the effort to provide speakers, video presentations, a tour and a luncheon. I was so embarrassed that, after all his work, we

arrived with so few students. To make matters worse, one young woman kept making references to the time she had been in that same hospital. When the food production manager inquired about her operation, she said she had not had an operation but had given birth to her son there. The only other student on the trip had once worked in this hospital kitchen and been fired. Fortunately, the time of her employment pre-dated the arrival of this food production manager.

So often during the process of setting up the partnership, I encountered snags that were not really anyone's fault. Problems usually resulted from teachers just not having enough time to think things through, or from conflicts in scheduling. In the case of the hospital tour, I had left it up to the Culinary Arts teachers to choose the students who would participate in the field trip. Apparently, there was a breakdown in communication between the shop and academic teachers regarding the scheduling of final exams. Since this vocational school has two divisions of students, one group in shop while the other is in class, and the opposite set-up the following week, it is often difficult for people to keep things straight.

We experienced other setbacks due to corporate and legal redtape or breakdowns in communication. After two years, we had finally established ties with one

Food Services Director serious about working with us. This gentleman is actually employed by a corporation within a corporation, since the large parent company subcontracts its' food services from an outside agency. In working with us, then, the Food Services Director had to fulfill the regulations of the large investment firm which housed the Food Services facilities and the company for whom he actually worked.

Before we could begin our program, the Food Services director had to check with lawyers for both companies regarding child labor laws and workmen's compensation. Since students were not to be paid, would they still be covered by workmen's comp, in the event of an accident? After much investigation, lawyers for the two firms concurred that as long as students obtained working papers from the school department, they would be covered by workmen's compensation.

The Food Services Company does not usually hire anyone under 18 years of age, but since our interns were unpaid, the company would make an exception. Finally, the day arrived when students entered the colossal food production facility of this major investment corporation. Two weeks passed, and the director of Food Services reported our interns were doing well. One morning, however, the students'

immediate supervisor was chatting with one of our interns and discovered that this girl was not yet 16. The supervisor shared this information with the Food Services director, who called us immediately. He said he had told us in our very first meeting with him that his company would expect student interns to be at least 16. I searched my notes from that meeting and found nothing about age limitations, except the reference to the 18-year-old age requirement for paid employment.

Aside from whose oversight this actually was, the fact remained that three of the four students we had placed in internships were under 16 years of age. The pool of students from which to pick was growing smaller, for some were doing poorly academically, others were just too young.

The Culinary Arts teacher finally came up with three more names of students, including the young woman "at-risk" whom I described earlier. We were left with three eligible students for this first term of our internship program. These three worked out fabulously, and I will share their experiences in the next chapter.

The students who had had to leave the program because they were too young were disappointed, and we were sorry this error had occurred. When the students are 16, however, they will be the first chosen to return to the worksite.

### New Technologies

School/business partnerships for vocational schools give students and faculty the opportunity to experience state-of-the art equipment and practices first hand. In touring food production facilities, we witnessed technology that is not found in textbooks, and is impossible to duplicate in the Culinary Arts shop. For example, the tray retrieval system at our partner company is a \$3 million investment in itself.

From our tour of the dining services at a major hospital, we learned about a system of food preparation that is already used in some large restaurant chains and school systems.

The hospital had recently purchased the machinery for the "cook/chill" system at a cost of \$300,000. As I viewed the gleaming kettles and complex computer control panels it occurred to me that an employee would have to prove extremely competent and reliable before he or she were allowed to touch that equipment. The process of "cook/chill" food preparation was outlined as follows: Huge kettles, which can hold up to 200 gallons at a time, heat food to 180 degrees. At this temperature, the food is pasteurized, then pumped into extremely strong, durable plastic casings. All air is pulled out of the casings so that bacteria will not form. The encased food is chilled immediately to 40

degrees or less; if chilling does not take place immediately, the bags could explode. Once food is properly chilled, it can be held at 32 degrees for up to six weeks.

Eventually, the encased food is shipped to its' destination and "rethermalized." The industry does not like to use the word "reheated," because this implies that the food has been cooked twice. Once food has been heated to a temperature of 140 degrees, it is ready to be served. Unlike the "boil-in-bag" concept, this food has not been frozen, but held in a "slush" state. Although deep freezing breaks down the grain and fiber of foods, recipes prepared the "cook/chill" or "cryovac" way are said to taste as good as fresh.

If this system of food preparation is adopted widely, jobs in dining services may become more scarce. For example, in the "cook/chill" kitchen, only two or three workers are needed to actually prepare the recipes. Once the food arrives at its destination, it can be "rethermalized" easily by one or two workers. One school system currently provides food for 70 schools using a single distribution center. The Food Production Manager at this hospital envisions their "cook/chill" system one day providing food for local nursing homes and other facilities.

We toured many areas of the huge hospital's food services department and learned so much in one morning away from the boundaries of the classroom. Casually walking and talking with the food production manager gave us a chance to hear an "insider's" perspective on his job. Like ethnographers, we were uncovering tacit cultural knowledge. The Food Production manager said he must reprimand anyone found "changing a recipe." There are twelve types of special diets for patients, some with controlled salt or fat. "Hospitals are in the business of making people well, not sick," he remarked. A cook who is caught experimenting with recipes is given three warnings, then terminated.

The Food Production Manager must constantly check the quality of food served to patients. To do this, managers invent a fictitious room number, patient name, and menu choice. Once the tray is prepared, it is followed to the fictitious patient's floor. At this point, managers check the temperature of hot and cold items on the tray, examine the overall color and appearance of the meal, and taste-test the food.

Finally, this Food Production Manager told us he did not have a college degree but had worked his way up from washing dishes. He said, "You don't necessarily have to have a college degree to go places; you have to



really care about what you do." I wonder if this adage is true in today's tight job market.

Since this gentleman seemed an effective, innovative manager and a sincere and caring person as well, I hoped he would be one of our strongest contacts in the partnership venture. He was eager to work with us and even suggested a hospital vehicle might be used to shuttle students between school and the job-site. In the months that followed, however, the implementation of the "cook/chill" system took up the majority of this manager's time. Also, issues of workmen's compensation, insurance, and other hospital regulations dampened the food production's manager initial enthusiasm. Try as we might, we were unable to get a program started at the hospital. The tour had been enlightening, however, and we have been invited for return visits at our convenience. Perhaps now that we have established a firm partnership with the food services subcontractor in the large investment corporation we can use our knowledge and experience to one day expand our program to the hospital's dining facilities.

## Seeking External Expertise

### Individuals

Once I became interested in school/business partnerships, I immersed myself in the topic. As I mentioned earlier, I first consulted with a professor who had co-authored a book on partnerships. He met with the school vice-principal, the coordinator of cooperative education and myself in the school-run restaurant to share his expertise with us. In this first discussion with him, we learned that school/business partnerships must be two-way propositions. Business has to do more than just deposit money into a program, then disappear. Schools and the private sector must work together to see what it is that business wants from graduates and what educators can do to adapt the curriculum and instructional practices to meet the requirements of the workplace. Also when we set up a partnership, he said, we should build some form of evaluation of the program into our plan from the start. The system of evaluation should be reasonable from the educator's point of view. In other words, know what is capable of being measured and agree to measure only that which is within your ability to measure.

So that I might sensitize myself to the needs of the business community, I spoke with two personnel directors, one community relations manager, and a director of a human services organization. The human services director had helped develop a school/business partnership agreement between a large urban school system and several companies. He praised our project as worthwhile and timely. The chairman of the Culinary Arts Department at a community college was invited to our second breakfast meeting and gave us advice on setting up partnerships. He works closely with the business community, and the students in his co-operative education program are placed in Food Services positions as far away as Disney World. He suggested we find one or two institutions willing to provide us with slots for students on an on-going basis. Hotels could be difficult to work with, he said, because they tend to have a frequent turnover in managers.

When we discussed the job market with this community college faculty member, he said that a whole previous generation of young people walked into companies and got jobs. "We are now approaching a time [and that was 1990] that we haven't seen since World War II." Like the personnel director who spoke at our first meeting, this gentleman also warned against

students "hop-scotching" from job to job, or always choosing the same, comfortable tasks. "Don't always go for fry cook at a fast-food restaurant," he said. "Try salad making at a fancier restaurant." He said students must focus upon "career building" rather than "instant [monetary] gratification."

Aside from knowing the university professor through my doctoral studies, I did not have any special connections that made these individuals receive me so openly. I simply asked for their help, and they obliged.

#### Other Partnership Projects

Through the Massachusetts Department of Education I learned of other partnership projects throughout the state and was particularly interested in a hotel and hospitality collaboration at a vocational high school in eastern Massachusetts. I contacted the coordinator of this project and, once again, found an individual willing to help. He sent me information on his program, and I applied some of his ideas to our effort.

I presented the proposal for our partnership at New England's largest annual meeting of business executives, educators, human services providers and government officials who come together to address workplace development issues. Sharing my ideas at the

conference was a positive experience for me. How often are teachers called upon as "experts" to address groups of business and government officials? It seems recently people, including teachers themselves, find few redeeming qualities in the profession. The opportunity to participate in this dynamic conference for two consecutive years not only enhanced my sense of self as a teacher, but also gave me the chance to network with innovators of school/business alliances. For example, I learned of a program that developed a manual for focusing and evaluating school/business partnership projects, and I adapted this manual for my own use. I also learned about literacy skills for the workplace, a subject I would like to see implemented in the vocational high school curriculum.

Finally, I have communicated with the Office of Community Education of the Massachusetts Department of Education on a fairly regular basis to keep informed of the latest news in the Industry-Education Partnership Recognition Program. The Office of Community Education also sponsors yearly conferences with such themes as "Strengthening Education for Economic Strength." I attended two of these conferences and, again, had an opportunity to discuss goals for education that will enhance the quality of the workforce in America.

Meeting with representatives from a university, community college, hotel, utilities company, human services organization, hospital, and multi-million dollar corporations broadened my perspective on workplace issues. Contacting the coordinators of successful partnerships provided me with ideas for our project. Attendance at conferences geared toward strengthening the ties between government, human services, schools and business inspired me to continue my efforts, in spite of all obstacles.

In the preceding pages, I have chronicled my experience with the evolution of a school/business partnership initiative between the Culinary Arts Department of a vocational high school and food services providers. At the onset of our project, we envisioned the school as the hub of a wheel, with spokes branching out to any number of restaurants, hospitals, cafeterias, and hotels. After almost three years and countless hours of work, however, we find our wheel has only one spoke, but a significant one. As the Culinary Arts chairman from the community college had advised, we have found an institution willing to provide us with slots for students on an on-going basis, and this corporation is one of the most prestigious in the state. Its' food services department is the admiration and envy of others.

Upon examining the student interviews in the next chapter, I think the reader will agree we have accomplished small, immeasurable changes in the lives and self-concepts of these young people. In the future, we hope to accommodate approximately sixteen interns a year. In the larger picture, this eventually adds up to a respectable number of human beings. As this partnership grows stronger, we may again reach out to other organizations such as the hospital described earlier, this time with a successful program in place to serve as a model. If the partnership sustains itself over the years and becomes "second nature" to the Culinary Arts shop, other teachers and shops may be inspired to seek connections of their own. I am convinced that constant striving toward building bridges between schools and businesses is the only way educators can embrace and impart the "invisible curriculum" sought by employers.

At a conference recently, a businessman emphasized how education and industry must work together to strengthen our economy. In the school and on the job, he said, things must change. He used the following quote to make his point: "If you always do what you always did you will always get what you always got." If we continue to do what we have always done in schools and workplaces, he maintains, we will "die."

Yet, educators cannot look to the business community for miracles. As I have pointed out, schools and businesses have very different agendas which are, at times, in direct conflict with one another. Educators must be honest with themselves about what business truly can and cannot do for education. I am convinced the most effective contribution business can make to the schools is a small, inexpensive one. By allowing students to serve as apprentices or interns in their organizations, businesses enhance and complement the school curriculum and provide opportunities for students to engage in authentic activities which foster the growth of cognitive and personal skills.



## C H A P T E R V

### A SCHOOL/BUSINESS PARTNERSHIP 2: OTHER PERSPECTIVES

#### Student Perspectives

We had envisioned partnerships with a variety of food services facilities, but, in the end, collaborated with just one organization. I do not wish to underrate the significance of this alliance, however, for our partner corporation embodies the best of all possibilities for us.

Orchestrating transportation to job-sites was one of our greatest concerns. The school does not own vans, the city buses are sporadic, and whenever students leave school grounds, liability issues immediately become a concern. Our partner corporation is located directly across the street from the school, with an annex on the same side of the street as the school.

When students cross the street to the Food Services Department of our partner corporation, they enter one of the largest, most unique cafeteria systems in New England. Up to 1,500 meals are served there daily. In the on-site bakery, all pastries are made from scratch. In fact, the Food Services Director often has difficulty locating his baking supplies because most institutions now use ready-made mixes, and

wholesalers have reduced their stock of specialty baking items. On Fridays, the Dining Services Department holds a "bake sale," where corporate employees can purchase a variety of pastries for weekend entertaining.

Yearly food sales in the corporate cafeteria are about \$2 million, and the cost of food supplies is \$1 million. The pantries are stocked at all times with at least \$30,000 worth of staples. Since the corporation subsidizes the Dining Services as an amenity to the employees, there is no pressure to realize a large profit. Here is another reason our partner corporation is a perfect fit for our vocational high school: since the dining service is not profit-driven, employees are apt to spend more time teaching the interns.

The Food Services Director, a member of the school's Culinary Arts advisory committee, proved an ideal role model for our students. He is a competent, organized, direct man who always finds time for a kind word and is, obviously, very concerned about young people.

From our first meeting with the Food Services Director, I could tell he had given much thought to our proposal. He planned to rotate students through the four areas of food production--salads, hot foods, bakery, and serving. He said he was eager to see

students learn, not do "grunt" work. In more prosperous times, he would have been able to pay the interns, but now his company was "tightening its' purse strings." Although he could offer no paid positions, he could help our students "gain experience."

Our co-op coordinator emphasized to the Food Services Director that an internship program is a learning experience, and an opportunity to motivate students. Students are "locked into school," he said. A chance to participate in "real-life" work settings could initiate "attitudinal" changes. With the poor attendance record and high drop-out rate at the vocational high school, this program might inspire some students to stay in school.

Each side began by being honest--the co-op coordinator and I shared what we hoped to accomplish and why; the Food Services Director made it clear just what he was willing to offer us. Although this was a first-time effort for all of us and our agenda was not precisely detailed, our openness with one another from the start may have contributed to the good will that continues between the corporation and the school.

After many delays and disappointments, our vision of a committed school/business partnership had finally materialized. The positive aspects of this corporation exceed our expectations: it is within safe walking

distance from the school; its' Dining Services are exceptional; the staff is friendly and helpful; and the Food Services Director is a committed, caring individual who wants our program to succeed.

### Student Interviews

I will present interviews with three students who participated for one marking period (four to five weeks) in the on-the-job-training program in the Food Services Department of our partner corporation. Since these interviews are so refreshing, I will present them in near entirety. To avoid the monotony of constantly identifying the speaker, I will use upper case letters when a student is talking and lower case letters when I am speaking. In all references to our partner corporation's name, I will substitute simply "the corporation."

### Student Interview 1

An 18-year old female Latina student, quiet, shy, nervous about speaking with the tape recorder on.

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When your teacher chose you to go over to the corporation, why did you want to go?

OH, WELL, PARTLY BECAUSE I WANTED TO GET OUT OF THE CLASS, AND TO SEE WHAT IT WAS LIKE OUT TO WORK IN A REAL JOB.

Was it different than class?

A LITTLE BIT. A LITTLE DIFFERENT.

What are some of the things they had you do?

THEY PUT ME IN DIFFERENT SECTIONS. THEY HAD LIKE FOUR SECTIONS, LIKE BAKERY, SALADS, COOKING. WHEN I FIRST GOT THERE, THEY PUT ME IN BAKERY, AND MOSTLY WHAT I DID WAS HELP SCOOP MUFFINS AND I GOT A CHANCE TO WORK WITH THE MIXING MACHINES, LIKE TO MAKE FROSTING.

Was there any equipment there that you didn't have in school?

NO, THEY'RE BASICALLY THE SAME THING.

So, the basic difference between working over there and working in school was it was busier there?

BUSIER.

Did you have to work faster?

YES. WE HAD TO WORK FASTER BECAUSE IN THE BAKERY AREA. . . THEY'D DO A LOT OF MUFFINS. . . LIKE COOKIES. . . FOR ORDERS.

Much more than school?

MUCH, MUCH MORE. . . CUZ THEY'RE SERVING LIKE FOUR HUNDRED OR A THOUSAND PEOPLE. . . FRIDAYS THEY HAVE BAKE SALES.

Did you get to take part in the bakesales?

WELL, ALL I REALLY DID WAS HELP THEM WITH THE BAKERY PRODUCTS. . . SET THEM UP ON TRAYS. . . AND LIKE I SAYS. . . SCOOP MUFFINS. . . PUT COOKIES OUT.

Did you like working over there?

YES. IT WAS DIFFERENT. IT WAS DIFFERENT FROM HERE. THERE WASN'T SO MUCH . . . UM . . . LIKE THE SUPERVISOR WASN'T ON ME LIKE THERE AND HERE.

Oh, the teacher's 'on you' more than the supervisor?  
(She laughs).

YEAH.

So you had more independence over there?

YEAH, LIKE MORE INDEPENDENCE OVER THERE. . . THEY JUST PUT ME IN A SECTION AND I HAVE A PERSON FROM EACH SECTION TELL ME WHAT TO DO. THE HEAD, LIKE THE HEAD OF THE BAKERY, SHE'LL TELL ME WHAT TO DO AND I'LL DO IT.

Were they nice to you?

EVERYBODY WAS NICE. THEY WERE FRIENDLY.

You weren't scared to ask them for help if you didn't understand?

NO, I'D ASK THEM, AND THEY'D HELP ME. I GOT TO WORK ON THE RANGE OUTSIDE WHERE THEY. . . ALL THE FOOD IS PREPARED AND THEY PUT IT IN THE REFRIGERATOR AND ALL YOU HAVE TO DO. . . WHEN IT COMES SERVING TIME. . . TAKE OUT THE FOOD AND PUT IT ON THE RANGE.

Have you ever done anything like this before?

NO. . . LIKE IN SCHOOL . . . AND THIS IS REALLY MY FIRST EXPERIENCE.

How did it make you feel about yourself?

I FELT IMPORTANT. . . I FELT GOOD.

Did you learn anything that might help you in the future; something for yourself?

YEAH. (She laughs.) USE PROPER LANGUAGE.

Proper language?

PROPER LANGUAGE BECAUSE I HAVE A HARD TIME SPEAKING PROPER LANGUAGE WHEN I WAS GROWING UP SPEAKING THE WAY I DO.

What do you mean by 'proper language?'

SPEAKING CORRECT ENGLISH.

Did you learn anything else over there about getting along with people you work with?

JUST, YOU KNOW, IF I HAD A PROBLEM WITH ONE OF THE WORKERS, JUST TO LET THE SUPERVISOR KNOW AND STUFF, BUT I NEVER HAD ANY PROBLEMS WITH ANYONE, CUZ EVERYONE WAS BASICALLY NICE TO ME.

-----

This young woman said she would have liked to have stayed longer at the corporation. She received a "C" as a grade for the internship experience because she was absent for three days and failed to call her supervisor. During the orientation meeting, the Food Services Director had emphasized that if students were to be out sick, they should call in by 6:30 a.m. Of course, they would not be penalized; their supervisor simply needed to know how to plan the workload that day. As I noted in Chapter 4, this young person did not call her boss because she did not have a telephone in her home. Also, I suspect she is the only one in her family who speaks English.

### Student Interview 2

An African-American male student, age 18, a senior. Handsome, soft-spoken, Caribbean background.

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When your teacher chose you to go over to the corporation, why did you want to go?

WELL, I HAD HEARD A LOT ABOUT THIS COMPANY, AND I THOUGHT IT WAS A BIG OPPORTUNITY, YOU KNOW, WHETHER I WOULD GET PAID OR NOT, SO I SAID, 'LET ME TRY THIS AND SEE HOW IT WORKS.'

How did it work?

IT WAS FU. . . VERY EXPERIENCE. . . I LEARNED A LOT OF NEW FOODS, ALL KINDS OF DISHES AND EVERYTHING, AND I GOT ALONG WITH THE WORK. . . EMPLOYEES OVER THERE. IT WAS A NEW EXPERIENCE FOR ME.

What kinds of things did you do once you got over there?

THEY PUT ME IN. . . THE FIRST PART THEY PUT ME WAS IN COOKING, YOU KNOW I EXPERIENCED COOKING FOR, YOU KNOW, ABOUT I THINK IT WAS AT LEAST A WEEK. AFTER I WAS DONE WITH THAT, I WENT OVER INTO THE BAKERY. . . AND AFTER THEY PUT ME IN BAKERY, THEY PUT ME IN SALADS. . . SO I WAS MOVING FROM ONE SHIFT. . . PLACE. . . TO ANOTHER EACH WEEK.

(We discuss what it was like working in the smaller annex cafeteria.)

THE EMPLOYEES WOULD GO IN THERE CUZ THERE'S A FAST FOOD RESTAURANT AND THEY'D PICK UP THEIR ORDERS IN BAGS. . . THEY HAVE A DINING ROOM, BUT IT'S NOT AS BIG AS THE FIRST ONE I WAS IN. . . THEY MAKE THEIR OWN FOOD JUST LIKE THE FIRST ONE, BUT THEY DON'T MAKE IT LIKE. . . THEY MAKE IT AND PUT IT IN BAGS AND EVERYTHING SO IT'S LIKE A FAST FOOD RESTAURANT. . . THEY PICK UP ORDERS. . . YOU GO AND PICK IT UP. . . THEY HAVE DIFFERENT SECTIONS, HOT FOOD, FAST FOOD, DESSERT. BUT THIS WAY HERE, THEY HAVE THE SAME THINGS. . . IT'S JUST BASICALLY THE WAY THEY RUN THINGS. . . AND ABOUT THE TIME AND EVERYTHING. . . IT'S SMALLER, BUT IT'S BUSY.

Did you find the people there to be helpful to you?

THEY GAVE ME A FEW. . . THEY TOLD ME ABOUT. . . BASICALLY HOW TO USE A KNIFE AND BE CAREFUL WHEN SERVING SOMEONE FROM A HOT STEAM TABLE. . . THEY WERE PRETTY HELPFUL AND VERY FRIENDLY AND STUFF.

Did you learn anything there that you hadn't already learned in school?

BASICALLY, NOT REALLY BECAUSE I WAS IN AN ITALIAN RESTAURANT, I WORK RIGHT NOW, SO IT DOES THE SAME THING. BUT IT'S THE WAY THEY DID THINGS WAS DIFFERENT.

Had you worked in the Italian restaurant before you went to the corporation?

OH YES. I WORKED THERE FOR AT LEAST FOUR YEARS NOW. . . SO THE ONLY EXPERIENCE WAS THAT I HAD NEVER WORKED IN FRONT OF PEOPLE BEFORE. I USED TO WORK IN THE BACK KITCHEN AND PEOPLE, LIKE, YOU KNOW, THEY'D GET THEIR FOOD FROM THE DINING ROOM. . . BUT THIS EXPERIENCE WAS JUST WORKING IN FRONT OF PEOPLE. . . GET TO SERVE. . .



ON THE LINE. . . TO SERVE AND SO YOU LEARN THE EXPERIENCE.

(We discuss what he thought of the program.)

I THINK IT IS A NICE PROGRAM. IT'S A VERY EXPERIENCE ESPECIALLY, YOU KNOW, WITHOUT GETTING PAID, BECAUSE, YOU KNOW, YOU CAN LEARN A LOT MORE THAN JUST GETTING PAID. . . HOW TO DEAL WITH, YOU KNOW, EMPLOYEES AND CUSTOMERS. . . THE PEOPLE THERE ARE LIKE MORE EXPERIENCED, IT'S LIKE WHEN YOU ARE IN SCHOOL, YOU HAVE YOUR FRIENDS AND WHEN YOU MOVE FROM YOUR FRIENDS, YOU FEEL KINDA DIFFERENT, BUT YOU KNOW, ONCE YOU GET THE HANG OF IT, IT'S ALL RIGHT.

Did you feel you had more freedom there or did you have more freedom in school?

I FEEL LIKE I HAD MORE FREEDOM OUT IN THE CORPORATION BECAUSE YOU DON'T HAVE TO BE TOLD EVERY SECOND WHAT TO DO. . . OR WATCHED OR ANYTHING. . . SO IT'S LIKE WORKING ON YOUR OWN. . . LIKE THE BOSS TELL YOU TO DO SOMETHING, HE DOESN'T COME BACK EVERY SECOND MAKE SURE IT IS DONE.

So your teachers are always checking on you?

YEAH, THEY'RE ALWAYS CHECKING ON YOU.

One student said she felt more grown up over there, like an adult.

YEAH, YOU FELT LIKE AN ADULT.

What are your plans when you graduate?

I WOULD LOVE TO SAVE UP MY ACCOUNT AND CHECK INTO A COMMUNITY COLLEGE. . . I WANTED TO CHECK INTO A CULINARY INSTITUTE SO THE COMMUNITY COLLEGE WOULD BE MY SECOND CHOICE. . . I WENT ON A TOUR LAST YEAR AND I WAS THINKING ABOUT GOING DOWN. . . I'M GOING TO TRY THIS YEAR TO GET IN CONTACT WITH MY COUNSELOR TO SEE IF I AN GET AN APPLICATION TO FILL OUT.

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I promised this young man I would get some information for him about the colleges and would help him fill out the applications, if he liked. As

Spradley suggests in Participant Observation, the researcher bears a responsibility to weigh carefully what constitutes a "fair return" to informants. For each of the students who has participated in this study, I have offered to write letters of reference, help compose resume, or give assistance in any other way I can.

### Student Interview 3

An African-American male student, age 17, a junior. Handsome, soft-spoken. One of his teachers told me this young man is a single parent of more than one child. I did not ask for any personal information about the students; it had no bearing on the program. The Food Services Director agreed with me. He said that a lot of his employees have personal problems, but "between the doors" of the corporation, "they do well."

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When your teacher asked you to go over to the corporation, why did you decide that you would like to go?

WELL, FIRST OF ALL, WHEN I WAS HER, WHEN I WAS IN SHOP, I FELT LIKE I WASN'T. . . I WANTED MORE THAN WHAT WE DO. . . I LIKE TO KEEP BUSY, AND YOU KNOW, I DIDN'T HAVE NOTHING TO LOSE, SO I SAID, 'YES.' I LIKE TO TRY DIFFERENT THINGS. IT COULDN'T HURT ME.

Were you glad you said, 'yes?'

WELL, OVER THERE IS LIKE MORE PEOPLE, SO YOU GOTTA MAKE MORE, KEEP BUSY ALL THE TIME. OVER HERE IS LIKE. . . WHEN I WENT OVER THERE. . . I WAS ALWAYS BUSY. . . WHEN

I CAME BACK HERE. . . IT WAS LIKE I HAD TIME TO MOVE AROUND . . . BOTH OF THEM ARE GREAT TO DO.

(I ask him how he felt over at the corporation compared to how he feels at school.)

HERE, THEY TREAT YOU LIKE A KID. OVER THERE, THEY TREAT YOU EQUAL.

How did that make you feel?

LIKE INDEPENDENT. LIKE I DON'T HAVE TO ASK TO DO ANYTHING. LIKE YOU ALL HAVE EQUAL RIGHTS.

Did you ever feel like that in any other place you have been?

YEAH, MY JOB.

What kind of job do you have?

I WORK AT A PIZZA SHOP, MAKING PIZZA.

When you got to the corporation, what kinds of things did you do?

I DID LIKE PREP WORK, AND I HELPED OUT MAKING DISHES. . . I HELPED. . . REALLY EVERYTHING. . . WASHING DISHES. . . A LITTLE OF EVERYTHING.

Did you learn anything over there that you hadn't learned here?

NOT REALLY, JUST HOW TO SERVE MORE AND MORE PEOPLE.

Were the people nice to you?

YEAH, THEY WERE.

Did you have any problems with anyone?

NOBODY. EVERYBODY WAS FRIENDLY. EVERYBODY GOT ALONG. WE MADE JOKES ONCE IN AWHILE, BUT WE ALWAYS GOT OUR WORK DONE.

So did you have the job at the pizza place before you went over there or after?

AFTER.

When you went to apply for the job, did you tell them you were working at the corporation?

YEAH. THEY SAID THAT WAS GREAT, THEY COULD USE ME REAL BAD. . . CUZ THEY WEREN'T GETTING PEOPLE LIKE WITH EXPERIENCE. . . SO IT SHOWED I HAD A LITTLE EXPERIENCE PLUS I WAS IN THE CULINARY ARTS PROGRAM. SO I KNEW A LITTLE WHAT I WAS DOING. . . SO THEY SAID THAT WAS GOOD.

That was the only experience you had at a job?

YEAH, REALLY. THE OTHER JOB I HAD WAS LIKE JANITORIAL WORK.

(We discussed how he liked the program.)

I ENJOYED IT OVER THERE. . . I JUST WISH THE PROGRAM HAD STARTED A LITTLE EARLIER SO THAT I COULD HAVE BEEN THERE LONGER CUZ I REALLY LIKED IT.

If you had a chance to go back, would you go again?

DEFINITELY.

Do you plan to go into foods when you graduate?

YEAH, YEAH, I THINK I DO. BUT I DON'T REALLY KNOW WHERE I WANT TO GO. I'M HOPING SOMEBODY HERE WILL GIVE ME IDEAS.

(We discussed how he went about getting a recommendation from his supervisor at the corporation for the job at the pizza shop.)

FIRST OF ALL, I HAD TO GET PERMISSION FROM MY SUPERVISOR THAT WAS OVER THERE, AND SHE SAID I COULD DO IT, CUZ THEY'D GIVE ME A GOOD RECOMMENDATION BECAUSE I BEEN DOING A GOOD JOB, SO I ASKED HER, AND SHE GAVE ME A NOTE.

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We talked more about his future plans. He said his grades are good. I remember he had been most enthusiastic about being chosen to go over to the corporation. When I saw him one day during his

academic class week, he came up to me, shook my hand and said, "Thank you so much for giving me the chance to go over to the corporation." He described his experience there, at the time, as "fantastic."

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### School Staff and Employer Perspectives

In this section, I will present the perspectives of four people who occupy strategic positions in the school/business/economy relationship. As Figure 1 illustrates, the Culinary Arts teacher is the most isolated of the four, and his interview reveals his position offers little flexibility or independence.

Although the coordinator of cooperative education enjoys more freedom in his job and has the opportunity to interact with representatives of the local and national economy, his interview shows that he has no authority to implement policies or innovations.

Both interviews offer insight into the nature of school organizations and suggest why it is often difficult for educators to initiate change. Business is represented in this chapter by the Director of Food Services in our partner corporation and the Training Manager for a large, prosperous manufacturing firm. The Food Services Director offers suggestions for

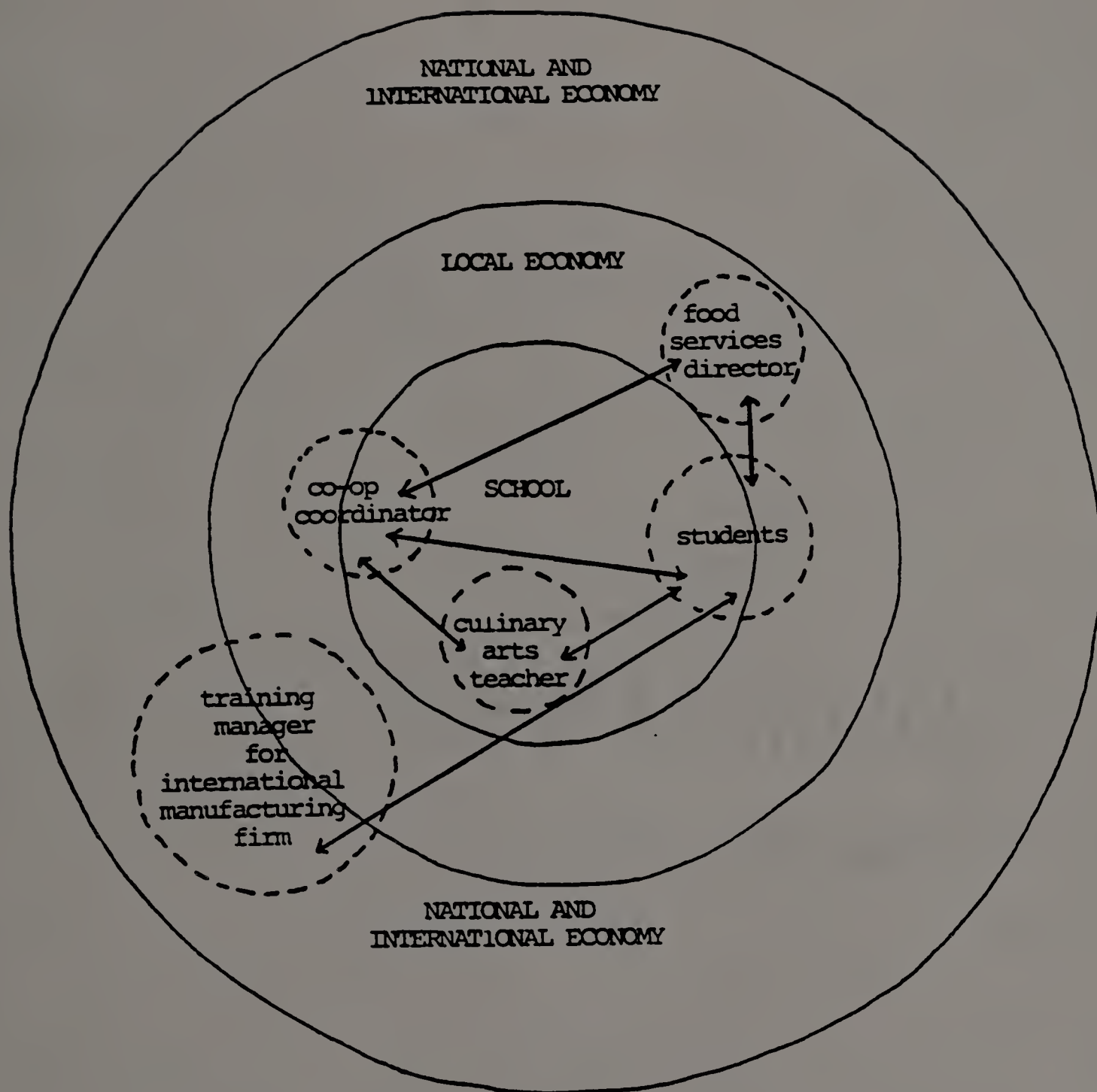


Figure 1

Roles and Relationships: School/Businesses/Economy

marketing our internship program to other corporations. He believes partnership program can create positive peer influence among students and employees.

The Training Manager, who is in contact with international distributors is keenly aware of global competition. He maintains if business and education do not work together to revitalize curriculum, invest in technology, improve school buildings, and meet the needs of the increasingly diverse school population, economic collapse will be inevitable.

There is still much sorting out for all of us to do. The Coordinator of Cooperative Education suggests some students may not need to master high level literacy skills. If a student excels at only one aspect of car repair, for example, perhaps he or she should graduate with a competency certificate which emphasizes this strength so that an employer will know exactly what this student is capable of doing. On the other hand, the Training Manager calls for curriculum reform which inspires students to become independent thinkers who can problem solve, work in teams, and communicate clearly.

The age-old questions resurge once again: is there a basic level of competency all students graduating from our high schools should be expected to

achieve, and, if so, how do we guarantee students will reach this level? Our system of education is based upon the assumption that certain courses "train" the mind to perform generalized intellectual functions. For example, "the study of. . . any foreign language. . . gives one an insight into the human mind. . ."  
(Ullman in Wesman, 1945) is the kind of statement still heard in education circles. What percentage of training from school subjects actually transfers to intelligence, and how do we go about measuring this transfer?

Although many of the questions are the same ones raised by Wesman in his 1945 study, "Transfer of Training from High School Subjects to Intelligence," one fundamental change has occurred. As stated in previous chapters, society has historically turned to its' schools for solutions to its' social and economic problems. The following interviews suggest we are gradually recognizing schools cannot fight our nation's battles alone. Developing education "networks," which link business, social services, volunteers, parents and schools may strengthen us individually and as a nation.

#### Interview with the Culinary Arts Teacher

In school, students will take whatever time they have to do a job, so if they have all day to make a batch of cookies, they take all day. . . The time factor is much more critical when they're out



working in (the corporation), and they see that. . .  
. . . Everybody has to work together. Sanitation is a  
top priority, and making sure that the job is done  
right. You notice that when they come back.  
Their working habits are a little bit different.  
(Culinary Arts Teacher)

Although this Culinary Arts teacher believes the  
program is a great idea and appreciates that someone  
outside his department was willing to help his  
students, he feels he could not have initiated the  
project on his own:

We don't have the time to do something like this.  
. . . It would be difficult, because just putting in  
a regular day, everything would have to be done on  
our own. In 42 minutes of a prep period, you  
couldn't make a contact. You know, one phone  
call, and then you get put on hold, and that  
shoots the prep period.

If the program is to continue, the Culinary Arts  
teacher feels that the co-op coordinator would have to  
do a lot of the "ground work," since he has better  
accessibility to the phones and to the people to keep  
the project going. He felt the internship program was  
an excellent way to get students "exposed to the  
industry without having to chase down co-op jobs."  
Like me, he believes the ultimate goal should be to  
expand the concept of internships to other shops.

The Culinary Arts teacher has the most direct  
contact with students but the least amount of  
flexibility in his position. He appreciates the  
benefits of school/business partnerships, but his job

forces him to be preoccupied with day-to-day logistical matters. Still, he has the best interest of his students in mind:

Students don't lose in this program. Even if skill-wise, they don't learn any more, just the life skills they gain from this program are really beneficial. They're not going to work with the public here, as they do outside. They're not going to work with older people in a job-type setting, as they do over there. It's a basic entry-level kind of program, and they're not expected to know a whole lot, just some basic things so they can add on to that. . . They're learning the importance of being on time, appearance, that you have responsibilities. You have to have a photo I.D. to get in and out of there. . . If you make a mistake, they're going to hold you responsible. maybe once they'll say 'everybody makes a mistake,' but after that, you're responsible . . . for the food, equipment, and everything else along that line. . .

#### Interview with the Coordinator of Cooperative Education

Everybody gets up in the morning, goes to the bathroom, there was a plumber there; turns on the light, there's an electrician there. They live in a house that was built by a carpenter. They go out and get in their car that's maintained by an auto mechanic. Then they say everybody should have a college education. People don't understand, really, what society is all about.  
(Co-op Coordinator)

The coordinator of cooperative education who had helped me set up the partnership retired at the end of the school year and was replaced by an equally experienced individual. As the quotation above suggests, this new co-op coordinator believes skilled labor is essential to the well-being of our nation. Figure 1 illustrates that the coordinator of

cooperative education serves as a link between the vocational student and the local economy. He works closely with shop teachers, students, and employers to set up on-the-job-training experiences, usually with pay. Unlike the Culinary Arts teacher, the co-op coordinator enjoys a more self-determined, flexible schedule. He has an office, a telephone, and can leave school grounds whenever necessary. In the Tayloristic model, his job could be compared to a manager's, while the teacher's is more akin to that of a line worker. Residing on the boundaries of the school and the larger economy, the co-op coordinator can look in both directions, reflect upon the relationship between business and education, and strive to establish meaningful ties between the two.

This co-op coordinator, who has also served as a superintendent of a regional vocational system, has spent years formulating his own philosophy of education. He believes we are doing an injustice to our young people and society by having three "tracks" students can follow--college prep, vocational and general:

College prep kids know where they're going. That's fine. The general track kids basically graduate without any kinds of skills. They're not really prepared to go to college, they're really not prepared to work, so they're more at a dead-end than anybody. I personally think these

schools should be broken down into college prep, or some kind of vocational training.

He cites the research that suggests America does less to ease the transition from school to work than any other industrialized nation and he implies that we often use government funds to disenfranchise, rather than empower our people:

I think that people in this country have been, I'll use the word 'babied,' too long and coddled too much. It has been too easy for them to be unsuccessful instead of successful. . . I think we have to come to grips with the fact that if you're going to be successful in the world, you have to train, you have to have a skill, whatever it may be. Maybe it's teaching English. . . that's a skill. It may be a carpenter, that's a skill. It may be auto mechanics. But something has to be done and everybody is not going to be at the higher echelance. You got to make it so the people below can succeed instead of setting them up for failure.

Although some educators may argue that his ideas are limiting and could promote stereotyping and discrimination, the co-op coordinator believes he is responding to reality. He suggests students receive an evaluation of their strengths very early in their school careers, not when they are ready to go to high school. This evaluation of skills should continue throughout elementary school, and students should be directed toward specific career areas.

The co-op coordinator cites the statistics that less than 25 percent of our population has a four-year college education:

I'm not knocking a college education, but I'm saying you don't need one for a lot of things that are done in this society. . . You can have a student that's an excellent machinist, or mechanic, or carpenter, who is very, very poor in English or math skills. . . why are you trying to sit a student down and train him in English, if he really can't do it. . . First of all, he hates it. Secondly, he's not good at it, but he's an excellent mechanic. He can diagnose a car, he can repair a car, he can make it run. Everybody that goes to work, just about, drives a car. I don't care if they're a doctor, a dentist. Somebody's gotta repair that car. And you don't need a person with a four-year college degree to repair a car.

To realize this dream of "skills for all students," the co-op coordinator envisions an ungraded high school, where students could work to their own potential. He feels that most classes are now taught to "the middle," and "students at the upper end get bored," while "students at the lower end don't get it."

Although he has not worked out the details of his ideal system, since he knows he will never realize this vision in his lifetime, he sees teachers offering various blocks of skills and students moving through these phases at their own pace. The teachers could do "more teaching to the lower level and middle levels, while students that can grasp something and can move on, in a lot of areas, don't need your help anyway. They just need accessibility to it, and when they run into a problem, you help them out."

In order to assure employers that vocational students have mastered the skills of their trade, the co-op coordinator believes a certificate of competency is essential:

If it were up to me, this (certificate of mastery) would be what an employer would base it on instead of a diploma. To say I graduated from a school, that I was an 'A' student or a 'D' student doesn't tell the employer anything. A kind of competency certificate follows the student along, the employer can sit down and look at it. When the teacher puts his name on it, he is saying that at the time a student left, he or she had these skills."

The competency profile would give employers and students an honest picture of the students' capabilities for entry-level positions. When I expressed concern over students who, try as they might, could never get beyond a certain skill level while in school, the co-op coordinator suggested there are so many different skills for each trade, that each student would become an 'expert' at something.

If a student, if for whatever reason, never went beyond mufflers, and exhaust systems, . . . there's a place out there, there's a job out there for that student. You don't need a student that is very good at overhauling an engine to do that work. This kind of certificate would show that student's level, and there's a place out there for that student. They can do this repetitious work. . . and some of them would be very happy to do it and be very good at it.

Since the co-op coordinator's main function is to place students in paid, on-the-job training experiences, I was interested in his reactions to my

unpaid internship program. He responded positively, saying "any time a student can get into a job-site away from the school, it gives the student a chance to grow." This "hands-on" experience, according to him, teaches students social interaction skills which cannot be replicated in a school setting:

A student can prepare. . . salads here, day in and day out, but until they get into an actual work situation, the demand is there, waitresses coming in and saying, 'Where's my salad?' Customers waiting and the cooks are yelling and screaming. Until you get in that, you are not in a real live situation.

As the student interviews suggest, interns did experience personal growth, yet how does one measure or document these changes? In the current desperate economic climate, particularly in New England, employers are, more than ever, concerned with quantifiable results.

The co-op coordinator believes it is impossible to "gauge" this kind of growth:

There was a comment by the president, or the chairman of the board, I'm not sure which, of IBM several years ago. If he had widgets coming in and didn't have any better success than schools did. . . however, he has something that can be measured. Anything you don't think is going to make it, you can reject and just throw away. You can't. . . treat human beings the same way. You can't measure success for many years after a student is graduated. You can put a student out on a job now and that student may be a good student in school, but they fail on the job for whatever emotional reasons, or whatever. . . you know, people are not made the same and everyone being an individual. . . You can't measure success until years and years

down the road, and you look around society now. . . I'd say we're failing. I'd say the court system is failing, I'd say the school system is failing, I'd say the family system is failing, I'd say the church is failing. I'm not a pessimist, but I think things could be better, but it's going to take everyone working together. I think society is too fragmented now. Something will eventually pull it back together. Now with the dysfunctional families, education is in a bad way.

Although the co-op coordinator has dreams and ideas, he has very little power to initiate changes. Even the certificate of competency, which he so strongly advocates, is not within his locus of control. The competency profile system is in place in many vocational schools, and some shops in his school are using it, but the administration has not adopted the system as school "policy." Here we have a man whose position requires he become an expert on the relationship between school and work, yet, he has no authority to apply his expertise to strengthen that relationship. Although the co-op coordinator's job has the trappings of a management position, he, in many respects, remains as a "salesperson" peddling a product that has been developed by what he knows is a faulty system of production. He has ideas for improving the product, but rarely has an opportunity to express these thoughts, let alone implement changes. He is frustrated by the fact that in education, "things go round and round, and the wheel's reinvented too many



times before it gets in place. Someone has to take that authority, say this is what we're going to do, this is the way we're going to do it. I don't have that."

Instead of constantly "reinventing the wheel," educators must reflect upon what remains constant in life, and what truly changes.

There's certain things that I think don't change. Some of the remedies we're using in medicine now were developed by primitive man. We keep trying to revolutionize things, and schools recycle every ten years or so. Every ten years, everybody come round with these new ideas that don't do more than was done before.

The workplace changes, but workers have the same basic needs as always. They must have the skills to do the jobs that are available in the marketplace. School should prepare students to be successful at these jobs. Education cannot exist in isolation; educators must respond to the realities of the changing workplaces and make their best effort to train students for adaptability, not obsolescence. Considering the problems of our "fragmented society," this is a complex and difficult task, but one that is essential to our economic health.

#### Interview with the Director of Food Services

- If a student comes here and he's put in a hot food department he's accepted as an entry-level hot food worker, he's not accepted as . . . someone whose brother is in trouble. . . There is no excess

baggage that comes with him. He's just somebody that walks in. . . or she. . . and they're in the bakery. . . and the baker says, 'This is how we are going to do the cookies. You weigh this out.'

(Food Services Director)

This Food Service Director is obviously fond of young people and is sensitive to their needs. He remembers when he was their age and said it would have been nice if there had been a program like ours when he was in high school. Although he is in tune with adolescents, other employers may not be as receptive. I asked him how I could convince reluctant companies of our program's worth:

Don't worry so much about an individual employer and his personality, or his likes and dislikes, but more what the program can do for him. In other words, whether the guy is just a nice guy, it doesn't make any difference. It's the program that's still valid. . . I think anybody in the business would be smart enough. . . they'll see the obvious benefits to them. . . the extra pair of hands, helping the productivity, helping to get the daily job done, through non-paying positions. That's a big plus for a businessman.

Throughout our interview, the Food Services Director emphasized the need for us to aggressively "market" our program. Employers are "wary of new things;" there's a normal resistance," We need "ammunition" to "break down those barriers." "An employer might think, Why should I do this? It's going to cost me money. How does it affect the people I have working here. What if I commit myself and the students don't work out? I'm going to look bad."

To assure employers, we must present success stories, client lists, brochures, phone contacts. The Food Services Director said his costs were more "just time, than anything. . . the cost is minimal . . . their food. . . some costs. . . in hourly people spending a little time with them. . . really out-of-pocket costs." We could accentuate this "bargain price" when we present our proposal to companies.

Knocking on doors, peddling a "product" is something I have not done since I sold Girl Scout cookies in elementary school. A teacher typically does not venture forth into the larger world. Yet, this Food Services Director was talking to me in terms of sales, marketing, costs and benefits. Once again, I witness business and education speaking different languages. If I had thought about these things when I planned my initial school/business partnership breakfast meetings, perhaps the turn-out would have been more impressive.

Another good marketing point, the Food Services Director suggested, is that other employees, at least in his corporation, "like the program, too. . . they get to meet new people, and they like these kids. . . they take them under their wing. . . they're glad to help, too."

Throughout the process of establishing this partnership, I have been plagued by the thought that we are still not reaching the students who need this program most. As I have said before, we select only those students who have reasonably good marks and are well-adjusted emotionally. I shared this thought with the Food Services Director and he responded:

I think the natural incentive would be for them (the poor students) to see what their . . . fellow friends are doing. . . They're being rewarded for being good students. . . That. . . in itself could be, or should be a kind of an initiative for a not-so-good student to try to do a little better. . . with his attendance. . . Students are no different than us, in that nobody's perfect in this world. . . If a student comes in and he's got a bad attitude for the day, or he's late, or he's not as quick as yesterday, to a certain degree you can understand.

Also, at school, students are under a lot of peer pressure, and they have classmates who may be "negative motivators." He felt in his company students would be free of these influences and would perform responsibly:

They aren't totally naive about the work. I mean that's what they're being trained for. . . they want to fit in. . . so they make an attempt to fit in. . . you know, you don't want to be the oddball out there. . . And they do work. . . When students come here, they want to do well. . . they're almost in the type of business that they're studying for, and they don't want to fail.

The Food Services Director felt our program was a success. "The kids did well, and your place did well, and you did well, making sure they were here, asking questions about them. . . I can see it being a benefit

to other companies. It's just trying to get them to do it for the first time."

### Interview with the Training Manager

If you always do what you always did, you'll always get what you always got. . . now that's an old one. . . I'll change that. . . If you always do what you always did, you will not survive.  
(Training Manager)

These words were spoken by a training manager at a conference on business and education partnerships that I attended recently. Since I wanted to hear from someone who, as depicted in Figure 1, is involved with national and global economy, I telephoned the training manager to ask if I could interview him. His extraordinarily successful company enjoys an impeccable reputation. They distribute products to more than twenty countries, and their distributors often fly to America to receive instruction at the attractive training center located within the plant.

The rumor is once people work for this company, they never want to leave. As a result, competition for jobs is great. Management is known for its kindness and generosity toward employees. I have often heard that whenever a worker needed a new appliance, the company would subsidize the purchase of it. Sizable holiday bonuses are still discreetly tucked into paycheck envelopes. The concrete floor in the factory

plant was replaced by a costly wood-tile floor so that workers would be more comfortable.

The training manager gave me a tour of the plant, and I was astonished by the cleanliness, advanced technology and overall cheerful climate of the organization. The company has even its' own video production studio where a communications specialist works full-time developing media for training and marketing. From what I could tell, this organization is a model for other manufacturers. The training manager would like to see schools meet similar standards:

Our factory is immaculate, our factory has the latest, up-to-date technology and equipment. We have to, to survive, and I feel we need to do that in schools today. I know some schools where water is leaking on the computers from the roof because they can't afford a new roof. To me, that's a tragedy. If we did that here, we'd be out of business.

The training manager is not blaming educators for the problems in our schools. He sees a need for business and education to work together because "we need the schools and the schools need us. It's basic economics."

If business does not get involved with education, he fears we will not have properly trained people to meet the changing needs of the future:

The world is changing quickly. We have to do everything faster and . . . in less space. The time it takes for management to make decisions, that time is wasted. We have talent at the plant floor, at the process level where it is happening. We just need to tap that talent and brain power. We need people who can make decisions, who can think for themselves. They're out there. We just need to work with the schools to develop those talents.

I have questioned whether the call for a "new kind of worker" was a media exaggeration, but when I listened to this training manager, I realized that in the most successful manufacturing plants, the future has arrived:

Years ago, you were hired more for your muscles and your hands as opposed to your mind, but today, forget muscles and the hands. You need your thinking. . . We have a new policy for new hires that they have to pass an 8th grade equivalency test. . . and have to be adept at certain skills. . . and that's going to be a requirement in all industries, whether they have it now or not. . . they will, I guarantee you. . . start to establish it. I think some people are going to be left out. . . The old days were that you could get by without that required skill. . . but you can't today. You need to be able to use a computer, you need to be able to collect data, you need to be able to analyze data, you need to be able to write reports, you need to be able to write memos. . . regardless of what position that you have, whether you are on the plant floor or in any operation. . .

He believes business and education must devise ways to show students how their learning is applied in the "real" world. Although the manufacturing base in Massachusetts and other parts of our nation is

seriously eroded, we will always need manufacturing, for it "creates wealth."

We need to work together to share. . . information, to show students what is happening in industry today. . . I strongly feel we cannot all sell insurance and work in a restaurant. We need to work together with schools to let them know what we think will happen down the road in the future, so we can work together to develop curriculum, because it's going to be constantly changing.

When I asked him for specific ways business and education could cooperate, he suggested paid co-operative positions for students, plant tours, challenge grants, and donations of computer supplies. Although he believes school/business partnerships to date have "scratched the surface," he thinks we have not really made "a full dent in it."

How would he convince his colleagues in other companies that it is worthwhile to develop a relationship with the schools? What would be the return for them?

The return is continued growth and success. If we don't do something I really ultimately believe it could be economic collapse. I know that sounds like the sky is falling. . . but we are in an economic war with Japan and West Germany. . . and who knows, in five years, it could be China. . . We need to gather up all our resources and work together as one entity to be able to overcome these competitive challenges. The schools need us to provide for jobs to provide wealth so that we can employ people and other companies can employ people, the graduates. . . Obviously we need schools to educate those people, so obviously it's a very close relationship. I think that how we would do that is through networking with all the different organizations. . . It's amazing what's



happened. . . in the last five years. . . People are so willing to share information today about processes they've been successful with. . . we constantly have people coming in here, we're constantly visiting other companies. . . People are willing to share information we used to never share. As a result, we're all becoming more efficient companies. We can do the same things with the schools. We can band together in a network type of thing to express the need that we've got to get together and fight. It's economic survival.

## C H A P T E R VI

### ANALYSIS

Parents, educators, and civic and corporate leaders are concerned about the quality of contemporary education and its' impact on children. I believe these concerns are warranted. Our present education system does not adequately prepare children for the adult world and must be changed, but not necessarily in the directions indicated by reform efforts of the 1980s. (Farnham-Diggory, 1990, p. 1)

School reform typically means reassertion of traditional educational structures and reorchestration of the traditional roles participants are expected to play. (Farnham-Diggory, 1990, p. 4). Children in most of our schools can be thought of as trainees in a long-standing bureaucratic structure. Their primary job is to learn the role of "the pupil." What does that mean? John Goodlad noted some aspects of this role in his visits to schools:

Students listened; they responded when called upon to do so; they read short sections of textbooks; they wrote short responses to questions or chose from among alternatives in quizzes. But they rarely planned or initiated anything, read or wrote anything of some length, or created their own products. And they scarcely ever speculated on meaning, discussed alternative interpretations, or engaged in projects calling for collaborative effort. Most of the time they listened or worked alone. The topics of the curriculum. . . were something to be acquired, not something to be

explored, reckoned with, and converted into personal meaning and development. (Goodlad, 1984, p. 468)

Harry Gracey, after studying a middle class suburban school, wrote a poignant analysis of the children he observed. About 35 percent of them, he said truly identified with the student role. These were the children who conform to the classroom norms, attempt to excel in terms of these norms, and as a consequence become "good pupils." Being a "good pupil" takes on an important dimension in their developing self-images. Most often, there are more girls than boys in this category.

The majority of children, however, seem to comply with the teacher's requirements, without the enthusiasm of those who identify with the pupil role. These children will be the "average pupils" in that they will be "on grade level" in their achievement. They will comply with the requirements, but have no drive to put in an excellent performance. The school day has become a long, tedious ordeal for them.

Children in rebellion against the pupil role, either passively or actively, are usually referred to the school psychologist for testing. They generally test low in intelligence and ability, but this may be seen as part of their role rejection. They do not do well in class and they do not do well on out-of-class

aptitude tests; they are rejecting the entire school organization and all its parts. (Gracey, 1972, p. 177-179, 183)

Gracey was studying the kind of school education-conscious parents often seek for their children. Inner-city schools and schools in poor neighborhoods would probably have many more rebels and few students who identify with the pupil role. Gracey makes clear that even in what appears to be an ideal traditional school environment, children succeed only at tremendous cost to their own personal and intellectual development.

At best, the school reform efforts of the 1980s may produce a few more "good pupil bureaucrats." (Farnham-Diggory 1990, p. 4). The types of reforms that have been imposed, often by state law--longer school hours, stricter promotion requirements, basic skills testing--do not necessarily address the real problems in our education system. As James Hunt comments:

It is in imparting the higher-order skills of analysis and problem solving that constitute the 'learning to learn' skills that our schools face their greatest need for improvement. . . the stiffening demands of advancing technology will. . . mean that real opportunity, real chances for upward mobility, will increasingly be reserved for those with 'learning-to-learn' skills: not just the ability to read, write, and compute at a minimal level, but more complex skills of problem-solving, reasoning, conceptualizing, and analyzing.

Increasingly, people who have only today's [1983's] basic skills--or less than today's basics--will be consigned to economic stagnation. (Hunt, 1983, p. 16)

Acquisition of higher order skills serves to enhance not only the quality of individual students' lives but inevitably contributes to global problem solving.

Experts from all over the world met a decade ago at a conference in Rome to explore the complex issue of worldwide education. A report, "No Limits to Learning," was an outgrowth of this conference.

Participants agreed:

Humanity is entering a period of extreme alternatives. At the same time that an era of scientific and technological advancement has brought unparalleled knowledge and power, we are witnessing the sudden emergence of a "world problematique"--an enormous tangle of problems in sectors such as energy, population and food which confront us with unexpected complexity. Unprecedented human fulfillment and ultimate catastrophe are both possible. What will actually happen, however, depends on another major--and decisive--factor: human understanding and action. (Botkin, Elmandjra, Malitza, 1979).

The authors attribute the crisis primarily to the failure to provide appropriate kinds of learning opportunities for people. Most learning, they explain, is "maintenance learning," where students are taught how to maintain and perpetuate the status quo, by acquiring fixed outlooks, methods, and rules for dealing with known and recurring situations. Although

maintenance learning is necessary, it is not enough.

In addition, the authors say, there must be "innovative learning"--acquiring skills for dealing with new situations. Innovative learning has two main features: anticipation and participation.

Anticipatory learning prepares people to use techniques such as forecasting, simulations, scenarios, and models. It encourages them to consider trends, to make plans, to evaluate future consequences. . . Its' aim is to shield society from the trauma of learning by shock. It emphasizes the future tense not just the past. It employs imagination but is based upon hard fact. (Botkin, Elmandjra, Malitza, 1979, p. 12-13.)

One of the most significant contemporary trends is the near-universal demand for participation.

Participation is more than formal sharing of decisions; it is an attitude characterized by cooperation, dialogue and empathy. It means not only keeping communications open but also constantly testing one's operating rules and values; retaining those that are relevant and rejecting those that have become obsolescent. (Botkin, Elmandjra, Malitza, 1979, p. 13-14)

"Neither anticipation nor participation are new concepts by themselves. What is new and vital for innovative learning is the insistence that they be tied together." (Ibid) Without participation, anticipation becomes futile. When the resolution of a local issue depends on the broad-based support of some critical mass of people, for example, it is not enough that only the elite or decision-makers are anticipatory.

Participation without anticipation can be counter-productive and misguided as well.

Human learning, the accumulation of knowledge which has produced our modern civilization, is a social enterprise. It has never been the case that rows of individuals, sitting behind desks, have each been charged with solving the same problem to the same level of competence. To do so in schools is not only inefficient from the standpoint of finding solutions but exceedingly poor training for the real-world learning situations that await students after their formal schooling has ended. (W. Chagnon and W. Irons, 1979; R. Hinde, 1974; L. Tiger, 1970)

What kinds of learning experiences are "appropriate" for today's student? What sort of educational system would serve to foster the growth of "higher-order" skills? Some advocate working within the existing system, because many of the people who best know how to improve the system are already working inside it. The question is whether the rules and regulations of the existing school bureaucracy will permit these talented individuals to produce new educational models. Others have chosen to "break the mold" and create schools from scratch. As discussed in Chapter 2, Chicago's Corporate/Community School of America, financed with \$3 million in corporate and

foundation grants, is a not-for-profit coalition of business executives, educators, and community leaders working for substantial improvement in urban public education. (Szabo, 1991, p. 20)

Whether we choose to work within existing structures or develop entirely new models, there are certain concepts which should fuel our efforts toward change. New "schooling" should be based upon contemporary principles of cognitive and developmental science, for it is through these disciplines we have come to understand the operation of "higher order skills." A new type of schooling should carry forward in the spirit of Dewey's vision of building educational programs around occupations, but is informed by systematic analyses of the mental skills that occupations involve and by current research on the best ways of fostering these skills (Farnham-Diggory, 1990, p. 55)

Cognitive and developmental scientists, as well as educators, have been pondering for some time how to redesign classroom instruction. Recently, many of these ideas have been synthesized and advanced by Allan Collins and John Seely Brown in a series of publications concerning what they call "the second educational revolution." The first educational revolution, according to Collins and Brown, was the



onset of formal schooling. Children were moved out of workplace apprenticeship environments and into classrooms, where reading, writing, and mathematical skills were taught in relatively abstract formats.

The second educational revolution should reinstate certain apprenticeship principles that are now recognized as scientifically sound. The principles of the apprenticeship model are outlined by

Farnham-Diggory:

1. Human minds are designed for complex, situated learning.

Minds learn by constructing elaborate working-memory programs for dealing with important events over long periods of time. We can and do make sense of a swirl of events. We can and do learn to identify important goals cues and strategies. It is unnecessary for schools to chop learning experiences into small bits to be practiced over brief intervals. Formal education should begin, then, with students entering into complex, long-range learning situations that genuinely matter to them.

2. Experts must participate in the instructional program.

Human expertise is complicated, and much expert knowledge is tacit. In contrast to the behavioral objectives of traditional curriculum design, cognitive objectives are formulated from studies of experts on the subject at hand. Experts accumulate many different types of knowledge, not merely the declarative knowledge that constitutes so much of academic training. Experts themselves never stop learning and have efficient strategies for acquiring new information. Expert knowledge never stands alone but is always an integral, coordinated part of complex tasks. An expert demonstrates the context and ultimate purpose of learning in school.

3. Education must begin where the student is.  
Dewey's description of the child as the starting point of the curriculum is a key principle of contemporary cognitive and developmental science. Minds are not simply empty vessels that parents and teachers fill. Even young students' minds are active and complex, busily setting goals, noticing cues, and summoning knowledge that has already been acquired. All students entering a new domain of knowledge are, in fact, junior versions of experts. They have some of the frameworks and rudiments of every type of knowledge that experts have. For this reason, cognitive and developmental science emphasizes the importance of basing instruction on what a beginner brings to a learning situation.
  
4. Human learning is a social enterprise.  
The phrase "distributed intelligence" has been coined to describe the fact that expertise is usually a joint production. In the real world, few individuals are expected to know the same things to the same degree, as occurs in typical classrooms. To deal with the many problems that building a bridge involves, for example, contributions are needed from hundreds of individuals with different skills and levels of knowledge.

The apprenticeship system has been the basic mechanism for the transmission of knowledge since the dawn of humankind, and until recent centuries it remained the most fundamental form of education. With the advent of the 18th century's revolution in knowledge, production and industrialization, "learning" took on a new meaning. The growth of "declarative knowledge," or the knowledge of academic facts, was so rapid that formal educational systems were established to manage and disseminate this information. While there was a quickening of formal institutions for handling

knowledge, there was, at the same time, a fading of the apprenticeship aspect of learning. Eventually, the separation of knowledge acquisition and apprenticing was complete; apprenticeship, in its original form became extinct.

It is ironic, however, that declarative knowledge, or memorization of facts, is the main kind of knowledge that serves as the educational foundation for our society. Complex theoretical models of cognition, developed since the 1950s, distinguish five types of knowledge that appear to be qualitatively distinct from one another. They can be distinguished in terms of their characteristics and also in terms of how they are acquired. Although these five areas of knowledge are interrelated and not conceptualized as a continuum, some theorists suggest "declarative knowledge" or memorization of facts, is one of the more simplistic cognitive capacities.

I present this discussion of types of knowledge because I believe when we lost the apprenticeship model of education, we sacrificed an ideal medium through which we might inspire "higher order" cognitive skills. The four other kinds of knowledge, which I will outline briefly, seem directly applicable to apprenticeship-type experiences.

Procedural knowledge is skill knowledge, or knowing "how" to do something. It has to be displayed and is acquired by doing. Procedures are learned through practice, and with sufficient practice, procedures become automatic; they run themselves, and deliberately thinking about them may even disrupt them.

Conceptual knowledge is knowledge of general forms or prototypes, which can be categorical or schematic in nature. Concepts are not acquired declaratively. Conceptual knowledge comes into existence inductively, through personal, repeated exposure to examples.

Analogical knowledge is knowledge that preserves the patterned structure for information, as a visual memory does. It can come into existence only through the activation of the senses; it is a collection of sensory memories.

Logical knowledge is a personal theory of how something works, an explanation, a way of accounting for a phenomenon. Logical knowledge can be formal for someone like a trained scientist, but much logical knowledge has an informal structure. Logical knowledge, whether it is true or not, comes into existence only through personal reasoning. (These descriptions are based upon Farnham-Diggory's ideas, 1990, pp. 39-41.)

A student, sitting in a classroom reading a textbook or answering a multiple-choice test does not have many opportunities to develop this full spectrum of cognitive skills. Learning environments and instructional practices can be redesigned to include opportunities for students to acquire "higher order thinking skills." Co-operative learning, modeling, and coaching are a few of the concepts which have grown out of this search for a cognitive curriculum. Although these ideas are widespread, they have hardly revolutionized the system. "The school child of the late twentieth century is but a very small cog in an enormously complex educational machine that continues to justify itself primarily in terms of early twentieth-century theoretical concepts."

(Farnham-Diggory, 1990, p. 28)

As the co-op coordinator remarked earlier, education is famous for "reinventing the wheel." If we had been able to salvage some characteristics of the apprenticeship model, we may have avoided our present panic about our traditional curriculum's failure to inspire the thinking skills demanded by the modern workplace.

Within the past decade, a trend has developed which may provide a shortcut to the apprenticeship model: Business and education working together to save

our schools. The workplace, after all, gave birth to apprenticeship programs. When the workplace was abandoned as the basic educational environment and replaced by the classroom, we had what was mentioned earlier as "the first educational revolution." The return to the workplace instructional models augmented by principles derived from contemporary cognitive and developmental science is the basis of "the second education revolution."

School-business partnerships can provide a natural arena for the second revolution--for the transformation of traditional, Thorndikean educational environments into meaningful places that prepare students for the kinds of decision-making adults actually do.

Dr. Leonard Kaplan of Wayne State University maintains that "affect" stimulates higher levels of cognitive thought. (Kaplan, 1986, p. vi) The affective domain, according to Kaplan, consists of emotions, values, attitudes, appreciations, impressions, desires, feelings, preferences, interests, temperament, integrity, character, and aesthetics. Affective behavior is not an end product in itself, but a mechanism which deals with self-actualization and provides a vehicle for more productive thinking. (Kaplan, 1986, p. vii)

The affective domain is huge and complex. It can be arranged, according to Kaplan, as illustrated in figure 2.

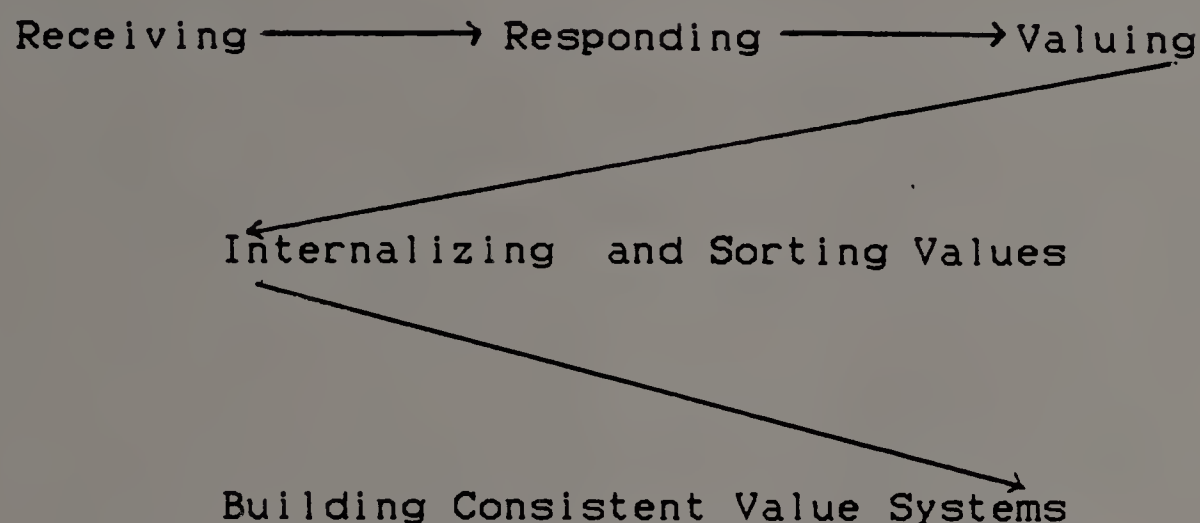


Figure 2

### Affective Domain

As seen by this outline, the continuum involves the ordering of phenomena from the simple situation of a child barely aware of any stimuli, to the time the child or adult can be described as having internalized a belief or value as part of his or her philosophy of life.

School/business partnerships which give students the opportunity to interact with "experts" in various fields and provide workplace experiences for young people contribute to the development of the "affective

domain" described by Kaplan. Through the opportunity to engage in authentic activities, students forge their own value systems. Many of the personal traits which employers say students should acquire through the school's "invisible curriculum" are affective in nature. In a National Academy of Science publication, "High schools and the Changing Workplace," some of the core competencies (in addition to mastery of academic subjects) employers sought in graduates were "dependability, responsibility, and adaptability." (From School to Work, 1990, p. 11)

Drawing upon this chapter's discussion of higher order thinking skills and affective behavior, I would now like to take another look at my own Culinary Arts/Food Services partnership project. If some of the principles of the apprenticeship model, cognitive skill development, and affective behavior can be applied to my modest project, perhaps these findings could be generalized to broader applications.

A person who is not an insider in a vocational/technical high school might ask why school/business partnerships are needed in such educational institutions. After all, students spend every other week in "shops" which simulate real-life work settings. At first glance, then, one could characterize the vocational high school as the only



educational enterprise that did not split formal aspects of learning from the apprenticeship mode of training. As the interviews with the Culinary Arts teacher and the student interns reveal, however, shops provide the formal aspects of learning in an atmosphere devoid of the vitality of a real-life workplace. The Culinary Arts teacher said in a real workplace setting, students are forced to be more aware of planning and pacing their work to accommodate the time schedule of the company. Cooperating, completing tasks, taking responsibility for actions, and practicing sanitation and safety skills, are a few of the characteristics the Culinary Arts teacher felt were more easily developed in the workplace setting. As the Director of Food Services pointed out, students experience peer pressure in the school setting and may have classmates who are negative motivators. In the workplace, however, there is more likely to be positive motivators, since, among many reasons, people do not want to get fired.

Students in classroom settings do not harbor such fears. On the contrary, many students enjoy getting kicked out of class, for they know they will either be sent to the principal's office or home. When students participate in the internship program, the Food Services Director noted "they want to do well. . . They want to fit in. . . so they make an attempt to fit in."

I do not believe this attempt to conform to the standards of the workplace is of the same nature as the conformity to the role of a "good pupil." Unlike the classroom, where success often means sacrificing one's own personal and intellectual development, the workplace internship allows social and intellectual skill development to emerge from the ordinary experiences of the setting. Although one intern had worked for four years in an Italian restaurant, he had never had the experience of working "in front of people." His "real" part-time job did not provide him with this essential social skill.

The young man who got the job at the pizza shop said he felt his background in Culinary Arts helped him get the job, but he also implied his true ticket to this part-time position had been the letter of recommendation written by his supervisor at our partner company. What did he "learn" from this experience? Referring to the earlier description of the five kinds of knowledge, we might say he formulated a concept (Letters of reference help get jobs) through a personal experience. If, in the future, he has repeated exposures to similar examples, he will generalize the concept and develop logical knowledge. (If a person is a good worker, he or she will create a favorable impression upon the boss. When it comes time to change

jobs, the boss will endorse this good worker.) This experience could also be generalized to the affective domain in the form of "work ethic" values.

One might criticize this analysis of cognitive and affective skill development in the workplace as oversimplified. After working for many years with children of poverty, however, I can assure the reader there are many children who do not understand basic concepts middle class families take for granted. The young woman intern in our partnership program received a lower grade than other participants because she failed to call her supervisor to say she was ill. Most middle class people would be hard pressed to imagine life in the twentieth century without a telephone. Indeed, more families than not seem to use answering machines, call waiting and other sophisticated devices to be sure not to miss a single communique. It is understandable that the supervisor may never consider the fact that some people do not have telephones, or do not speak English well enough to make a call. In our increasingly diverse workplace, however, managers must begin to reconsider the "status quo."

This is not to say we must develop a paternalistic attitude towards students or workers who fail to live up to certain expectations of the school or workplace. In the assertive discipline approach suggested by Lee

Canter, for example, teachers are urged to recognize a student is not helplessly driven to disobedience by circumstances such as a poor home environment. Once a student knows the rules, he or she can choose to either behave or misbehave. If misbehavior is chosen, certain consequences will, as students know, result automatically. The key to the success of assertive discipline (or conflict-free discipline as it is also called) is: 1) clear definitions of standards of expected behavior 2) clear understanding of these standards on the part of students 3) humane, sympathetic treatment of misbehaving individuals. (Farnham-Diggory, 1990, p. 151)

Unfortunately, in the workplace, nonconformity to standards is not approached so gently. If the young woman intern who failed to call her supervisor were working at a paid position she may have been seriously reprimanded or even fired. In the safety of a school/business partnership, however, this student was able to learn a valuable lesson without the devastating consequences she would have encountered in an actual job. If she had not participated in this internship program, the trauma of being fired for not calling in sick may have been a reality for her. As I said earlier, she will be nearly 20 years old when she graduates from high school and has never had a

part-time job. Where will she learn the affective behaviors necessary for successful employment? Certainly not in a school system that has no attendance policy.

As I mentioned earlier, this "freedom to fail" allows students to develop their own value systems through engagement in meaningful activities. The traditional method of trying to force students to behave responsibly has failed in many cases, particularly in urban settings.

The above example helps illustrate how school/business partnership programs can serve as "buffers" for students. Young people are allowed to practice real-life skills in real-life settings without actually blemishing their records. I suspect the young woman in the telephone episode learned she is responsible for relaying important messages whether or not she has a telephone. It occurs to me now we could have used this incident to help the student develop some higher order thinking skills. For example, we could have brainstormed ways of letting her boss know she was sick, in spite of the fact that her family members cannot communicate in English, and they do not have a telephone in their home.

These are the kinds of insights that will develop as we become more efficient at exploiting the

school/business connection. We are far from the vital, collaborative spirit of partnerships that is advocated by proponents of this movement. As things are right now, if a business organization wanted to collaborate with a non-vocational high school to develop a work/study program, a common approach would be to divide the program into two parts--an academic part handled by the school, and a practical part the business firm oversees. Typically, mastery of the academics is a prerequisite for entry into the job. There are however, very few connections between the academic material taught and the practical skills needed. It is usually assumed that widely applicable general knowledge is imparted in schoolrooms. In fact, school knowledge is fractionated into small, disconnected, declarative bits that are specific to particular lessons, teachers or tests. Similarly, job routines, especially for beginners, may also be fractionated. Since academic teachers and job supervisors--experts with years of experience--often find it difficult to work out the connections between the academic bits and the workplace bits, how can inexperienced students be expected to do so? It is much more likely that the academic training in such a work-study program might be almost totally useless from a practical point of view, except that it may instill

habits of conformity to daily routines. Worse, since academic training will have to be crammed into a shorter time frame, in order to leave room for workplace training, students in joint programs might risk learning even less in school than they are learning today. (Farnham-Diggory, 1990, p. 191)

If, however, an energetic, creative team from the school and the workplace, with a few outsiders and consultants, got together to design integrated work-study programs the results might be extraordinary. Suppose this team spent months exploring the kind of apprenticeship programs that would best develop skilled, adaptable citizens--students who understand that the job competency they were acquiring was intimately connected to the economy and culture in which they would soon be living as adults. Imagine the team had a free hand to group and schedule students in the most productive ways, rather than in the ways that best suited the convenience of previous managements--and that what was most productive also proved to be cost effective. Suppose experts from the workplace and experts from the school worked side by side with small groups of students, modeling problem-solving attitudes and inventiveness, demonstrating skills, and encouraging young people.

What might such a work-study program and such a school be like? (Farnham-Diggory, 1990, p. 192)

Farnham-Diggory's vision of exuberant school/business partnerships is eclipsed by her own experience of present-day schooling:

It is the first week in September. . . Stores are freshly stocked with book bags, calendars, pencil cases, soon-to-be sharpened pencils, and composition books. . . Through the windows of the elementary school, teachers can be seen busily arranging their rooms. School buses are being polished. A shared current of anticipation runs through everyone as the first day of school approaches. The town hums with it. The nation hums with it.

Within a month, the excitement will be over. In some hearts, it will never reawaken. The tedium will have set in. All too many students will have been told to disconnect--to turn off their minds and their experiences, and to replace them with an endless series of arbitrary exercises that will be counted, graded, and stacked. They will be serving as passive apprentices in an insular bureaucratic system, learning to play, more or less successfully, a role essential to the maintenance of the system--the role of "the pupil." They will almost never have the opportunity to serve as apprentices in the types of real-world problem-solving, decision-making systems that they will enter as adults. (Farnham-Diggory, p. 196)

The irony is we may have the expertise to fix our system, but the schools we have today are, sadly, the schools that most people want. They are the schools most teachers, parents, students, voters, legislators, policy makers, superintendents, principals, cafeteria workers, guidance counselors, school psychologists, textbook publishers, school bus drivers, and education



professors think we ought to have. Everyone has some complaints, but few question the basic structure of the schooling they remember from their own childhoods.

(The 13th Annual Gallup Poll of the Publics attitude toward the Public schools, 1983.)

In some respects, I am among those nostalgic about the schooling of my childhood; I am certain, however I was offered a richer curriculum than is available to students now. Although I attended a dilapidated elementary school in the heart of the inner-city, I had some of the advantages found today only in private schools. For example, I was offered French, with language lab reinforcement, from grade three. Although this course was available to only the "top" group in our class, I do recall our group being racially and ethnically diversified. Also, our teachers maintained a unit approach to learning. When we studied "the sea," in third grade, for example, all our learning activities were based upon concepts relating to the sea. We culminated the study of this unit by presenting a puppet show about sea creatures. I remember fashioning a sand dollar out of the cover of a glass canning jar which I covered with paper mache and painted. The love of the sea that was awakened in me by my third grade teacher has been with me all my life. I became somewhat of an expert in oceanography because

in third grade, someone helped me learn how to learn about the sea.

As an educator and a parent, I mourn the loss of what I once knew as the "vitality" of schooling. Struggling to teach high school students who read at a second grade level; encountering young cashiers unable to figure out change, waiting to be served in a store while the clerk talks on the phone with her boyfriend--these experiences, as a teacher and a citizen have made me question the social and intellectual capabilities of those young people on the verge of entering our workforce. It is not enough to just complain. I wanted to do something to positively influence the course of the future for some of our youth.

With this dream of making a difference, I embarked upon my search for school/work connections. I have related the ups and downs of establishing a school business partnership, almost entirely on my own. What evolved was certainly far from the ideal school/business collaboration envisioned by Farnham-Diggory. A snowstorm nearly aborted my meeting; most corporations did not follow through; we had a major miscommunication about student age for work; and student behavior was sometimes unpredictable. On a personal level, I struggled with the issues of my

"role" in this program, and I worried about infringing upon other faculty members' territory. I had to find a bit of time in my own hectic schedule to call employers, set up meetings and visit work sites. Sometimes I would be on the phone with a business person during a short break between my classes. The bell would ring for the next class, but I would not want to offend the person on the other end of the line by ending the conversation abruptly. I would then be late for class, modeling a negative behavior for my students. Although I often had permission from the principal to leave school grounds during my preparation period to meet with the Food Services Director, my colleagues resented my occasional freedom. In fact, some colleagues openly expressed their belief that I was engaged in a conflict of interests.

Although the Food Services Director fully embraced the idea of internships for Culinary Arts students, I did most of the planning. We enjoyed a very open, respectful relationship, but certainly not one in which we worked "side by side, modeling problem-solving attitudes and inventiveness." Often I felt as if the corporation was fulfilling its' civic duty to help the schools, but there was a limit to how deeply any one individual in the company would get involved. People are busy. It takes vital, committed individuals to

establish and fulfill long-term goals. Corporations often engage in planning for the short-term only. Many well-intentioned projects end up in a file folder somewhere. Much corporate fanfare in the beginning of a project disappears as time goes on, and one realizes that business concern was merely for public relations, not education.

Would I do it again? To quote one of the young interns, "Most definitely." I did help to effect some change, however small, in the experiences of three, by middle-class standards, 'disadvantaged' young people. The next group of interns is presently preparing to go over to the corporation for their on-the-job training in food services. Some of the students who will participate this time are the ones who were too young last year, and they are excited to have a second chance.

The interconnectedness of things, as I learned in the third grade unit on the sea, is inevitable. We may not be able to uncover the specific cognitive and affective behaviors students gain through participation in apprenticeship-type programs. Perhaps the changing world and workplace require that education finally move away from Thorndike's theory. He proposed that anything that exists, exists in some amount. It follows then, there is always a way to measure it.

Once a measurement is made, it can be used to formulate scientific predictions. With a theory of what goes into a student in the classroom and what comes out, Thorndike created a "science" of education. This quantitative approach served us well in the early 1900s, when amidst the frenzy of the industrial age, we began to run our schools like factories. Many aspects of schooling we all take for granted today were transferred directly from machine shops to classroom. Most of those machine shops, however, have changed dramatically. At a conference recently, a speaker from a local paper company opened his remarks by showing the audience a "flintstone." He said this rock, found commonly in the nearby river, was used in the process of making shiny colored paper, by spreading pigment and wax over plain paper. This method of production yielded 2 reams of paper (833 feet) in one work shift, or 1,600 lineal feet per day. Today, the company's machines for making shiny colored paper can produce about 1,500 lineal feet per minute, while producing other products at the same time. The old machine had two buttons; a red one to stop it, and a green one to make it go. The control panel on the new machine is so complex, he said, it resembles something you would see in a space shuttle. Education has changed dramatically even in relation to manufacturing. Researchers are

saying the average worker reads more on the job than he or she read in school. The army now requires recruits to read at a seventh grade level. Three employment officers to whom I have spoken recently told me they face piles of applications from unqualified candidates. In the paper company I referred to earlier, there were fourteen jobs waiting to be filled. How could that be the case during these recessionary times?

Somehow, our quantifiable system of education that worked well in the early days of manufacturing is failing us as we enter the era of computer-based technologies. Of course, changing demographics and burgeoning social ills contribute to the complex of problems facing our schools. In the final analysis, however, it is always the institution "school" that is held accountable for the ultimate education of the citizenry. If the concept of schooling could be expanded to incorporate the workplace and the world in general, perhaps a new order of "educated" individuals would evolve. We cannot hang back, in our Thorndikean tradition, waiting until we can quantify the results of school/business partnerships. As the seasoned Coordinator of Cooperative education noted, we are not dealing with "widgets" you can reject and throw away if faulty. What we are dealing with is the highly sophisticated mechanism for acquiring knowledge, the

human mind. Emerging from contemporary research in cognition and development is a new picture of that mind. We must begin to understand how cognition evolves, then apply our knowledge of the mind's processes to our instructional programs. I have suggested that apprenticeship programs, through their experiential nature, can foster growth of cognition.

As educators, we are also dealing with what one might call character, spirit, or moral development--those ineffable characteristics that dwell within the affective domain. I have also suggested that opportunities for students to participate in real-life work settings allow students to "try on" various affective behaviors, hopefully keeping those which will contribute to fuller participation in the workplace. Once we moved education from the workshop to the classroom, we concluded academics must be learned first and then generalized and applied to occupations. The issue of the integration of theory and practice and transfer of learning is as old as the history of western education. Yet, a closer look at the 'what comes first' dilemma, reveals academic disciplines traditionally grew out of efforts in dealing with practical problems. Formal schooling must be validated as a viable experience for young people of the nation. Education should not only prepare, but

also integrate them into the world of human experience, which is principally the world of the workplace.

School/business partnerships that promote real-life apprenticeship experiences can inspire "cognitive apprenticeships," in the workplace of the mind and help create schools where people go to develop skills in learning to learn, problem solving, and the creative application of ideas. (Farnham-Diggory, 1990, p. 56)



C H A P T E R    V I I  
S U M M A R Y   A N D   C O N C L U S I O N S

Summary

In this dissertation, I have attempted to show the viability of school/business partnerships as one aspect of revitalizing public education.

I initiated a collaboration between the Culinary Arts Department of a large, urban vocational/technical high school and a local food services organization and have reported and analyzed the outcome of my efforts in the form of a case study.

The groundwork for the project entailed canvassing local hotels, hospitals, colleges, and other food services providers to determine the level of interest in Culinary Arts school/business partnerships. The proposal for a student internship program was presented to the business community at breakfast meetings held in the school-run restaurant. Although initial interest in the partnership plan was high, in the end, just one corporation made a firm commitment to work with us. This organization proved to be an ideal partner, particularly since it had many unique qualities that other food services providers lacked. It is one of the largest corporate dining facilities in New England. Because the company subsidizes meals as an amenity to

employees, the dining services department is not under great pressure to realize a profit, and kitchen staff is more inclined to take the time to teach students. Interns can rotate each week to a different food production area: the on-site bakery, deli and salads, hot foods, and serving. Most importantly, the partner corporation is located directly across the street from the school, eliminating the problem of orchestrating transportation for student interns.

From my initial idea of establishing internship opportunities for the shy adolescents who served customers in the vocational school's restaurant, to the actual inception of the partnership program, a period of almost three years passed. During this time, I maintained detailed fieldnotes and journals which later served as a basis for analysis and assessment of the partnership experience.

Student interns were chosen by their Culinary Arts teacher on the basis of attendance, grades, work habits and attitude. While students worked in the dining services department of the corporation, I monitored their progress through informal conversations with interns and their bosses.

At the end of the first phase of the program, I interviewed student participants, the food services director of the partner corporation, the culinary arts

teacher, and the coordinator of cooperative education. I later transcribed these interviews and used them as part of the data for the case study.

All three student participants interviewed had a positive experience in the program. One young man obtained a part-time job after school because of the good recommendation he received from his supervisor. Although the second young man had had a part-time job in a restaurant for four years, his experience there had been confined to the back kitchen. In the corporation, he worked "in front of people," and he felt this opportunity had enhanced his personal skills. The young woman in the program practiced her English skills with adult co-workers and hopefully learned a valuable lesson about notifying her employer when she is ill. all three interns said they felt independent and mature in the workplace. Supervisors trusted them to work alone and did not check on them repeatedly as their teachers might.

The food services director noticed students tried to fit in and do a good job, since the adult employees served as positive motivators for these young people. Other corporations should consider adopting an internship program, he said, because the costs to the company are small, but the rewards can be great. Aside from the "extra pair of hands" an intern provides,

students can also enhance the quality of work life for adult employees, who welcome the chance to serve as mentors to adolescents. The partnership program can inspire a healthy, intergenerational atmosphere in the organization.

The Culinary Arts teacher also lauded the benefits of the internship program. Even if students do not gain new skills related to their shops, he said, they develop traits which are essential for full participation in society.

The coordinator of cooperative education agreed that the "hands-on" experience of internships teaches students social interaction skills which are impossible to replicate in a traditional school setting.

The message most clear in all the interviews is that internship program promote the development of the kinds of skills employers seek in the workforce of the 90s. Some researchers describe these behaviors as "affective," other categorize them as "higher order cognitive skills." If our projections about the workplace of the future are accurate, employees will be expected to possess much more than a minimal level of literacy. They will be called upon to problem solve, reason, conceptualize, analyze, anticipate and participate. Chances for upward mobility will increasingly be reserved for workers who have mastered

these learning-to-learn skills. Also, if the present recession continues, students who have had internship experience will definitely possess an advantage over those who have not, as they face an increasingly competitive job market.

Drawing upon the ideas of John Dewey, Jean Jacques Rousseau, Johann Pestalozzi, and others, I conclude that developing the ability to use traditional academic content in practical applications and decision-making and, at the same time, allowing concepts to arise from the context of life activities should be the focus of our education curriculum. Vocational education should no longer remain as an alternative to academic training. Instead, the reunification of the academic and apprenticeship models should lead to revitalization of the American systems of education and employment.

### Conclusions

The American economy is at risk, suffering from a rising tide of mediocrity in its' most valuable asset: a skilled workforce.

Managers and personnel officers lament that today's young workers are woefully unprepared to meet on-the-job challenges and to adapt quickly to the changing workplace needs of a post-industrial,

knowledge-based economy ("America's Leaders Speak Out," NAB Report, 1989, p. 3).

The problem is most acute at the entry level, where the overall number of youths entering the job market has been declining, and the pool of applicants increasingly comprises high school drop-outs, ill-prepared high school graduates, and immigrants with limited English skills. Many youthful applicants, particularly in the city, bring with them the legacy of poverty and disillusionment.

This present set of economic and demographic circumstances means that "for the first time in the history of our nation, we no longer have the luxury of any throwaway children." (NBA Report, 1989, p. 3)

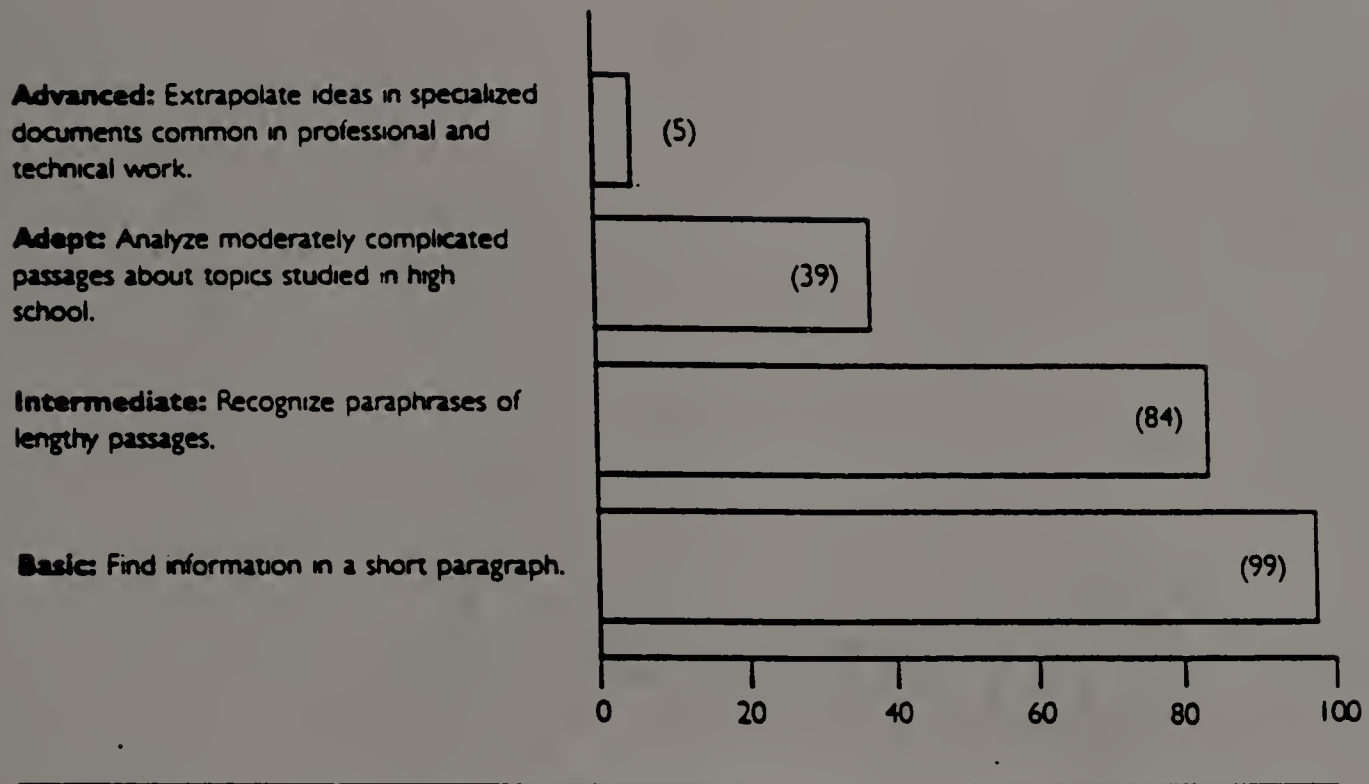
Ill-preparedness for the workplace is a problem limited not only to the disadvantaged; increasingly, American businesses are finding today's "average" student is far below par. As measured by the Young Adult Literacy Study conducted by the Educational Testing Service, from a third to a half of young adults fail at tasks considered only moderately complex, such as identifying information on a graph of energy sources. This assessment found practically all high school graduates (who do not have postsecondary degrees) can do well on simple simulation tasks involving prose, documents, and quantitative problems.

However, large proportions of young adults were unable to perform what are only moderately sophisticated tasks such as synthesizing the main arguments from a lengthy newspaper column, and determining from a menu the cost of a meal and calculating the change one should receive. We do not have a significant problem of "illiteracy" among high school graduates, but large proportions of these graduates are "low-level literates" ("From School to Work," 1990, p. 28). (See Figure 3 for similar analysis.)

The dropout rate is up in at least 30 states; nationwide, almost three out of every 10 students fail to finish high school. Scores on two major college admissions tests have leveled off in recent years, with many states showing declines. On an international level, the performance of American students is even more dismal. In recent science and math tests, students in struggling nations like Poland and Hungary performed better than our students, whose test results were on the same level as Thailand's.

In the 1980s, America was awakened to its education crisis by a series of reports showing American workers ill-equipped to meet the skill demands of American employers and ill-prepared for the high-tech, service-oriented future. According to these reports, most notably the Hudson Institute's "Workforce

**Percentage of In-School 17-Year-Olds at or Above Various Reading Proficiency Levels**



Source: National Assessment of Educational Progress. *The Reading Report Card* (Princeton, NJ: Educational Testing Service, 1986), 16-17, 27.

**Figure 3**

**Reading Proficiency Levels of 17-Year-Olds**



2000," and David Kearns's book, Winning the Brain Race: A Bold Plan to Make Our Schools Competitive, America faces not only an education crisis, but also a skills crisis.

According to two important new studies, however, "America's Choice: High Skills or Low Wages," by the Commission on the Skills of the American Workforce, and "The Myth of the Coming Labor Shortage," by the Economic Policy Institute, America does not face a skills shortage in the sense that skill requirements of jobs exceed the skills of American workers. The U.S. faces, instead, a shortage of skilled, highly productive jobs capable of providing future income growth for the average, non-college bound American (Tyson, Marshall, Kasarda, 1990, p. 26).

Within this collection of reports there is a fundamental disagreement about the demographics of the future and the impact shifting societal trends will have upon the workplace. Regardless of which analysis we accept as "correct," we can find points of intersection in both arguments. Perhaps the reason for improving workforce skills should not be to "match" the skills required for an improbably future explosion of professional-technical and high-skill jobs, but rather to provide a solid base of workforce quality from which widespread upgrading of job content can be pursued.

Upgrading the skills path of the workforce as a whole should be our national priority. Yet, the greatest problem employers now face is "the quality of content of education received by most [workforce] entrants, minorities and whites, may not provide an adequate basis for future technological innovation and productivity growth" (Mishel and Teixeira, 1990, p. 65).

The nation's educational system is essential to the development of worker competence and company competitiveness. High-productivity work-place organizations depend on workers who can do more than read, write and do simple arithmetic, and who bring more to their jobs than reliability and a good attitude. In such organizations, workers are asked to use judgement and make decisions rather than merely follow directions. Management layers disappear as workers take over many of the tasks others used to do--from quality control to production scheduling. Tasks formerly performed by dozens of unskilled workers are turned over to a much smaller number of skilled individuals. Often, teams of workers are required to monitor complicated computer-controlled production equipment, to interpret computer output, to perform statistical quality control techniques, and to repair complex and sensitive equipment (Tyson, Marshall, Kasarda, 1990, p. 27).

Tasks such as those described above require higher-order language, math, scientific and reasoning skills American's K-12 education system is not providing.

The prospects for our non-college bound students are grim. The Commission of Work, Family and Citizenship in its' report, "The Forgotten Half," expressed concern for these students in this way:

Non-college bound youth who complete high school have been saddled with the thoughtless expectation that they will readily 'find their place' and need not be of further concern to the larger society. ("From School to Work," 1990, p. 4)

In the United States, the institutions of school and those of work are separate and almost always far apart ("From School to Work," 1990). Early efforts were made to connect school to work. In the 1900s, public education in America was in the middle of a massive effort to make a free K-12 education the birthright of all American youngsters. At the time, there was an obvious need for alternatives to the traditional college-prep program offered by secondary schools. In 1906, an organization called the National Society for the Promotion of Industrial Education was established. Its efforts focused upon providing non-college bound youths with the vocational skills required for entry-level jobs. These skills could be taught at the secondary school level, with representatives of the private sector serving in an advisory capacity (Hoyt, 1991, pp. 450-451). This collaboration between industry and education might be

viewed as America's first "school-business partnership."

Unfortunately, these initial efforts to integrate the classroom and the workplace evolved into the nearly total separation of academic and vocational education we see in today's high schools. "head and hand have never been farther apart" (Rosenstock, 1991, p. 434).

Vocational programs have become a "dumping ground," and both the teachers and the students in these programs often have the lowest status in a school system. Vocational students are traditionally relegated to "working with their hands," with minimal and diluted academic content, as the system fulfills its' prophecy of their limited potential (Rosenstock, 1991, p. 434). Often vocational education teachers come from different social strata than those who teach, for instance, physics or American literature. Almost everyone understands the "class-sorting function" of vocational education. Although they would use different terms, even 14-year-olds understand it (Rosenstock, 1991, p. 434).

From the beginning, vocational education has been class-specific--targeted at those destined for non-professional work. Because the curriculum of vocational education reflected a cultural bias against those who perform non-professional work, it came to be

viewed by many not as a source of opportunity, but as an irreversible path to second-class occupations. Many educators and parents alike worried about students making the early--and in their view, limiting--career decisions implied in selecting a vocational education program. This image has persisted until today (Gray, 1991, p. 438).

Recent national economic goals have created a renewed interest in vocational education. If, as one goal for education states, by the year 2000, "every adult American will be literate and will possess the skills necessary to compete in a global economy," the logical place to start is in the integration of academic and vocational principles. Although it may take some time for vocational educators to internalize the new respect for their occupations, researchers are lauding vocational education as "an instructional modality" (Gray, 1991, p. 442).

As Gray writes:

Jean Jacques Rousseau's Emile, written in 1762, tells the story of a boy who developed great wisdom through discoveries gained not from formal education but from practical interaction with his environment, including learning carpentry. The Swiss educator Johann Pestalozzi translated Rousseau's theme into the instructional practice of learning by doing or learning through discovery, which in turn greatly influenced John Dewey and became the basic rationale for the development of the manual arts movement in the American high school. Somewhere along the way, however, the idea of learning by doing or learning

through discover was relegated to vocational education and stripped from most of academic education (Gray, 1991, p. 442).

Efforts to develop "applied knowledge," defined as the ability to use traditional academic content in practical application and decision making, have been absent from most high school curriculum other than vocational education. Even vocational education, in its' traditional state, does not provide opportunities for participation in real-world workplace experiences.

Cognitive researchers are beginning to question our education system's separation of learning and doing. Their findings suggest that teaching academics in a rote, sequential manner, devoid of any practical application, is ineffective; the current distinction made between learning for knowledge and learning for doing is contrary to learning theory and detrimental to instructional effectiveness (Gray, 1991, p. 442).

The notorious inability of American students to perform well on any type of problem-solving assessment supports this contention, as does the failure of the lecture method of teaching, particularly in the inner-city schools. These developments have lead to a renewed interest in the potential of vocational education instruction as a method to develop "applied knowledge" in all students.

In a study conducted as part of the national Assessment of Vocational Education, John Bishop found that participating in vocational education had statistically significant positive effects for disadvantaged youths. Significant labor market advantages were found only when these youth took at least a four-credit vocational education program and found employment related to this field. This evidence suggests acquiring occupational skills can make a difference, and basic academic skills alone do not provide labor market advantages.

New federal legislation, the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990, shifts away from the traditional job-skills orientation of vocational education toward the broader purpose of using vocational education as a vehicle for learning academic and other kinds of thinking skills and for linking thought with action (Wirt, 1991, p. 425).

Vocational educators and others are being challenged to begin to construct a vocational curriculum that contributes much more than it now does to the development of students' thinking skills. To effectively prepare the workforce of the future, vocational education must become part of the thinking curriculum (Wirt, 1991, p. 425).

Business can contribute to this "thinking curriculum" by forming partnerships with schools. The range of business involvement with public education varies from "adopting" schools, to setting up centers and issuing reports, to investing millions of dollars in individual programs aimed at fostering school reform. Although these efforts are admirable and much appreciated by educators, critics suggest they will not bring about the fundamental changes the business community says are needed.

An essential role for business in the reform of education is emerging. At a meeting in December, 1990, work began on the creation of a youth apprenticeship program for the United States. Modeled after the apprenticeship systems in Germany and other European countries, the proposed U.S. system would allow older teenagers to combine school and work in structured, integrated environments which provide opportunities to learn broad knowledge and applied skills (Lewis, 1991, p. 420).

True, about 70 percent of seniors in public high schools in the U.S. already hold at least part-time jobs. As Stephen Hamilton of Cornell University told the crowd at the apprenticeship meeting, "We send our kids to work, but we don't expect them to learn anything." In Germany, by contrast, work is learning.



As Hamilton noted, in our country, "studenthood is passive," while in Europe young people mature by working with adults rather than solely with their peers (Lewis, 1991, p. 42). Because of the breakdown of traditional institutions, adolescents today spend inordinate amounts of time either alone or with peers. Some researchers believe children do not learn essential skills from their contemporaries.

As I read the recent literature on school-to-work transition, cognition, and apprenticeships, I am convinced that the school-business partnership I established is a more worthwhile endeavor than I realized. When I initiated the collaboration between the Culinary Arts Department in a large urban high school and the Food Services Department in a major corporation, I was not familiar with the research in cognitive studies that shows "providing students with real problems to solve in context is essential if they are to develop more complex modes of thinking and using knowledge in solving problems. This approach can also spur motivation to learning" (Raizen, in Wirt, 1991, p. 428). My motivation to establish a school/business partnership for the Culinary Arts shop came one day when I was dining in the school-run restaurant. As I said in Chapter 1, a teacher/customer asked a student/witness for "silverware." The student

obviously did not understand this request and stood silently with a look of confusion on her face.

Sensitive to students' vocabulary difficulties, the teacher then asked specifically for a "fork" and "knife," and the student obliged, smilingly. This incident troubled me. I wondered how these students, who moved so slowly and self-consciously around the restaurant, and who were barely able to write an order, would ever survive in the real world. I concluded if students had a chance to "practice" problem-solving skills in an actual workplace, in addition to the "contrived" environment of a vocational shop, they may be more prepared for participation as citizens in our increasingly complex society. School/business partnerships which allowed for internship or apprentice-type experiences would help to provide students with a broader range of personal, intellectual, and work-related skills than is currently--or probably ever could be--developed in academic classrooms and vocational shops (Wirt, op. cit., p. 428).

I started with a vision of many partnerships for the Culinary Arts Department, hoping to make linkages with hospitals, colleges, restaurants, hotels, and other food services providers. Experience taught me it is best, when working almost alone, to start small.

Trying to connect with many different organizations, each with its' own management style and culture, may dilute your efforts. Of course, you have to canvas the field to determine the level of interest, but once you realize certain businesses are not sincerely committed to the partnership effort, it is probably wise to move one. Or, as the Director of Food Services suggested, it may be time to develop a more effective marketing strategy. Clarifying goals and expectations, and establishing parameters for evaluating the partnership are steps to be taken long before students move from the classroom to the work site.

Although our project resulted in a "mini" pilot study, the outcomes were, as outlined in the previous chapter, positive for all involved. Now that we have ironed out many of the problems in setting up this Culinary Arts/Food Services partnership, we can begin to focus upon ideas for enhancing our efforts. For example, if a particularly strong bond develops between a student and a worker, perhaps a mentorship relationship could continue after the internship experience has ended. In the spirit of community college cooperative programs, we could assist students in writing "field experience reports" that help interns to analyze the structure and operation of the facility in which they are employed. Incorporation of reading,

writing, and reasoning skills into the apprenticeship experience can serve to further enhance the cognitive gains of students in internship programs.

Peter F. Drucker, often called the father of management, has written 23 books on the subject. In a recent issue of Psychology Today, however, Drucker's article was entitled, "How Schools Much Change:"

To begin with, nothing in our educational systems at present prepares us for the reality in which we will live and work. Our schools scorn the real world of work. And they have yet to accept that the majority of Americans already make their living as employees in sizable organizations. No educational system, not even the graduate business schools, tries to equip students with the elementary skills of effectiveness as members of an organization. These include: the ability to present ideas orally and in writing, briefly, simply, and clearly; the ability to work with people; the capacity to shape and clearly; the ability to work with people; the capacity to shape and direct one's own work, contribution and career by making an organization a tool for the realization of one's aspirations and values. What's more, our schools have not yet begun to produce student show ar technologically literate--in a broad sense of having some understanding of the way the world around us functions (1989, p. 19).

Most applicable in Drucker's statement are these words:

This will begin to change as internship programs become a regular part of the curriculum at secondary schools and universities. In this way, employers will assist in training people they will need in the future and students will gain genuine understanding of what they want to do and what they can do in life.

Leaders in both management and education recognize vocational education must no longer remain as an alternative to academic training. The economic transformation vital for the health of the American way of life into the 21st century might be brought about by a revitalization of our schools through the reunification of the academic and apprenticeship models.

APPENDIX A

LESSONS I LEARNED FROM THIS PARTNERSHIP

## LESSONS I LEARNED FROM THIS PARTNERSHIP

1. Be prepared to be disappointed. Initial interest in a project may be great, but few businesses will make a firm commitment to cooperate.
2. Target one or two institutions willing to provide internship slots on an on-going basis.
3. Target caring, reliable individuals within the corporation and work through them.
4. Delineate clearly the roles and authoritative responsibilities of all involved.
5. Maintain coordinators for the project in the school and in the corporation.
6. Involve those who will be working most closely with student interns in the entire process.
7. Build some form of evaluation of the project into the program.
8. Know what outcomes you are capable of measuring, and agree to measure only that which is within your ability to measure.
9. Don't expect miracles from business. This is one small area where business can effectively use its' resources to enhance school effectiveness.
10. Don't feel the project must continue at all costs. Sometimes programs outgrow their effectiveness.

11. Don't be too rigid about expectations and outcomes. Allow for flexibility in relationships with business.
12. Be sensitive to the concerns of unions. In a tight job market, if a company takes on student interns, regular workers may be displaced.



APPENDIX B

THE STUPIDIFICATION OF AMERICA

## The Stupidification of America

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  - 8 "The Myth of the Labor Shortage: Jobs, Skills, and Incomes of America's Workforce 2000," by Lawrence Mishel and Roy A. Tolcin, Economic Policy Institute, June 18, 1990.
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  - 10 "The American Media: Who Reads, Who Watches, Who Listens, Who Cares," Times Mirror Center for the People and the Press, July 15, 1990.
  - 11 "Urban Industrial Transition and Workforce Skill Mismatch: the US, UK and FRG," by John Kaniska and Stephen J. Appold, Center for Competitiveness and Employment Growth, Kenan Institute of Private Enterprise, The University of North Carolina, June, 1990.
- Percentage of children who attend public school in the US: 88.5<sup>1</sup>
  - Percentage of children in Japan who attend public school: 86<sup>2</sup>
  - Percentage of GNP spent on Grades K-12: Sweden: 7.0; Japan: 4.8; West Germany: 4.6; US: 4.1<sup>1</sup>
  - Percentage enrollment of national population in K-12: Japan: 20.1; US: 19.7; Sweden: 18.0; West Germany: 14.9<sup>1</sup>
  - Percentage enrollment of national population in higher education: US: 5.1; Sweden: 2.6; West Germany: 2.5; Japan: 1.9<sup>1</sup>
  - Percentage of high-school graduates prepared to do college-level work: US: 5; UK, Germany and France: 17-24<sup>4</sup>
  - Wages on the average per hour, in dollars: Germany: 18; Sweden: 16.82; US: 13.92; Japan: 12.72<sup>5</sup>
  - Number of children who bring a gun to school a day in the US: 135,000<sup>6</sup>
  - Percentage increase in spending on education in the US after inflation in the 1980s: 29<sup>7</sup>
  - Amount slated for education in 1990 in the US: \$350 billion<sup>7</sup>
  - Number of US students who drop out of high school each year: 600,000-700,000<sup>7</sup>
  - Percentage of US students who drop out of high school each year: 20<sup>5</sup>
  - Percentage of some inner-city students who drop of high school: 50<sup>1</sup>
  - Percentage of students in the 10 largest school districts in the US who are black or Hispanic: 70<sup>7</sup>
  - Percentage of young Hispanic adults who cannot read or understand high-school material: 40<sup>7</sup>
  - Percentage of Hispanic students who dropped out of high school in the 1980s: 30-40<sup>7</sup>
  - Percentage decrease in real wages for young black men between 1979-1987: 22<sup>8</sup>
  - Percentage decrease in real wages for young white men between 1979-1987: 10<sup>8</sup>
  - Number of children in adult jails a day in the US: 1,629<sup>6</sup>
  - Number of Americans who lack basic literary skills: 27 million<sup>7</sup>
  - Number of Americans who are functionally illiterate — unable to read well enough to perform effectively in the work place: 45-50 million<sup>7</sup>
  - Percentage of young Americans who could find Europe on a world map: 1947: 45; 1988: 25<sup>9</sup>
  - Percentage of Americans who correctly identified that President Bush does not like and will no longer eat broccoli: 78<sup>10</sup>
  - Percentage of Americans attentive to political changes in the Soviet Union: 12<sup>9</sup>
  - Percentage of US labor force that graduated from high school: Women: 91.1; Men: 86.5<sup>8</sup>
  - Percentage of US labor force that graduated from college: Women: 28.2; Men: 25.2<sup>8</sup>
  - Percentage of present American jobs that will not require a college education by the year 2000: 70<sup>8</sup>
  - Rate of increase in "substantive complexity" of jobs: in the 1960s: .89 percent; 1970s: .46 percent; 1980s: .28 percent<sup>8</sup>
  - Percentage GDP accounted for by services in the US: 1965: 57; 1987: 68<sup>11</sup>
  - Percentage gap in wages between white-collar professionals and skilled tradespeople: 1975: 2; 1990: 37<sup>5</sup>
  - Percentage wage gap between professionals and clerical workers: 1975: 47; 1990: 86<sup>5</sup>
  - Percent of increased wage gap attributed to the fall in wages of the non-college-educated: 66<sup>5</sup>

APPENDIX C

SAMPLE LETTER TO EMPLOYER

## SAMPLE LETTER TO EMPLOYER

January 22, 1990

Dear Ms.

It was a pleasure speaking with you recently, and I appreciate your consideration of the possibility of a partnership between the \_\_\_\_\_ High School Culinary Arts Department and the Food Services Department at \_\_\_\_\_.

As we discussed, I am enclosing a flyer that you can forward to the members of your Food Services Department. We are planning a breakfast meeting for the end of February. As an added treat, Professor \_\_\_\_\_, a well-known authority on school/business partnerships, will be present to answer any questions. We hope that a representative of the \_\_\_\_\_ will be able to attend.

Thank you for your interest in \_\_\_\_\_. I will send you more details about the breakfast meeting soon.

Sincerely yours,

Marlene J. Gentile

APPENDIX D  
FIRST MAILING TO CORPORATIONS

First Mailing to Corporations,  
February, 1990

. . . . BREAKFAST IS SERVED!!

The food service industry will need future workers, and our Culinary Arts graduates will need jobs. In order to be certain that our students are prepared to meet your standards, we need your input. With a clear understanding of your needs High will be better able to create a superior workforce.

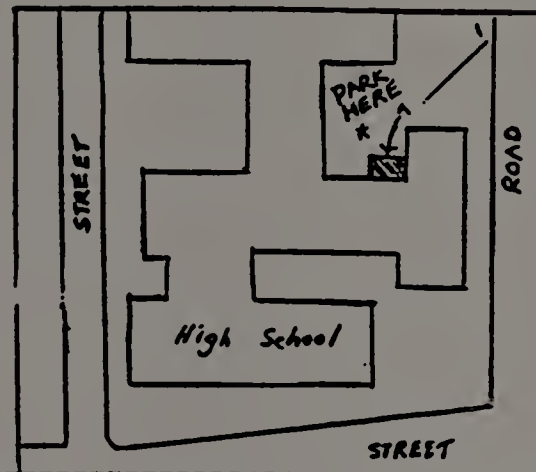
PLEASE JOIN US .

DATE: TUESDAY, MARCH 6, 1990

TIME: 7:30 A.M.

LOCATION: HIGH SCHOOL RESTAURANT

SPECIAL GUEST: PROFESSOR  
Author of



-----  
REPLY FORM

PARTNERSHIP COFFEE HOUR

- I will attend
- I will not attend
- I would recommend our colleague

\_\_\_\_\_  
Colleague's Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Address

\_\_\_\_\_  
Phone

Return to: Marlene Gentile

## AGENDA

PARTNERSHIP COFFEE HOUR  
TUESDAY, MARCH 6, 1990

7:30-8:45 a.m.

7:30-7:45

WELCOME (Marlene Gentile)  
INTRODUCTIONS

7:45-8:05

SCHOOL SPEAKS

DESCRIBE GOALS AND COMMITMENTS OF SCHOOL  
\*Questions and Answers

DESCRIBE CO-OP PROGRAM  
\*Questions and Answers

DESCRIBE CULINARY ARTS PROGRAM  
\*Questions and Answers

8:05-8:25

BUSINESS SPEAKS

- \*What is the state of the industry?
- \*What skills are employers looking for?
- \*Would partnerships work?
- \*How can the school and Food Services industry work together?

8:25-8:40

NEXT STEPS (professor)

- \*Where do we go from here?
- \*Who is willing to continue to work with us to create a viable partnership by Fall, 1990?

APPENDIX E  
SECOND MAILING TO CORPORATIONS



PLEASE JOIN US FOR COFFEE AGAIN!

Second Mailing to Corporations  
May, 1990

In March, some of us met (in spite of a huge snowstorm) to discuss the possibilities of a partnership between the High School Culinary Arts Department and the Food Service providers. Since many of you wished to continue the dialogue, we have arranged another meeting. We plan to present a proposal outlining a plan for our students to be placed in cooperative and work-study positions in your businesses during the fall of 1990. Won't you participate in this win/win effort--work experience for Culinary Art students and prospective trained employees for you.

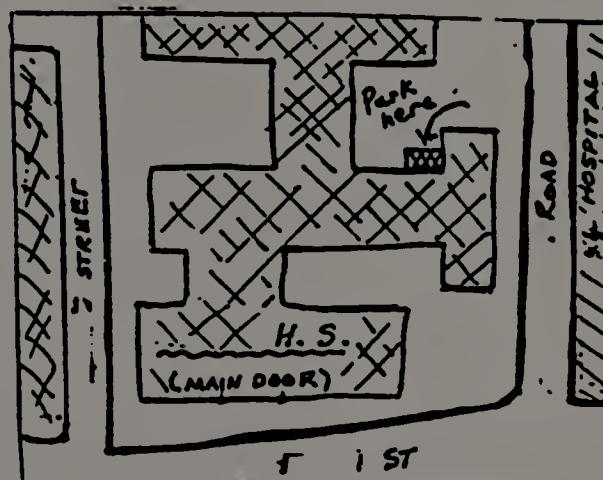
INVEST IN THEIR FUTURE AND YOURS!

DATE: TUESDAY, JUNE 5, 1990

TIME: 7:30 A.M. (Breakfast)

LOCATION: HIGH SCHOOL RESTAURANT

TOPIC: Discussion of concrete plans to send students out on co-operative work experiences this fall



REPLY FORM

PARTNERSHIP COFFEE HOUR

I will attend

I will not attend

I cannot attend, but please keep in touch with me because I'm interested

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

Return to:

Marlene Gentile

APPENDIX F

PROPOSAL PRESENTED TO BUSINESS COMMUNITY  
FOR INTERNSHIP PROGRAM

PROPOSAL PRESENTED TO BUSINESS COMMUNITY  
FOR INTERNSHIP PROGRAM

PROPOSAL FOR WORK-STUDY, CO-OP EXPERIENCES IN FOOD  
SERVICES FOR THE SCHOOL YEAR 1990-1991

GRADE 10

Students will be involved in on-site training, depending upon the availability of time that the facility could offer. Number of hours on-site, number of students participating, availability of instructors to oversee the project is, at this time, negotiable. Grade 10 students would not be paid for the time spent on the job. This program would begin after the first marking period.

Grade 11

Grade 11 students would be involved with the same type of work-study described above. However, if a teacher feels that student's work is exemplary, the teacher could recommend that this student participate in the co-op program. Students in the work-study component would begin the on-site training after the first marking period. Students in the co-op program, as per the State's guidelines, would begin their experience after the second marking period.

GRADE 12

Students in grade twelve will participate in a full co-op program. After the second marking period, students would be eligible to go out on the job full-time, every other week. Students would be paid for their time on the job. Details of payment, supervision, and evaluation will be outlined in more detail in future documents.

### GOALS OF THE PROGRAM

- To provide students with real-life work experiences.
- To expose students to role-models in the workplace.
- To train students to develop a work-ethic.
- To provide employers with potential responsible employees.
- To develop an on-going partnership between Culinary Arts Department and the food services industry.
- To keep instructional practices at Putnam aligned with the demands and changes in the food services industry.
- To provide incentives for students to stay in school and do well in their academic classes.

### WHO WILL BE ELIGIBLE TO PARTICIPATE?

All students who express an interest in the work-study, co-op experience will be considered. However, only those who have the endorsement of their culinary arts teachers will be eligible. In order to participate, students must demonstrate the following:

1. Good attendance
2. Interest in the food production field
3. A cooperative attitude
4. Passing grades in all courses

### WHAT ARE THE MUTUAL BENEFITS?

As stated above in the goals, a partnership between various members of the food services industry and the High School Culinary Arts Department will help our school match our instructional practices with the needs of the industry. For example, if a hotel expresses a need for salad-makers, we could intensify our training in that area. Also, research has shown that for students who are not planning to attend college, hands-on experience can be very effective in keeping student interest and enthusiasm alive.

WHAT OTHER ISSUES MUST BE IRONED OUT?

How many students will actually be eligible to participate?

Who will supervise the students?

How will the students get to their jobs?

What will be the specific responsibilities of the employer?

How will we negotiate problems that arise?

APPENDIX G

FOLLOW-UP LETTER AFTER PRESENTATION OF PROPOSAL

## FOLLOW-UP LETTER AFTER PRESENTATION OF PROPOSAL

October 21, 1990

Dear Food Services Manager:

As you may recall, I contacted you during the 1989-90 academic year, regarding the possible placement of some High School Culinary Arts students for work-study or co-operative experiences within your organization for the 1990-91 school year.

After meeting with several representatives from local food production establishments, we agreed upon a proposal that would provide tenth and eleventh-grade students with the opportunity to participate in "on-the-job" work-study without pay. Seniors would be sent out on "co-op," spending their shop week working for you at least 30 hours per week as paid employees.

Since enthusiasm for our proposal was high, we anticipate that you are still eager to work with us. I will call you in a few days to discuss this program further.

Thank you for your interest in \_\_\_\_\_.

Very sincerely yours,

Marlene J. Gentile, M.Ed.  
Partnership Coordinator

APPENDIX H  
INTERNSHIP PROGRAM AGREEMENT



## INTERNSHIP PROGRAM AGREEMENT

### Vocational Technical High School

The following represents an agreement between  
 \_\_\_\_\_ Vocational High School and  
 \_\_\_\_\_.

1. Name of student \_\_\_\_\_.
2. Student's program of study \_\_\_\_\_.
3. Name of sponsoring company \_\_\_\_\_.
4. Address of company \_\_\_\_\_.
5. Telephone number of company \_\_\_\_\_.
6. Name(s) of qualified and experienced worker(s) who will supervise students on the job site \_\_\_\_\_  
 \_\_\_\_\_.
7. Number of weeks/months of duration of internship \_\_\_\_\_  
 Starting \_\_\_\_\_ and concluding \_\_\_\_\_.
8. Sponsoring company's Workers' Compensation number \_\_\_\_\_.
9. Program Expectations for School.
  - a. students will be closely supervised
  - b. guidelines for hazardous materials/conditions will be strictly adhered to
  - c. students will participate in activities that will help prepare them for future employment.
  - d. sponsor will make workplace guidelines and rules clear to students, and students will be expected to live up to these rules
  - e. if there is a problem with a student, sponsor will notify \_\_\_\_\_ as soon as possible

10. Program Expectations for Sponsor (please list the specific behaviors you will expect from students, using additional sheet, if necessary)

---

---

Signed \_\_\_\_\_ 19\_\_\_\_\_  
Sponsor Mo. Day

Signed \_\_\_\_\_ 19\_\_\_\_\_  
School Coordinator Mo. Day

Signed \_\_\_\_\_ 19\_\_\_\_\_  
School Intern Mo. Day

APPENDIX I  
WRITTEN CONSENT FORM

## WRITTEN CONSENT FORM

TO: \_\_\_\_\_

FROM: Marlene J. Gentile, Reading Teacher

RE: Participation in Research Study on School/  
Business Partnerships

I. I am in the process of completing the requirements for a doctoral degree in education from the University of Massachusetts. My dissertation will include a study of school/business partnerships between Vocational Technical High School's Culinary Arts Department and local food services providers. In this research project, I will examine the school/business partnership experience from the perspective of the employer, student, and teacher.

II. You are being asked to participate in this study. If you agree to do so, you will be requested to do one or more of the following:

1. Complete one or more questionnaire(s) describing and/or evaluating your experience with the Culinary Arts School/Business Partnership Project.
2. Participate in from one to three interview(s) (either by phone or in person) describing and/or evaluating your experience with the project.

My goal is to analyze the information from your questionnaire(s) and/or interview(s) to (a) determine the effect of the Partnership upon the students, employers, and teachers involved and (b) offer suggestions to other shops at who might be interested in setting up school/business partnerships of their own.

III. If your interview is by telephone, I will make notes of our conversation. If your interview is audiotaped in person, the tape will later be transcribed by me. As part of the dissertation, I may use materials from your interview(s) and/or questionnaire(s). I may also wish to use some of this

material for presentations, reports, or for instructional purposes in my own teaching.

In all written materials and oral presentations in which I might use information from your interview(s) and/or questionnaire(s), I will use neither your name, names of people close to you, nor the name of your school or organization.

IV. While consenting at this time to complete questionnaire(s) and/or participate in interview(s), you may at any time withdraw your consent. Once you have completed the questionnaire(s) and/or interview(s), you may still withdraw your consent for me to use excerpts from these materials.

In signing this form, you are agreeing to allow me to use the materials from your questionnaire(s) and/or interview(s) as indicated in Section III of this form. If I want to use the data in any way not consistent with what is stated in III, I would contact you to get your additional written consent.

In signing this form, you are also assuring that you will make no financial claims on the University of Massachusetts or me now or in the future for your participation in this study and/or for the use of the materials in your questionnaire(s) and/or interview(s).

If you are under eighteen years of age, you must have the written consent of your parent of legal guardian in order to participate in this study. A space for his or her signature is provided below.

Thank you for participating in my research.

\_\_\_\_\_  
Marlene J. Gentile

\_\_\_\_\_  
Date

-----  
DO NOT DETACH. PLEASE SIGN AND RETURN ONE COPY OF THIS FORM. KEEP THE OTHER COPY FOR YOUR RECORDS.

Participant's Consent: I, \_\_\_\_\_, have read the statement above and agree to participate in the study under the conditions stated therein.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

Parent or Guardian's Consent: I, \_\_\_\_\_, have read the statement above and agree to my son or daughter's participation in the study under the conditions stated therein.

\_\_\_\_\_  
Signature of Parent or Guardian

\_\_\_\_\_  
Date

APPENDIX J

SAMPLE OF JOURNAL ENTRY

## SAMPLE OF JOURNAL ENTRY

1/3/91

I talked with one young man who had been placed at the \_\_\_\_\_ in the kitchen. He has quit his job for two reasons: first, he wanted less hours so that he would have time for wrestling, but the hotel wanted someone who could give more hours. Secondly, he had a fight with one of the other employees. He said that he didn't have any training by the hotel for this particular job. They were impressed that he could make so many different things. He was doing well, but one day the Food Services Manager told him to make beef burgundy. He said he didn't know how, and the man said, "What are you, fucking dumb?" He pushed the man against the wall and said, "No one calls me dumb." He quit the job after that. He admits that he should not have lost his temper. He said that a lot of swearing and name-calling always goes on in kitchens, and some other guy might have just overlooked the incident, but he can't handle it when someone calls him names.

I asked how he would have reacted if this were his permanent job, and he said that he wouldn't be able to act this way. He said that the head chef understood what happened (I suspect that there may have been other incidents with this food services manager), and the chef said he would give the young man a recommendation for another job, if he needed it.

This incident brings up many issues:

- I. Employer expectations vs. student expectations.
  - a. Hours to be worked.
  - b. Duties to be performed (Student said he was doing more than what he thought he was hired for. He claims that he didn't do just food prep, but prepared whole meals).
  - c. Who is directly responsible for supervision of students (this young man said that this guy wasn't his "boss;" he, in the student's eyes, had no right to tell him what to do).
- II. What can be done to remedy problems
  - a. Employers need orientation--some understanding of adolescent issues--cannot expect students to be just like adults (the student kept saying, "I wasn't ready for this. It was too much for me.")



- b. Students need orientation: Work ethic issues--role-playing of possible crises that could arise on the job; students must be made to feel that this is a "real" job. As long as they have the feeling that they are just "practicing" they will never do their best.

Conversation with \_\_\_\_\_ 1/7/91: (Co-op Coordinator)

I told \_\_\_\_\_ about my conversation with the young man from the \_\_\_\_\_. \_\_\_\_\_ was unaware that there had been an "incident." The student told me that \_\_\_\_\_ knew all about why he had quit the job so I was very surprised to learn that \_\_\_\_\_ didn't know the real details. \_\_\_\_\_ suggested that if I write a brochure for the co-op experience, this is how it should read:

The co-op experience is an extension of the schools shop. In most cases, it is an entry-level position whereby students should be given an orientation period so that they are well-aware of what is expected of them and what the particular procedures are for that job. Employers should not lose sight of the fact that this is a learning experience. We do not want students to be expected to do things that are not capable of doing. If the employer is expecting to hire an expert tradesperson, the employer will ultimately be disappointed. These are novices and they are not receiving responsibility to let the employers know what they are getting. Since the economy is depressed now, employers can be very selective about whom they choose to hire. In more productive times, however, employers sometimes exploited students as "cheap labor," so we continue to be cautious when placing students. What can the employer expect? A student should have the basics in her or his discipline be equipped with the terminology of that trade, know how to use the tools associated with the job and be trainable. An attitude of cooperation and reliability is important.

Why should employers get involved? Of courses, there is the immediate benefit in having workers that you can mold to meet your expectations. By investing in the potential workforce, you contribute to the development of the future workforce. You contribute to the development of the future workforce. More important than the tangible benefits, however, are the long-term social ramifications for our society as a whole. In years past, many different groups shared responsibility for the upbringing of our youth. The

family, church, ethnic clubs, neighborhood, and schools all contributed to the character development of the younger generation. Today many of these once-powerful influences have declined. Many people have come to believe that it is the sole responsibility of the school to mold young people into moral, productive citizens. The school is unable to do a good job at the many roles it now finds itself playing. With the increase in substance abuse, teen pregnancy, depression, break-up of the traditional family--to name a few of the many social issues that we deal with--the schools are forced to become social service agencies before they are centers of learning. I believe that we are not doing a very good job at any of the roles we must now play. We need help from outside sources. Not financial help, but support that cannot be itemized on paper. We need other organizations to share in an interest in our younger generation. As a society, we cannot afford to ignore the needs and problems of our youth. What kind of future will the American economy have if its workforce is made up of amoral, illiterate people? That is an extreme, of course, but what I see in school every day frightens me. How will many of these young people function as citizens in this country? Some already have two children by age 15. Many cannot carry on a conversation, look up a number in the phone book, fill out a job application. We do try hard, but we cannot do this enormous job alone. So many kids are not getting the emotional support and stability from their homes. We as teachers cannot promise that we will send perfect products. You cannot look at us and say, "Why doesn't this student know this?" There are many things you can teach a student, but there are many things that a student must learn on his or her own. By providing an opportunity for students to participate in the "real" world, employers contribute to the development of the character of young people, and in the long run, to the betterment of our workforce in the future.

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