THESIS

This is to certify that the

thesis entitled

Determining the Role of Private Industry Training Relative to the Purposes of Public Education as Described by Corporate Training Directors

presented by

Gerald Richard Shaffer

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Educational Administration

Major professor

Date 5/22/86

DETERMINING THE ROLE OF PRIVATE INDUSTRY TRAINING RELATIVE TO THE PURPOSES OF PUBLIC EDUCATION AS DESCRIBED BY CORPORATE TRAINING DIRECTORS

By

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

Department of Educational Administration

1986

ABSTRACT

DETERMINING THE ROLE OF PRIVATE INDUSTRY TRAINING RELATIVE TO THE PURPOSES OF PUBLIC EDUCATION AS DESCRIBED BY CORPORATE TRAINING DIRECTORS

By

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The purpose of this study was to describe the efforts of private industry to educate employees and to explain the relationship between those efforts and the efforts of the public schools. Private industry training plays a significant role in America's effort to educate people. Educational resources are precious, and sometimes scarce. Unnecessary overlap, competition, or duplication of effort would be extremely unfortunate. It was imperative that the public schools and private industry have a clear definition of the nature of private industry training programs as they relate to the purposes of public schools.

Research focused on two areas, explored through a survey of corporate Training Directors:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools? Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful?

These questions were investigated through a questionnaire for a survey of Training Directors regarding the role of private industry training relative to the purposes of public schools.

Training within private industry is being provided for employees at record levels, and continued growth is forecast.

Major findings include:

- Larger organizations recognize need for training employees, are major providers.
- Job skills and supervisory training receive most attention.
- Basic education (academic skills) are minor parts of training budgets, are supplemental to public schools, illustrate significant duplication of effort.
- Greatest growth forecast: supervisory training, need for public schools and private industry to clarify responsibilities.
- Job skills programs by industry are extremely effective. Current relationship with public schools is supplemental. New relationship with public schools would liberate significant resources.

DEDICATION

To my wife and children for their patience, support, and love.

To my mother and father who always promoted the importance of an education.

ACKNOWLEDGMENTS

I wish to express my appreciation to some of the people who have assisted me in the completion of my study and all other aspects of my doctoral program.

To Dr. Philip Cusick, my advisor and chairperson, I would like to express my appreciation for guidance and assistance throughout my program.

To Dr. John Suehr, Dr. Mary Kelly, and Dr. James Costar, my committee members, many thanks for their support, insights, and understanding.

To Joy White, thanks for your persistence and and dedicationn typing, editing and pushing ahead in the final stages.

To my family and friends, thank you for your endless support, encouragement, and love. Without you, this elusive goal would never have been reached.

To my wife, Katie, a very special thank you for your love, understanding, and strength which gave me the foundation upon which I could rely throughout this challenge.

Gerald Richard Shaffer

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Chapter I

INTRODUCTION

Training and education within private industry are currently being provided for employees at record levels, and indications are for continued growth. A majority of industries reported increases in training budgets in 1984, and also predicted continued increases in 1985 (Zemke, 1984).[1] It is currently estimated that United States business organizations spend between seven billion and nine-point-eight billion dollars annually for training and development activities (Zemke, 1984).[2] This massive effort by private industry to educate America's work force is only one element of the nation's education and "re-education" commitment.

Even when measured against public schools, private industry's education effort is considerable. Some have called corporate training programs a "shadow system" to public schools. Corporate Classrooms: The Learning Business, published by the Carnegie Foundation for the Advancement of Teaching, noted, "Education and training within large private sector corporations of the United States have become a booming industry. Millions of adults, as employees, pass through corporate classrooms

every year; an uncountable number more are given what is generally called on-the-job training." (Eurich, 1985)[3] Eurich called the corporate classroom "a reality based upon a new concept of who the educated and productive citizen is in late twentieth century society," and reproved "two prestigious think tanks" for overlooking training in their studies on the challenges to American growth.

Many observers cite serious problems arising from private industry's independent effort. Eurich stressed that industry remains obligated to provide for its own needs first, having never relied on the traditional education system with its own goals and styles. She stated, "If it had, the United States would probably never have achieved its economic preeminence." At the same time, Dr. Ernest Boyer, President of the Carnegie Foundation, commented that a significant portion of corporate training exists because the American education system often failed to equip people for work or life (Zemke, 1985).[4] Boyer stated that they (corporate programs) frequently overlap the programs of traditional academic institutions, raising questions about how the country deploys its limited educational resources (Schoultz, 1985).[5]

Notre Dame President, the Reverend Theodore M. Hesburgh, casts the issue in less benign terms. He argued that the very existence of corporate training

departments is an error - one that should be corrected. He is on record as declaring that corporate education programs represent "the wasteful duplication of resources that inevitably occurs when corporations spend more than thirty billion dollars on their own education and training activities." (Zemke, 1985)[6]

Power and Conflict in Continuing Professional Education questioned who shall develop, organize, provide for, and control continuing education in American society, and illustrates that the world of job-related training and education is "a disorderly market." (Zemke, 1985)[7]

Still, public schools remain as the cornerstone of the American education system, firmly based in our nation's traditions and philosophy (Goodlad, 1984).[8] Public schools continue to be one of the major institutions for facilitating the socialization and integration process of Americans into society. Basic skills training, and the preparation for work, are only one element in the broad definition of responsibilities that public schools strive to achieve (Bailey, 1976).[9] While vocational and technical skill programs are a standard component of most public schools' curriculum, these work-related programs compete for students' time and attention with other programs whose content and goals are also aggressively contested in terms of their priority or value (Parker, 1981).[10]

In recent years, public schools have received significant criticism regarding the level of effectiveness in the programs they provide. This criticism has included a perceived decline in academic achievement, failure to fully integrate schools racially, inadequate responsiveness to a changing economy, and the inability to meet the personal educational needs of people in a modern society. Criticism of public education is certainly not new (Parker, 1981).[11] Criticism is naturally linked to change, and this may be one of the most significant periods of change in our nation's history (Naisbitt, 1982).[12]

Also in recent years, there has been a significant increase in education/training programs within private industry (McQuigg, 1980).[13] Despite an economic recession, private industry's training expenditures for hardware, staffing, new programs, and salaries all continue to rise (Zemke, 1983).[14] The fact that this expansion tends to parallel an era of criticism directed toward public education may indicate a relationship between these two educational efforts. Lee suggested that the picture of training and development that emerges indicates that training evolves to meet the needs of individual industries (1982).[15] Educational needs of businesses, according to Lusterman, are regarded as fundamental, and the training activities

designed to address those needs are seen as legitimate and necessary business functions (1977).[16] Consequently, vast resources are being committed to educational activity which is often independent of our nation's traditional educational system - the public schools.

In light of the above discussion, it is clear that private industry training is playing a significant role in our nation's effort to educate its people. Educational resources are always precious and sometimes scarce. Unnecessary overlap, competition, or duplication of effort would be extremely unfortunate. Thus, it is imperative that we investigate the nature of these training programs in private industry, especially as they relate to the purposes of public schools.

Significance of the Problem

Training within private industry is an appropriate activity when there is an actual deficiency in the job performance of human beings. This can happen when new jobs are being created, when old jobs will be performed in new ways, or when existing jobs are being performed in deficient ways by members of the present work force (Miller, 1979).[17] Miller stated further, "The basic purpose of training is to shape or reshape the behavior pattern of an individual." Warren (1969) went on to say, "The behavior change brought about by the training

function must be measurable in terms of the organization's requirements."[18] An organization, therefore, undertakes training as the appropriate activity for meeting organizational needs leading to effective productivity.

Industrialists' interest and support for educational activities, both internally operated, as well as within public schools, can be traced back to the nineteenth century in the United States (Gray, 1981).[19] DeCarlo and Robinson (1966) pointed to the Philadelphia Centennial Exposition in 1876 as a location for one of the most basic, far-reaching changes in the philosophy and direction of education in America, where approaches to technical education were examined.[20]

Despite a well established history of the educational interests of private industry, there are many indications that the educational needs of businesses have not been adequately defined and met, especially in relationship to public schools. Kolb (1980) found that companies believe that both higher education and industry would benefit from a closer relationship, but are reluctant to initiate the necessary action.[21] Hysell's research on the perceptions of educational issues by public school management and industry revealed a clear need for improved communication (1981).[22] Anthony-Gonzalez (1982) recommended that business/industry/labor and educational institutions should

actively foster the development of "linkages" to meet educational needs.[23] Other research has indicated that formal linkages between public education and business are not prevalent, which has created a dichotomy between private sector didactics and a comprehensive educational process to update skills and knowledge within a sound instructional design system (Borer, 1983) and (Collins, 1978).[24, 25]

Foster (1966) examined the relationship of high school curriculum to industrial employability of students and recommended a cooperative vocational-industrial advisory council representing labor, management, and schools to evaluate programs and recommend changes.[26] Pauley's study concluded that to make correct career choices, students need to understand industry (1978).[27] Looking at educational programs within private industry, Whitlock (1982) also stated that cooperative efforts are particularly critical because of the ever present need to increase worker productivity and levels of education.[28] Because of its magnitude and impact on the entire economy, employee training is not just an educational issue, but should be addressed by education, business, and government if it is to be effective.

Effectiveness is certainly a critical issue, and the relative effectiveness of private industry's training programs has sometimes been questioned

(Sullivan, 1970) and (Christenson, 1972), as well as the effectiveness of public education's efforts to meet industry's needs (Nelson, 1978).[29, 30, 31]

Equally important as effectiveness is the issue of efficiency. The efficiency of educating and re-educating the American people may be jeopardized by unnecessary competition, ill-defined goals, and conflicting interests. Hall's evaluation of professional educators and industrialists concerning the involvement of industry in public education unveiled some of these concerns (1969).[32] He found that there was considerable unrest among educators due to increased industrial influences and concluded that as a consequence, public education is at a philosophical crossroads. He stressed that educators maintained the opinion that industry places monetary profit above educational standards for students, which has resulted in this ideological split prohibiting a truly cooperative effort.

Current estimates indicate that more than two hundred billion dollars in tax monies are spent each year on public schools and universities, and one hundred billion dollars of private corporate funds are spent on in-house training and retraining (Hungerford, 1982).[33] Patten (1971) suggested that complex organizations undertake educational and training ventures on their own because they feel that existing institutions in society

do not meet their needs.[34] The financial magnitude of this commitment, and the potential for possible overlap or even waste of funds, indicate the necessity for a closer examination of private industry's educational effort as it relates to public schools. Hungerford (1982) and others have called for a study to explore the lack of cooperative effort between corporations and educational institutions to identify areas of philosophical differences.[35]

Purpose of the Study

During relatively more stable economic times, it was found that training, education, and personnel development were clearly on the rise within private industry (Peterfreund, 1976).[36] All indications are that increased economic pressures, coupled with rapid social and technological change, continue to challenge business and industrial organizations. Clearly, training and educational programs are readily seen as one method for addressing these challenges.

At the same time, many of these same issues come under the responsibilities commonly assigned to our public education system. The purpose of this study is to describe the efforts of private industry to educate employees and to explain the relationship between those efforts and the efforts of public schools. More specifically, the research focused on two areas,

explored through a survey of corporate Training Directors, to answer the following underlying issues:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools? Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful?

As used in this investigation, the terms "augment" and "supplement" are defined as follows:

Augment - to make or become greater; enlarge; enrich what currently exists.

Supplement - something added to a completed thing, or to make up for a deficiency.

More specifically, this study investigated:

1. The types of training programs being provided by selected companies.
2. The relative amount of resources being allocated to these training programs.
3. The relationship between these training programs and public schools.
4. Whether these training programs meet the needs of private industry.

5. Whether public schools meet the needs of private industry.
6. Significant trends for the future.

Limitations and Delimitations

1. The number of Training Directors who participated in the survey is presumed to provide a valid representation of the population.
2. Training Directors, who were members of the American Society of Training and Development (A.S.T.D.) were utilized for this research. These individuals would tend to be the most knowledgeable about a company's overall training program. Still, their resources concerning the company's future plans for training would be subjective and naturally speculative. It is presumed they they were truthful in their responses.
3. The organizations included in the sample were selected because of their Training Directors' membership in the A.S.T.D. Since such companies might be presumed to have some of the most effective training programs, that selection criterion may have biased the results.
4. The instrument used was developed for this study, thus was not checked for reliability. The measure for validity was the collective

judgment of a panel of training professionals.

5. The vast majority of Training Directors who responded to the survey were from large organizations. Since such companies might be presumed to have more resources available to commit to training programs, that may have biased the results.

Organization of the Study

In this chapter, the statement of the problem, the rationale for the study, the purpose of the study, its significance, and its limitations were presented. In Chapter II, a review of related studies and literature is presented. Chapter III contains a description of the design of study, instrumentation, and methods of collecting and analyzing data. This chapter also contains a description of the sample chosen for the study. In Chapter IV, the results of the study are given. In Chapter V, the conclusion, summary, generalizations and implications of the study with recommendations for future research are presented.

Chapter II

Review of Related Literature and Research

INTRODUCTION

The United States is deeply engaged in a period of self-examination and re-organization. As we move toward a global economy, the post-World War II social, economic, and political structures are under increasing stress.

The methods by which we educate our people are one major social system currently facing intense scrutiny. From presidential commissions to local school board reviews, numerous efforts are being made to determine appropriate educational goals and priorities for our educational systems.

These educational systems include public and private schools which attempt to meet our people's educational needs from pre-kindergarten through adulthood. Daycare centers, public and private elementary, middle and high schools now lead to trade schools, community colleges and universities, as well as to educational opportunities in the work place.

This comprehensive, yet loosely structured educational network, is intended to provide American

citizens with life-long learning potential. Yet because of its comprehensiveness and lack of centralized structure, there is a great deal of potential for duplication of effort and waste of valuable resources.

Especially critical, in periods of rapid economic change, is education related to jobs. The American public has long debated the merits of vocational versus academic skills. Recent trends toward high-technology industrial development have intensified the developing awareness that "re-education" of the work force may be as significant as primary education.

During this period of time, there has emerged a significant effort from private industry to provide educational programs. Despite a most comprehensive public education program, American industry has invested vast resources into an independent educational network outside public schools. It is useful to examine the purposes of public schools and contrast these with training/education programs being provided by business and industry. From this we can better understand the role of private industry training as it augments or supplements the efforts of public schools.

The Purposes of Public Schools

"A Historical Dichotomy"

American society has often viewed the purposes of public schools as a dichotomy. In our effort to determine what type of education system truly addresses the needs of our citizens, we have described criteria regarding what is of value according to classic definitions which date back to Socrates and Isocrates in 400 B.C. (Broudy, 1982).[37] One contention is that all students must participate in a liberal education which provides each person with a broad intellectual background. This perspective is associated with the teachings of Socrates and the use of dialogues which opened the minds of his students with imaginative inquiries about important societal issues. The second perspective, as promoted by Isocrates, has pragmatic application of skills at its foundation. As we have attempted to balance the educational needs of a pluralistic society, we have often shifted between these two perspectives. As a highly technological society, we recognize the necessity for "how to" knowledge - knowledge and skill designed for a programmed result or competence that has some market value. Yet, we have also recognized that there is knowledge about the nature of humankind and qualities of mind and character that makes for human happiness and self-worth. Linked to

these perspectives is an American educational tradition in which parents oppose efforts for early specialization in schooling.

These contrasting and sometimes conflicting positions have had a profound effect upon the purposes and goals of public schools in our society. As well, the course that has been charted for public education has because of these issues held great importance for America's industrial and business effort (McQuigg, 1980).[38] Changing economic and technical needs have challenged the responsiveness of our public education effort in assisting business and industry (Choate, 1982).[39] In some cases, that has led business organizations to look to other educational options including their own educational programs (Lusterman, 1977).[40] It is useful to examine the purposes of public schools more closely to attempt to determine why businesses have established an independent educational effort outside public education.

"A Liberal Education"

In 1893, an influential report by the Committee of Ten described the purposes of schools, and especially high schools, as preparation of an elite for entry into college and "for the duties of life." (1893)[41] This was accomplished by studying humanities, sciences, mathematics and languages. More recent efforts to define the

purposes of education include Adler's Paideia Proposal, which advocates that all students participate in the same carefully specified curriculum (Davis, 1982).[42] The American Society of Curriculum Development (ASCD) is encouraging schools to design a "core" curriculum that will prepare students for life in the next century (1982).[43] These efforts limit the scope of course offerings, but view education of the individual in broad terms, such as "fulfilling potential" and "realizing talents," rather than developing specific skills. Goals go beyond acquisition of knowledge, to the development of intellectural skills and improved understanding of ideas and values (Davis, 1982).[44] A liberal or general education consists of foundation courses in humanistic and social science fields - a core curriculum which provides insights into humanity, differentiated from "training" and a code of knowledge.

Politically, a general education is intended to unify society while "training" differentiates skills and may lead to a class system (Feinberg, 1979).[45] Krates advocates an education system which promotes learning for learning's sake, where learning is a process of discovery, and the school "is a place to awaken a spirit of adventure." (1981)[46] Certainly, John Dewey's work significantly influenced this position among American educators (1916)[47], as well as Harvard University's "General Education in a Free Society,"

known as the Redbook, which was published in 1945 (Parker, 1981).[48]

A liberal education in public schools is difficult to achieve because of specialization among teachers, resulting in their own "incomplete" education and "insensitivity" to this challenge (Woodruff, 1979).[49] The uniqueness of American schools is found in the expectation that our system should assist individuals to identify and develop their own unique character and postpone irreversible decisions until as late as possible in one's educational career (Tyler, 1981).[50] American schools, as compared to other educational systems in the world, include socialization, social mobility, and self-realization among their primary functions. This self-realization function is not found in most other societies' education systems. Our effort to accommodate this distinction between education and training, linked to the advent of mass education in the United States, may have led to the "cafeteria" approach to learning with widespread diversification in curriculum with no coherence or cohesion (Rexine, (1979).[51]

"Skills for a Technological Society"

Many educators have argued that the narrow nineteenth century academic organization of schools was inadequate for the changing conditions of early

twentieth century. The narrow view of purposes and equally narrow prescription of means to achieve them, as described by the Committee of Ten, were disputed from the beginning by those whose vision of schools was more egalitarian (N.E.A., 1980).[52] Efforts to provide a free public education to a large and diverse population resulted in practical goals which included basic literacy and skills training which would be directly applicable to the world of work. Sewell reports that in American society many different kinds of achievement are valued, and there is often a relationship between educational goals and the socio-economic status of a family (1981).[53] Substantial numbers of Americans advocate preparation for work as a primary purpose of schools, reflected in legislation supporting vocational education starting with the Smith-Hughes Act in 1917, through the George-Deen Acts of 1936, 1946, 1956 and 1959, and again in the Vocational Education Acts of 1963, 1968 and 1976 (Henry, 1982).[54]

This effort for the practical application of skills has also been supported by business and industry as our society has become increasingly industrialized; and, economic conditions have changed requiring a well trained labor force (Schneider, 1981).[55] For example, to meet the skill needs for defense production during the Second World War, the Federal government in 1940 created the National Emergency Production Act, granting

three hundred million dollars to state governments to train workers for defense-related industries. In a five year period, over seven-point-five million skilled workers were produced by America's educational system. As well, the post-World War II economy saw large numbers of workers trained under the G.I. Bill, and these efforts have undergirded the U.S. economy for thirty years (Choate, 1982).[56]

John Goodlad reports that these vocational/skill oriented programs in public schools are among the most popular with students (Brandt, 1979)[57], and Lotto writes that general education has consistently depended upon vocational content to motivate and instruct low achieving, disaffected and disadvantaged general track students (1983).[58] She adds that academic ability, while it is related to obtaining access to employment and employability, bears very little on actual job performance. Supporters of a skills-based education are critical of recent reports which advocate academic curriculum, such as A Nation at Risk, and Action for Excellence. Executive Director of the American Vocational Association, Gene Bottoms, summarizes this position, stating that the reports falsely assume that highly academic curriculum will produce workers who are in touch with the real world and able to translate theory into practice (1983).[59] He cites a decade of Gallop Polls conducted for Phi Delta Kappan, which

indicate that the American people want an emphasis on the basics, the practical, and vocational education.

"Participation in Vocational Education"

Vocational education is firmly established among the purposes of public schools, represented by the substantial funding support it has received. The National Center for Education Statistics has compiled information as to how this public emphasis on vocational education is actually represented within public schools (Condition of Education, 1983).[60] The following data represents total expenditures for vocational education, by source of funds, in constant (1981) dollars for the years 1972 to 1981. (amount in thousands):

Year	Total	Federal	State/Local	S/L per Federal
1972	$5,600,099	$980,853	$4,619,246	4.7
1973	6,137,090	975,877	5,161,213	5.3
1974	6,376,260	869,395	5,506,865	6.3
1975	6,750,731	896,480	5,854,251	6.5
1976	7,359,308	848,115	6,511,193	7.7
1977	7,323,244	787,450	6,535,794	8.3
1978	7,845,352	690,163	7,155,189	10.4
1979	8,415,379	831,929	7,583,450	9.1
1980	7,713,359	831,659	6,881,700	8.3
1981	7,513,591	853,677	6,659,914	7.8

While there has been some shifting between the balance of funds between Federal and State/Local, there was steady support up to 1979 as funding remained reasonably even with the rate of inflation.

Further evidence that vocational education is established as one of the purposes of public schools is

illustrated by data which indicate the total number of educational institutions which provide vocational education programs. These data indicate the number of secondary and postsecondary institutions offering vocational education programs, by type of institution, for the 1978-79 school year:

Public Comprehensive or Vocational Secondary	15,706
Public Area Vocational Centers	1,394
Private Secondary Schools	586
Public Noncollegiate Postsecondary Institutions	811
Private Noncollegiate Postsecondary Institutions	6,766
Two-Year Institutions of Higher Education	1,118
Four-Year Institutions of Higher Education	633
Total	27,014

The majority of vocational education programs are being provided by public schools rather than by private schools with Public Comprehensive or Vocational Secondary providing fifty-eight percent of the programs.

This same balance is shown by the estimated enrollment figures provided below with sixty-four percent of the students enrolled in vocational education receiving their experience in Public Secondary Schools. The estimated enrollment in vocational education programs for 1978-79, listed by the type of provider, is indicated below (number in thousands):

Public Secondary Schools	12,513
Two-Year Institutions of Higher Education	4,423
Private Secondary Schools	22
Public Noncollegiate Postsecondary Institutions	741
Private Noncollegiate Postsecondary Institutions	989
Four-Year Institutions of Higher Education	309
Total	19,399

In order to illustrate the multiple and sometimes conflicting purposes of public schools, information regarding participation in vocational, academic, and general education programs is provided. These data represent curricular programs of 1980 high school seniors, by sex, racial/ethnic group, ability, and socio-economic status (SES):

Characteristic		Academic	General	Vocational
Total		38.7	36.9	24.5
Sex:	Male	39.0	38.0	23.0
	Female	38.4	35.9	25.8
Racial/Ethnic Group:				
White non-Hispanic		39.8	37.1	23.1
Black non-Hispanic		33.0	35.2	31.8
Hispanic		26.9	41.6	31.5
American Indian/ Alaskan Native		24.4	45.4	30.1
Asian or Pacific Islander		52.4	29.0	18.6
Ability:	Low	13.8	47.1	39.0
	Middle	33.5	40.9	25.8
	High	72.3	20.0	7.8
SES:	Low	21.1	43.4	35.4
	Middle	36.3	38.4	25.2
	High	62.0	27.4	10.5

There is substantial interest in all three categories of curricular programs (academic, general, and vocational). However, there are some significant differences regarding who participates in these programs.

Academic programs are dominated by high ability, high SES students, while vocational education draws less than ten percent of its students from this population. Most vocational education students are found in the low ability, low SES categories.

Participation in vocational education is fairly consistent among Racial/Ethnic minority groups (thirty-point-one to thirty-one-point-eight percent), but noticeably fewer white students (twenty-three-point-one percent) and Asian or Pacific Islanders (eighteen-point-six percent) enroll in vocational education programs. These data may illustrate the political concern expressed by Feinberg earlier in this chapter, suggesting that vocational "training" which differentiates skills may lead to a class system educationally and socially. Still, vocational education is a major part of America's schools, utilized by twenty-five-point-eight percent of male students and twenty-three percent of female students, certainly well established among the purposes of public schools.

The National Center for Education Statistics research indicates that there may be some direct financial benefit for individuals who participate in vocational education resulting in higher earnings for the individual

participant over academic or general education programs. This is especially true for females' hourly wages. The following data represents the earnings of 1972 high school graduates in initial jobs after completing formal schooling, by sex and high school program, for the years 1972 to 1979.

Program and Sex	Average Hourly Wage	Average Yearly Wage
All Programs:		
Total	$5.44	$11,085
Male	6.01	12,906
Female	4.88	9,087
Academic:		
Total	5.50	11,311
Male	6.04	13,021
Female	4.90	9,244
General		
Total	5.29	10,942
Male	5.89	12,786
Female	4.74	9,096
Vocational:		
Total	5.55	10,864
Male	6.09	12,836
Female	5.04	8,812

Again, there is noticeable benefit for women who participate in vocational versus academic or general education programs in terms of their average hourly wage. There is also a benefit for men who participate in vocational programs, in terms of hourly wage, especially when compared to those who participated in general education programs. Although moderate, these data suggest that vocational programs positively impact upon the employment potential of participants.

"Approaches to Vocational/Technical Education: Orientation vs. Specific"

Swanson reports that there are about three million secondary students enrolled in occupationally specific courses and about ten million who take at least one vocational course (1983).[61] Among supporters of vocational education, there are those who oppose vocational courses becoming too job specific, or vocational programs becoming too company specific, thereby becoming "the servant of business and industry." (Pratzner, 1983)[62] The historic, primary role of vocational education in providing entry-level skills leading to employment has been vastly expanded to include career awareness, vocational skills for non-vocational students, and skills useful in productive use of leisure time, (Hoyt, 1982)[63] which has led to vocational education funding from the Federal government to surpass seven hundred twenty-eight million dollars in 1983 (Voc Ed, 1983).[64] Still, Swanson reports that America is the only large industrial country in the world that relies almost wholly on a system of general education as preparation for the work force. No more than ten percent of potential secondary level students ever complete a vocational program (1980).[65] Skill training is an essential component in the education systems in Japan (Schiller, 1982)[66], the Soviet Union (Popkewitz, 1982)[67], and in China (Smith, 1982).[68]

"Synthesis Between General Education and Skill Development"

Efforts to synthesize these two extreme positions - general (liberal) education and skills development - were reflected in the Seven Cardinal Principles of Education, published by the National Education Association (1918).[69] In this document the NEA attempted to draw together the features of a humanistic, liberal educational philosophy with the components of a practical, skills-based approach to schools. The Seven Cardinal Principles examined the whole of life's functions in a democracy, and included as objectives: health, command of fundamental processes, worthy home membership, vocational education, citizenship, worthy use of leisure and ethical character. This expansion in the purposes of public education quite naturally led to an increase in the diversity of offerings in schools made possible by increasing the size of schools (Martin, 1980).[70] Vacillating between the need to match course offerings to a diverse population and the need to give social cohesion to the same diversity, a proliferation of courses and programs was developed. The sweeping language of the Seven Cardinal Principles has led to the assumption that public schools could reform all of society's ills (Martin, 1980).[71] From that time until the 1970's, the major reports and studies on education accepted this all-inclusive view of the purposes and objectives for public schools (NEA, 1938 and NEA, 1944).[72] Alfred North Whitehead summarized this effort at synthesis when

he wrote, "What we should aim at is producing people who possess both culture and expert knowledge in some special direction." (Finkelstein, 1981)[73]

"Conflicting Perspectives or Unclear Goals"

Currently, the North Central Association suggests, education is being fragmented into increasingly more rigid and exclusive groups, each representing only one educational perspective (Spring, 1981).[74] One significant group is the American business and industrial community. Rapidly changing economic and technological needs have led to massive re-training efforts of America's work force and have drawn sharp attention to the educational needs of future workers.

In general, manufacturers view vocational education favorably (Nunez, 1983).[75] Still, the Wall Street Journal reports that literacy-related problems are costing business millions of dollars (Mikulecky, 1981)[76], and there is widespread concern among business leaders about declining academic achievement (Lusterman, 1977).[77] While these issues have generated much interest in private schools among the general public, businesses have begun to look more closely at their internal effort to educate employees (Zemke, 1982).[78] Within business and industry, another comprehensive system of education has emerged, supported by vast resources.

Whether this new educational network within private industry has evolved to address deficiencies in the public schools to meet highly specific needs of these businesses, or is operating at loggerheads with America's continuing public education effort, is not clear. At the present time, our nation does not have adequate means to conduct the enormous amount of upgrading and retraining that is required to keep up with technological change and worker displacement (Bottoms, 1983).[79] Private sector companies know what their needs are, know they are changing, and know that they need someone to train their current and potential work force to a high degree of technological expertise. If public education cannot meet their needs, then industries will go into the training business themselves or look toward private schools or other sources for this service (Hopkins, 1982).[80]

Therefore, it is useful to determine what the relationship is between these two educational efforts and examine the role of private industry training relative to the purposes of public schools.

Training/Education Programs in Business and Industry

Vocational education, and teaching skills which can be applied to the world of work, have been well established among the purposes of public schools. Yet, increasingly in the past few decades, corporations and businesses have established internal training programs for

employees and have come to rely less on educational programs provided by schools. The 1981 United States census data suggest that about nineteen percent of all courses taken were offered by businesses, industries and labor groups. This is compared to four-year colleges (twenty-one percent), community colleges (seventeen-point-five percent), vocational schools (nine percent), government (eight percent), and elementary/high schools (six-point-five percent) (Swanson, 1983).[81] As well, business and industry conduct more than a fourth of their training programs for non-employees. But fully ninety percent of the courses offered by business and ninety-five percent offered by labor were taken for job related reasons, and seventy-nine percent of the adult participants were currently employed when they took a course (Swanson, 1983).[82] Companies have expended significant funds toward these training programs, often surpassing public school expenditures. Since 1978, corporations have spent more money on audio-visual materials, totaling over two-point-five billion dollars per year, than all other educational institutions combined. Public education's expenditures for audio-visual materials were one-point-sixty-nine billion in 1978 (Schwaller, 1980).[83]

"Parallel Expenditures with Public Schools"

At the same time, schools have spent significant amounts of money toward vocational education, in a period

of eroding budgets and public pressure to establish priorities. Of twenty-seven thousand institutions offering vocational education in 1978-79, the largest single provider, public comprehensive and vocational secondary schools made up more than half of the total. Funding by the Federal government for vocational education programs almost doubled in current dollars between 1972 and 1981, from four hundred sixty-six million dollars to eight hundred fifty-four million dollars. State and local expenditures more than tripled from two billion dollars to six-point-five billion dollars in terms of current dollars (National Center for Educational Statistics, 1983).[84]

Despite these efforts, many companies have gone ahead with their own educational and training efforts to meet their needs. In the face of these trends, and the significant challenge the United States faces in a rapidly changing world economy, it is necessary for us to examine the role of private industry training to determine if corporate training efforts are intended to augment or supplement America's public schools.

"Established Commitment by Private Industry"

Training within industry is not a new phenomenon. By 1913, a sufficient number of corporations' schools had been formed to lead to the organization of the National Association of Corporation Schools, including companies like American Locomotive, AT&T, Burroughs, Cadillac Motor

Car, Carnegie Steel and Commonwealth-Edison. Even then, corporation schools went beyond vocational supplements to basic education of the public school system and were attempting to make up for a combination of what were felt to be deficiencies in the public education system and the needs of large numbers of immigrant workers.

Today, large companies are still most likely to have training and educational programs. Financial institutions lead all other categories of industry in each of the several measures of program scope. Transportation-communication-utilities groups are not far behind (Lusterman, 1977).[85] In most situations, companies blend training and educational programs to include internal and outside resources, such as outside schools, outside experts brought into the organization, company experts, education-training-development specialists, and part-time faculty (Lusterman, 1977).[86]

"Scope of the Programs Provided"

Seventy-five percent of all companies provide some in-house courses for their employees. Eighty-nine percent have tuition-aid or refund programs (which are virtually omnipresent among companies with one thousand or more employees, and in eighty-two percent of the companies with five hundred to nine hundred ninety-nine employees), and seventy-four percent authorize some of their employees, principally managers and professionals, to take outside

courses during working hours, paying attendance costs. Abigail VanderKamp's study of career education in seventy-nine companies reported that fifty-four percent of the industries responding had formal training programs. Among the thirty-two million or so persons employed by firms with five hundred or more employees, about three-point-seven million, or eleven percent, took part in in-house courses provided by their companies during working hours, and another seven hundred thousand (two percent) were enrolled in company courses given during non-working hours. In all, two out of five (thirty-nine percent) firms provide some after-hours courses, either internal or outside, and it is as high as fifty-six percent in companies with over ten thousand employees (Lusterman, 1977).[87]

A study by the Conference Board identifies three arrangements by which off-the-job employee education and training is conducted, each tending to use a different type of resources:

- company courses: in which all participants are employees of the firm providing the course. Four out of five companies surveyed conducted courses during working hours and about half did so after working hours.
- tuition-aid program courses: tailored for specific companies, selected and contracted for

by the employee who is reimbursed for expenses (with colleges, etc.).

- other outside courses: taken during working hours, or otherwise, and open to the general public with "generic" topics. Seventy-four percent of the companies reported that employees took such courses in a year.[88]

Central training departments are sometimes responsible for all in-house programs and have a variety of functions:

- provide programs and courses in "generic" subject areas to satisfy a corporate-wide need.
- assist other departments and training units in their programs.
- provide skills and basic remedial programs, often time for secretarial, clerical and other non-exempt employees.

In most cases, centralized training departments will fall under the Personnel Department's responsibilities, but occasionally they will be related to the marketing function.

One company in ten spends fifty percent of its training effort on new employees, but the mean average firm has a ratio of about ten percent. Eleven percent of the companies report that they provide some kind of basic remedial courses for their employees, although there are wide-ranging definitions for "remedial." However, this

may indicate some duplication of effort relative to the traditional purposes of public schools. Eight percent of the companies provide remedial training during working hours and five percent after working hours. Organizations reporting no formal training programs of any kind dropped from nineteen percent to sixteen percent from 1981 to 1982 (Training, 1983).[89]

"Program Design"

Company courses are often elements of "programs" - clusters of related courses, and/or classroom and experimental sequences, designed around a particular skill or knowledge area. "Programs" vary considerably in the degree of their structural cohesiveness and in their length. Some are designed to carry particular groups of employees through a process of learning in which the subject matter, methods, duration and even evaluation criteria are carefully structured in advance. Apprentice programs, entailing two to four years of phased work and study, are prime examples of this (Zemke, 1983).[90]

There are many instances in industry of programs that are much briefer, aiming at more limited increments of knowledge or skill, but no less highly structured. These educational programs often integrate programmed instruction, lectures, discussion, role playing and other learning activities into multi-week formats.

Less structured programs exist as well, presented as clusters of courses or topics belonging to a subject "family" - sales, management, information systems - and the completion of these courses may be a necessary or desirable condition for employment and/or promotion (Zemke, 1977).[91]

"Scope of Expenditures for Private Industry Training"

Corporations dedicate significant resources to their training and educational efforts. Between thirty million dollars and forty million dollars are spent each year for training by private industry in the United States. These estimates do not include wages (Training, 1983).[92] William Norris, Chairman of Control Data Corporation, estimates that the actual expenditure in 1977 was one hundred billion dollars annually, which is about one-half of the tax money spent each year on public schools and universities (Training, 1977).[93] The Conference Board estimates that four hundred million dollars is spent on programs, seminars and courses which were offered outside the firm, and one-point-six billion dollars was spent for in-house activities during 1975. The projected increase to 1982 is two-point-two billion dollars, up eighty-three percent.

There is significant potential for wasteful spending given the similar purposes of public schools. The general corporate attitude regarding expenditures is,

"Need, not cost, is the primary factor influencing corporate commitment to training/education/development." (Peterfreund, 1976).[94] Management's judgment about the value of in-house programs takes into consideration benefits that cannot readily be quantified. These considerations may indicate that corporate training exceeds the capabilities of public schools by addressing specific needs of businesses. Internal programs, for example, offer greater opportunity to shape instruction to measure company needs and the needs of the particular employees, and to facilitate the integration of training with performance appraisal. These considerations often offset additional cost over more "generic" outside programs.

Four out of every five corporate education and training dollars are spent in connection with in-house activities, and the greatest portion of them by far are for programs conducted during working hours (Lusterman, 1977).[95] On a per-employee basis, thirty-seven companies surveyed spent an average of one hundred sixty-one dollars annually per employee on training. One-third spent less than fifty dollars per year, one-third spent between fifty dollars and one hundred fifty dollars, and the balance distributed all the way from one hundred seventy-five dollars up to one thousand forty-seven dollars per employee in firms such as I.B.M. and some major oil companies. Non-industrial companies spend almost three

times as much per employee as industrial companies, except at the executive/supervisory level, which is roughly equivalent on a job-by-job, level-by-level basis.[96]

The Conference Board reports that dollars per employee for training come to a mean average of sixty dollars per employee. The median expenditure per company, however, was sixteen dollars per employee because of a few (six percent) high-spending companies spending more than one hundred dollars per employee. The Conference Board also reported that financial insitutions showed the highest median expenditure rate per employee (fifty-six dollars) and manufacturing firms the lowest (eleven dollars). (American Management Association, 1981).[98]

An organization's training priorities depend on the nature of the industry, but Training magazine's 1983 Census reported that the following employee groups commonly received training:[98]

16.8%	First Line Supervisors
14.8%	Professionals
14.1%	Middle Managers
9.2%	Customer Service
8.7%	Sales Representatives
8.4%	Production Workers
6.9%	Senior Managers
6.7%	Executives
5.8%	Secretarial/Clerical
5.8%	Administrative
3.0%	Other
100.0%	Total

"Program Management Facilitation"

Another indicator of an organization's training priorities is reflected in how the programs are facilitated and managed. While almost all firms over five hundred employees sponsor or support some form of employee education or training, and three-quarters provide courses in-house, only two in five (forty-two percent) assign anyone to full-time duties in this area. Only thirty-six percent of the companies in the United States have self-contained, corporate level training departments with company-wide responsibilities (Lusterman, 1977).[99]

Thus, most firms use employees who have other primary duties, placing heavy reliance on outside consultants and other suppliers. Only seventeen percent of the companies have employees who devote all or more of their time to teaching, and those organizations are found disproportionately in large firms. Training magazine estimated in 1983 that there was two hundred thirty-two thousand-one hundred twenty-one full-time trainers. In twenty-seven percent of the companies with any full-time education and training personnel, one or more of those people are typically located within corporate departments that train for a particular function. Others would be specialists at divisions, plants, or other operating locations (Lusterman, 1977).[100]

"Private Industry's Training Needs"

Corporations are providing programs because they feel they are addressing a pressing need. Recent statistics support this view. Seventy-nine percent of the individuals participating in all types of adult education are currently employed; twenty percent are not in the labor market; and, only two percent are unemployed. Forty-five percent of the adults who take adult education courses of any kind do so for advancement in their current job. Nearly fifty-four percent of the courses are provided by public schools. The rest are given by business or industry, community organizations, government agencies, and other non-schools (National Center for Educational Statistics, 1983).[101] Ten percent of adults are interested in training for a new field, and two percent take courses for preparation for a new job in their current field. CETA, by comparison, spent fifty-three billion dollars, and a mere fifteen percent of the participants found jobs. Currently, one-quarter of the training programs provided by business and industry are for non-employees. Training is sometimes required by union contracts, although a recent survey by the College Board found that only sixty of one thousand five hundred agreements analyzed have such provisions (Lee, 1983).[102]

Company education and training efforts suggest they address goals which exceed the traditional purposes of the public schools where there are a number of issues which

may be of mutual concern to industry and the public interest: (Lusterman, 1977)[103]

- basic education - language and arithmetic competencies, reasoning abilities, and other fundamental academic skills.
- equity - equal educational opportunity without regard for sex, race, income, religion.
- non-employees - provisions for developing skills which will provide options for those people not already active in the work force.
- occupational imbalances - overcoming weaknesses to market demand in a rapidly changing economy.
- continuing education - providing for potential advancement, establishment of new goals, and re-vitalization.
- career education - illuminating career choices for young people that will better facilitate the transition to work.

This list certainly exceeds expectations for simple skills development. In terms of the dichotomy between "a liberal education" and a pragmatic "how to" skills development approach, discussed earlier in this chapter, the list above encompasses both perspectives.

Again, it is important to examine the efforts of private industry to educate employees and to understand the relationship between those efforts and the efforts of the public schools. From this examination, we can begin

to determine if the training programs provided by private industry are designed to augment or supplement public schools.

"Effectiveness of Existing Programs"

Senior managers in large companies are quick to concede that there is much room for improvement in most corporate training programs. Research by I.B.M. in 1978 revealed that none of the corporations studied appeared to be satisfied with their management development programs; but, there is an indication that in-house education is still considered vital to continued company health (Dean, 1980).[104] Few rate their companies' courses as "unsatisfactory", but most are reserved in their praise. Only half think they have succeeded "very well" in their aim of training new employees, and still fewer that they have done so with respect to their goals.

"Private Industry's Educational Goals"

With few exceptions, executives interviewed in a 1975 study said that "development of people" was a vital part of their job, and while they seldom initiated specific training programs nor were concerned with methods, they have a powerful influence on the philosophy and type of educational activities adopted. Corporate motivations are short-term, functional and mission-oriented. Companies sponsor programs because they have to

so the work can get done, so personnel will be ready when needed for whatever positions require them. Non-business oriented motives - the concept of education solely as a means of uplifting, upgrading a work force as individuals - are minimal and rare (Peterfreund, 1976).[105]

The history of industrial education since 1913 illustrates that corporations are not unwilling to invest substantially in training for disadvantaged, for non-English speaking immigrants of the past, or for educationally handicapped today (Branscomb, 1975).[106] As with public education programs, minority enrollment in vocational education programs appears to be closely tied to the minority composition of the general population. In public schools, when considering all students in all curricula by racial/ethnic group, greater proportions of blacks, Hispanics, and American Indians participate in vocational programs. Higher proportionate enrollment in vocational education was also characteristic of students in low ability groups and from lower socio-economic status (National Center for Educational Statistics, 1983).[107] Ninety percent of the courses offered by business and labor are taken for job-related reasons, and therefore have a very functional orientation for participants.

"Trends for the Future"

In answer to a survey question about further changes in corporate education and training programs, about

one-half of the corporate leaders saw expansion of their training effort being required. Forty-five percent of the companies responding to an American Management Association survey rated "training and development of employees" very important, and only eight percent rated it un-important. A utility reported: "Our management considers training a need - not a luxury - and believes that in times of stress, training can be more meaningful and profitable than at others." A petroleum company responded: "Training is a critical factor in our long-range organization development plans, and we cannot afford to pare back expenditures." (Springborn, 1977)[168]

The theme is that education and training in industry must be viewed as a system in which analysis of needs, the development and administration of relevant programs, and evaluation of feedback are the main elements. The Conference Board report makes it clear that "individualization," "tailoring" and "flexibility" all have become key terms in the corporate education-training lexicon. A training director stated, "We try to avoid the package syndrome." A like attitude applies to utilization of consultants. Still, the preference for in-house programs is strongly related to the company size. The percentage of programs handled entirely in-house increases as organizational size increases. This reflects their ability to provide in-house resources and expertise, but may also reflect the syndrome of, "If we didn't build

it, it won't work for us." (Training, 1983)[109] This attitude may lead to a willingness on the part of corporations to work at cross-purposes with public schools.

In fact, large companies have several reasons for doing their training in-house (McQuigg, 1980):[110]

- programs are often more relevant than training done outside.
- can be put into practice immediately.
- does not become obsolete before it can be used.
- designers of the programs are close to top management and should know what the needs of the organization are.
- in-house staff can be utilized for relevant information or consultants can be contracted.

The Peterfreund study in 1975 supported these notions and demonstrated that most of the organizations tended to "go their own way" in fashioning and directing their training activity. Few think of other companies as "models," and they were dedicated to tailoring approaches to their own organization's singular circumstances rather than looking for universal programs that can be transported from company to company (Peterfreund, 1976).[11] It is difficult to conceive of public schools, or any other educational organization whose purposes include vocational education, meeting such specifications.

One approach taken by private industry has been to make training programs fully integrated with job

experience, an advantage that regular education institutions and other "outside" programs cannot duplicate. One executive responded to The Conference Board, "We are placing new emphasis on job-based methods of learning in support of our policy of line responsibility for training." (Lusterman, 1977)[112] This clearly calls for greater involvement of line managers in the efforts of education and training. Many companies that provide courses for new employees are shortening or deferring them, placing greater reliance on on-the-job experience - learning by exposure to realistic work problems. Companies are starting to realize that trainees must be convinced that the training will result in higher job satisfaction, there must be clear, realistic objectives, and they must eliminate major physical and emotional distractions for optimal success. On-the-job training may be effective in achieving these conditions by exceeding the capabilities of public schools and other outside educational institutions.

"Relationship with Public Schools"

The Conference Board report on Education in Industry begins with the corporate perspective regarding the effectiveness of schools in helping them meet their needs:

> Most business executives are critical of the performance of the nation's schools and colleges in preparing people for work, and deplore particularly the lacks they find in communications and mathematical skills among

> younger employees. Most believe, further, that these institutions would do well to emulate industry in its growing emphasis on student participation, the blending of classroom study with both programmed self-study and planned problem-solving experience, the tailoring of curricula to clearly defined goals and individual needs, and the employment of advanced instructional technologies. (1977)[113]

There is general consensus among business executives that our educational system should give greater attention to preparation for work. Most executives voice concern about over-specialization, the emergence of a system that trains narrowly instead of educating, and neglects basic literacy and the three R's.

As a group, executives think poorly of the present performance of the schools and colleges in preparing people for work (Lusterman, 1977).[114] Forty-seven percent think that the performance of schools in work preparation is only adequate or fair. Forty-one percent characterized it as inadequate or poor, and only twelve percent think it is good or excellent. Another important element in business's quarrel with academic high schools and liberal arts colleges is not that they lack a vocational curriculum, but that they perform poorly at what they consider their most basic function - developing competence and skill in the use of language and the intellect.

Finally, business and industry have come to realize the importance of flexibility in education and training. As one major manufacturing firm stated, "It's impossible

to know what our manpower needs will be in five or ten years; and therefore, the basic need is for flexible people who have been trained in reading, writing, basic computational skills and thinking. We can teach them the rest." (Lusterman, 1977)[115] There is general agreement that we are in the "post-industrial" age, and with that, it is about general work competencies, not specific technical skills and professional knowledge that business executives most commonly complain. In 1975, The Conference Board found:[116]

- only one in seven executives mentioned that they wanted specific skills.
- fifty-four percent refer to language skills as a deficiency.
- twenty-four percent indicated a need for math skills.
- eighteen percent felt work readiness and "work place realities" were slighted.
- seven percent stressed interpersonal skills.
- six percent called for analytic skills in planning, organization, and deciding.

Certainly, these items fall within the purposes generally assumed by public schools and suggest that corporate training programs may be providing for deficiencies in the public education system.

Other business leaders also emphasize the practical aspects of training with a specific focus on the

application of information. Raymond Herzog, Chairman of 3M Company, says, "It is not knowledge, but the use of knowledge which is important." (1977)[117] Carrying this notion further, the Chairman of Gould, Inc. states, "The programs we provide are intense, often lasting late into the night, adaptable to changing business needs, and most importantly they are practical and results oriented." (1977)[118]

These factors indicate that corporate training exceeds the capabilities of public schools. If this pragmatic approach is fully realized, corporate leaders suggest that it is often a savings to a company to provide training for employees. The President of J.I. Case states:

> It is estimated that in terms of capital investment, it takes at least forty thousand dollars to create one new job in a manufacturing organization today. Thus, it makes little sense not to help employees get the education and training they need in order to fully develop their capabilities. If you fail to do that, you fail to get a maximum return on investment in human resources.
> (Rummler, 1977)[119]

"Independence from Government"

Despite the pressures caused by rapid change and uncertain goals, business and industry feel little need for government assistance toward solving their problems. Most executives see no need for new federal programs, policies, or legislation dealing with employee education.

Current wage and hour laws are seen as preventing companies from offering training to upgrade skills on employee's own time without paying overtime. Some companies do support efforts by state and local government to determine business needs and develop responsive education programs, as well as to relieve industry of the burden of remedial education.

While resistance to governmental assistance is strong, corporation's independent educational efforts have often times fallen short of meeting their needs. Branscomb and Gilmore point out that the past twenty-five years have been a period of especially rapid change in technical needs and not accidentally a period of growth in corporate education (1975).[120] At the same time, corporations have a strong stake in the nation's academic institutions that justifies a substantial amount of philanthropic activity. The Conference Board estimated corporate donations for higher education in 1975 to be an all-time high of three hundred fifty-seven million dollars.

If these institutions fail to meet the needs of corporations, then corportions have no other alternative but to develop curricula of their own. Related to this is the rate of fragmentation of technical knowledge into specialities, as well as the rate of obsolescence. Corporations have come to recognize they cannot discard

intelligent, useful human beings at an ever earlier age when in fact their life span and requirements for useful activity are growing (1975).[121]

"A Case Study - Examining One Company's Training Effort"

Kawneer Company, Inc. is the leading manufacturer of architectural aluminum products in the world with manufacturing facilities and service centers around the United States and Canada, as well as five plants in Europe. The company's corporate headquarters is in Atlanta, Georgia. Annual sales in the United States and Canada for 1985 were two hundred seventy-four million dollars.

Kawneer's products, which range from commercial aluminum doors and windows to "curtainwalls" used on high-rise buildings, are sold through distributors who own local glass businesses. Kawneer employs one hundred ten salesmen to call on these distributors and to promote their products with architects and general contractors. Due to the highly technical nature of these products, Kawneer has provided extensive training programs for its employees and customers since 1947.

The company's training programs are primarily managed by the Training and Development Manager. In this capacity, he is responsible for a staff of six individuals, and manages a budget which exceeds five hundred thousand dollars. There are four full-time instructors

in the Training Department, one full-time audio-visual specialist, and one full-time secretary. The training center, with offices, a classroom, and an installation area for the erection of "mock-ups" of the products, is located within the company's corporate office building. The classroom facility is designed to accommodate approximately fifteen to twenty people.

The training staff consists of the four instructors, three of whom have extensive experience within the company in a variety of technical and service positions. The fourth individual has a sales background, and some industrial experience, but not within the specific industry of architectural aluminum. None of the instructors have formal training in educational methods or learning theory.

The audio-visual specialist has a background in public television and is professionally trained for videotape program production. The secretary is a professional who has held a variety of positions in other business offices.

The responsibilities for the Training Department fall under three general categories: sales training and recruiting, sales management development, and customer training. Additional training programs are provided to employees at plant and office locations around the United States and Canada and are coordinated by the Personnel Department.

Given the fact that this company has provided formal training programs since 1947, it is evident that the commitment to training is deeply seated. The company President views training as a required operational expense - a necessary part of the business to get the work done and to develop customer loyalty. As with any operating expense, budgets are carefully scrutinized, and emphasis is placed on "cost effectiveness." Resources are readily available for programs and related materials that can be clearly illustrated to have positive, direct impact on the company's profitability. There is a consistent ratio between this criteria (impact on profitability) and the size of the training budget for each program.

This company is a manufacturer of commercial building products of a highly technical, sophisticated nature. Other than engineers or individuals hired with experience in the industry, it is highly unlikely that a new employee would be hired possessing the technical knowledge or skills required regardless of the level of his or her formal education. In this sense, the training that is provided augments the efforts of public schools. Because of the highly technical nature of this business, few "basic academic skills" programs are provided, and employees are screened carefully to insure that they possess these skills when they are hired. Therefore, supplemental programs are typically related to

vocational production skills related to machine operation, changes in technology, and clerical skills. Generally speaking, it would not be seen as cost effective to provide basic academic training, and employees requiring these programs would be expected to attend outside programs on their own time to acquire them, most likely looking to public schools.

Kawneer Company divides their training effort into two broad areas - those related to Marketing, and those related to Personnel. The Corporate Training Manager position is actually a part of the company's Marketing Department since his program responsibilities are concerned with sales, sales management, and customer relations. These two training efforts (Personnel and Marketing) operate rather independently. Some effort is made to share resources and to avoid duplication of effort. Budget responsibilities are independent, and staffing is separate.

Included in the Personnel Department's training effort is the ongoing production and distribution of self-instructional materials. These materials are most commonly slide/audio-tape programs, or videotape programs. Some of the videotape programs are "interactive videotapes." All of these programs are developed in the company's audio-visual production studio within the corporate office and are distributed to the plants and offices around the U.S. and Canada. These facilities

all have conference rooms which are equipped to present the programs. The programs cover a variety of topics ranging from production issues, products, personnel motivation, company philosophy to basic office skills. Local personnel directors at the facilities utilize these programs with company personnel in small-group training sessions, or the programs may be used on a self-instruction basis. All levels of employees are provided access to these programs, depending on the topic, and its appropriateness to their job.

Looking more closely at the three areas of responsibility for the Marketing-related training programs, the first is sales training and recruiting. New salesmen are recruited locally by the Area Sales Managers around North America. After preliminary interviews at that level, they come to the corporate office for a series of interviews which include the Director of Personnel, Director of Marketing, other functional managers, and company Vice Presidents. Following successful interviews at all levels, they are hired and eligible to begin training.

The sales training programs are offered four times a year, and each program last thirteen weeks. Approximately three or four individuals participate in each session. The first eight weeks of training take place at the corporate office training center. The new sales personnel are provided an orientation to the company and

the construction industry. During the first two-week segment, they are presented with information regarding the company's products, services and philosophies. As well, they are taught basic selling and communication/ presentation skills. A separate area in the corporate office building is utilized by the new salesmen, under the supervision of the instructors, in which they fabricate, erect and install the company's products under "mock-up" conditions.

The material described above is presented in the classroom setting which is highly interactive and often utilizes lecture/discussion. Audio-visual support is provided through the use of transparencies, slides, videotapes, product samples and company literature. These support materials are produced through the company advertising department, or are sometimes (but rarely) purchased from outside vendors. Rear-screen projection is available in the classroom for slides and films, and videotapes are available on one-half inch VHS format, as produced in the company's audio-visual production facility.

During the third and sixth weeks of the initial eight weeks of training, the new sales trainees travel with an experienced company sales representative. They fly to meet this individual and travel with him for the week. This experience provides the trainee with some perspective about the sales position and illustrates the

application of information which has been presented during the classroom experience. They then return to the corporate office training center to complete the formal training program. All expenses, including travel, auto rental, lodging and meals, are covered within the training department's budget. The average training expenditure for thirteen weeks exceeds twenty thousand dollars per trainee.

The remaining weeks of training for the new salesman are conducted at a plant or office facility close to the territory he will be assuming. These activities include a variety of functional positions including production and service related operations. At the end of this thirteen week program the trainee is eligible for a sales territory.

The second area of responsibility for the training department in Kawneer Company is sales management development. The department develops and provides week-long training seminars for sales managers, covering a number of management issues as well as including product and marketing information. Also, the department supports the sales manager's efforts to develop new and experienced sales personnel by developing and distributing manuals and materials which can be used "in the field." These include materials which are concerned with effective recruiting and hiring techniques, personnel

administration, motivational materials, and marketing information.

The third area of responsibility is customer training. As is the case in many companies, this company provides extensive training programs for their customers involving the pricing, installation and sale of their products. Kawneer offers twenty week-long training programs for their customers around the United States and Canada. The training department instructors divide their time between the sales training activities at the corporate office and traveling to the customer training programs. The instructors work in two-man teams at these customer training sessions. The customers are responsible for their travel and lodging expenses. Participation in the programs is a benefit of being a customer and there is no charge. Kawneer provides an opening dinner, lunches each day, and a "graduation" luncheon on the last day. Certificates are provided indicating satisfactory participation in the program.

The Training and Development Manager reports to the Director of Marketing, who reports to the Vice President for Sales. The Training Manager is a staff position and has no authority related to sales personnel after their initial training. A complete written evaluation is made of each sales trainee's performance during training, and this is presented to the new salesman's manager. In much the same way, the training function is a support activity

to the area production and sales offices, especially as it relates to sales management development and customer training. Much of the costs for these activities are absorbed by the area production and sales offices and are not reflected in the training department's budget.

Clearly, training activities related to Marketing hold a priority in Kawneer Company. The other training programs which are directed by Personnel are not nearly as extensive, nor as expensive. Again, most programs for Kawneer employees are internally produced, and self-instructional, which is extremely cost effective. Still Kawneer employees commonly say that other than sales personnel, the company spends more time and effort training people outside the organization than it does on employees. Training for Kawneer Company is dollar driven. Increased profitability is the goal behind every training program.

In terms of this research investigation, Kawneer Company's training programs primarily are designed to augment public schools. Most of the training which they provide is company-specific and not available from any other educational institution. Kawneer recognizes that applicants for jobs may be deficient in some basic skills. Rather than provide training programs to supplement public schools, they try to screen newly hired employees to assure adequate basic skills. If employees do need supplemental training, they are expected to seek it on

their own time. Kawneer does provide tuition assistance for their employees who take outside courses related to their jobs.

Educational resources at Kawneer Company are only limited by the degree of contribution the training programs make toward the company's profits.

Consequently, the future is open to continued support of the company's goals, assisting in the sale of products, the service of customers, and the development of employees to reach their maximum level of performance.

These training activities are fully independent of the educational efforts of public schools.

"A Need for Definition - Summary of the Review of Related Literature"

During relatively more stable economic times, a study in 1975 by Stanley Peterfreund Associates found that training, education and personnel development was clearly on the rise as a corporate function and that management within many corporations wanted the following issues addressed:[122]

1. More analysis and evaluation, objectives more systematically defined.
2. Well trained (educated) persons available when needed.
3. Employees able to be retrained for new skills and new roles.

4. More technologically advanced companies have a greater need to educate their own people.
5. Personnel able to operate with a higher degree of independence when company operations require it.
6. Legal requirements must be met (Equal Employment Opportunity, Affirmative Action, OSHA, Mandatory Continuing Education, etc.).
7. Schools and/or academic institutions were seen as having inadequate resources, doing an inadequate job in a specialized area.

All indications are that these concerns, and many others, still remain for corporations. Increased economic pressures, coupled with rapid social and technological change, continue to challenge business and industrial organizations. Clearly, training and educational programs are readily seen as one method for addressing these challenges by corporations.

At the same time, many of these same issues come under the responsibilities commonly assigned to our public schools. The role of vocational education within public schools is deeply seated. As we discussed within this chapter, public schools' responsibilities have included the acquisition and practical application of skills - among which are job-related skills. This responsibility dates back to the turn of the century in the United States. During this period, and up to the present,

private industry has made an on-going and increasing commitment to their own educational system, which parallels some of the same goals assigned to public schools. Given the information presented here, it is evident that there has not been a thorough investigation and description of the relationship between the educational effort made by private industry and that made by public schools. The purpose of this study, therefore, is to examine the educational efforts made by private industry in light of their relationship to the purposes of public schools.

Chapter III

Design of the Study

OVERVIEW

This chapter contains descriptions of the procedures employed in this study.

The purpose of this study was to describe the efforts of private industry to educate employees and to explain the relationship between those efforts and the efforts of public schools.

The development, field testing, and administration of the questionnaire used to collect data about private industry Training Directors' attitudes regarding the role of private industry training relative to the purposes of public schools are described.

The selection of one hundred four private industry Training Directors for inclusion in the sample is related. Demographic information about the population is presented.

The design of the study is then laid out and procedures used for analysis of data are discussed.

Development of the Instrument

The problem was to attempt to describe the role of private industry training programs relative to the purposes of public schools as perceived by key individuals within private industry. The relationship between training programs within private industry and public schools was not well defined. Private industry training, as a significant element of America's educational effort, is on the rise. At the same time, public education in the United States is receiving serious examination and evaluation as to its effectiveness and goals.

From this analysis, it was clear that two distinct, formative efforts were being made to educate, and re-educate, America's population.

The purposes of public schools have evolved to a level of comprehensiveness which encompasses the principles of a liberal, humanistic philosophy as well as pragmatic skills training. Traditionally, private industry's needs for informed, technically competent workers have been largely met by public schools. Yet private industry has also committed significant resources to their own independent educational effort. This study was designed to examine the purposes of public schools and contrast these with training/education programs being provided by private industry. Better understanding of the role of private industry training as it augments or supplements the efforts of public schools was the goal.

More specifically, the research focused on two areas, explored through a survey of corporate Training Directors, to answer the following underlying issues:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools? Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful.

As used in this investigation, the terms "augment" and "supplement" are defined as follows:

Augment - to make or become greater; enlarge; enrich what currently exists.

Supplement - something added to a completed thing, or to make up for a deficiency.

"Initial Approach"

As first conceived, the survey was to be presented to Chief Executive Officers (CEO's) or Presidents of "Fortune 500" companies. These individuals could provide an authoritative perspective regarding their companies' motives for offering these programs. Fortune 500 companies were considered for the population since larger companies are most likely to have comprehensive training programs (Training, 1983).[123] The original survey was going to consist of eight to ten in-depth telephone or personal interviews with CEO's or Presidents designed to

uncover the attitudes of corporate leaders. Also considered was the use of a questionnaire to be sent to a sample of CEO/Presidents from Fortune 500 companies.

At the presentation meeting of this proposal, it was concluded that CEO/Presidents may not be the best population for this investigation. The committee questioned if CEO/Presidents would repond to the survey in sufficient numbers to provide meaningful information. Training Directors who are more familiar with training programs and who would be more likely to participate in the survey were selected.

There were multiple advantages to selecting Training Directors. The investigation was able to include more specific information about private industry training program's content and structure of which CEO's and Presidents may not be familiar. The survey was designed to investigate the following issues:

1. The types of training programs being provided by selected companies.
2. The relative amount of resources being allocated to these training programs.
3. The relationship between these programs and public schools.
4. Whether these training programs meet the needs of private industry.
5. Whether public schools meet the needs of private industry?

6. Significant trends for the future.

More specifically, the above issues were expanded in the development of the questionnaire, utilizing previous research by the Conference Board (1977),[124] Peterfreund (1975),[125] McQuigg (1980),[126] and Training Census Reports (1982, 1983, 1984).[127, 128, 129]

This approach would not attempt to measure the effectiveness of specific private industry training programs. Rather, it would examine the responses of Training Directors regarding the role of training programs provided by their companies relative to the purposes of public schools. From this, it could be determined if private industry's effort is intended to augment or supplement public schools and if Training Directors felt the effort to augment or supplement is successful.

"Instrument"

After checking with various sources, including Buros (1974), the writer was unable to locate an instrument applicable to this investigation.[130] After consulting with his committee, the researcher proceeded to develop a questionnaire to be used for a survey of the responses of Training Directors regarding the role of private industry training relative to the purposes of public schools.

The instrument was made up of sixty-five statements which are distributed into five sections, totaling nine pages.

The first page, which is the first section, was designed to provide general background information about each company whose Training Director participated in the survey. This information included the organization's name, size, organization type, and the name of the Training Director completing the questionnaire. The classifications which are provided for organization types are those commonly used in related literature (Training, 1983).[131] Ranges are provided for information about organizational size (0-50 employees, 50-99 employees) up to 10,000^{+} employees. Training Directors used simple check marks or filled in blanks for this section.

The second section was designed to illuminate the current areas of emphasis within private industry's training effort and to attempt to forecast future trends in emphasis.

The first page in the second section provided a definition for the four general categories of private industry training programs: 1) Job Skills, (2) Supervisory/Organizational Development, 3) Basic Education/ Remedial Academic Skills, and 4) Orientation Training. These are broad categories of training found within the related literature.[132]

These four general categories were the substructure for the questionnaire and provided a means to examine the underlying issues of whether training programs

augment or supplement public schools with a more specific focus. Utilizing this sub-structure, it could be determined if each of the four general categories of training were intended to augment or supplement public schools and if they were successful.

On the first page of the second section, each Training Director was asked to indicate their company's budget commitment in terms of a percentage for each of the four categories of training. (Total of all four areas equals one hundred percent.)

The questionnaire did not request exact dollar estimates to be made by the Training Directors. First, a preliminary telephone survey of select Training Directors indicated that there would be significant reluctance by Training Directors to research this information accurately and provide it for this investigation. Second, it was not deemed to be necessary for the purposes of describing the role of private industry training relative to the purposes of public schools.

The next page of the second section was designed to determine future directions for private industry training in the four general categories (Job Skills, Supervisory, Basic Education, and Orientation). The Training Director was asked to check if their company's effort in each category would "increase, decrease, or remain the same."

The third section of the questionnaire was designed to provide a more detailed examination of each of the four general training categories. There were four sub-sections, one for each training category (each on a separate page). The same ten statements were given for each sub-section.

The first question for all four sub-sections pre-qualifies the participant for completing the remainder of the statements in that sub-section. The first statement determined whether or not each company provided a particular category of training.

If the company did provide training activities in a category, the participant was directed to complete the remaining items (two through ten) for that sub-section. These items were designed to provide insight into the content, structure, and priorities of the company's training effort relative to the purposes of public schools.

If the company did not provide training activities in a category, logically they would not be able to provide further details. They were directed to respond to the second statement in the sub-sections indicating their attitude regarding the need for additional training by their company in this category.

The fourth section of the questionnaire consisted of eleven statements which were of the Likert type. The response format was a five-point range: Strongly Agree,

Agree, Undecided, Disagree, and Strongly Disagree. The Likert-type scale was selected because of its ability to collect large amounts of information per item (Moser and Kalton, 1972).[133] Each item in a Likert-type scale is itself a rating scale (Robinson, Athanasious and Head, 1969).[134] Likert scales can be combined with other types of items in the construction of indices and scales (Babbie, 1973).[135]

The fourth section was designed to determine Training Directors' attitudes about the role of private industry training programs relative to the purposes of public schools. Each statement was a generalization about private industry's training needs, expectations, and achievements as they related to public schools. There were eleven statements to which each Training Director responded using the Likert-type response format.

Some of the items in section four were linked to statements presented earlier in the questionnaire and therefore provided further insight into the role of private industry training relative to the purposes of public schools. As an illustration, statement number one in section four, "Public education does not understand our training needs.", could be linked to statement number three, "Public education has the responsibility to provide (a category of) training to meet private industry's need.", in each sub-section of section three. This

analysis could clarify the role of private industry training as to whether it augments or supplements public schools.

Section five consisted of four open-ended questions which provided each Training Director an opportunity to elaborate upon earlier responses focusing on the role of training within private industry.

These questions are:

1. Some people feel that public education should provide vocational programs which are very "job specific," while others feel that there should be a general, orientation approach. Still others feel that public schools should concentrate exclusively on "basic" academic skills. Given the needs of your organization, what approach do your feel public schools should take, and why?
2. If public education took the approach you indicated above, would this effect the training programs provided by your company? How?
3. Should more be done to clarify the relationship between public education and training within private industry? If so, who should be responsible.
4. What additional comments should be made regarding your responses in the questionnaire, or about the subject of training generally?

Open-ended questions were effective as they allowed the participant to feel that he or she was not being restricted in his/her response (Wiersma, 1967).[136]

"Construction of the Instrument"

Following Likert's advice, more statements than would be included in the final questionnaire were assembled (Likert, 1932).[137] Some of these statements were gathered through initial telephone surveys conducted with select Training Directors in general accord with the methods suggested by Moser and Kalton (1972).[138] Some statements were developed by the researcher based upon the review of literature especially related by Serbein (1961).[139]

Later, some of these statements were used verbatim in the questionnaire. The original pool of statements consisted of fifty-four items, distributed in the first four sections of the questionnaire. The fifth section was added after the questionnaire was piloted in response to numerous requests for a section with open-ended questions by the participants in the pilot.

The statements were then shown to a faculty member and an advisor, Rafa Kasim, in the Instructional Resources Center for the College of Education, Erickson Hall, Michigan State University. Each of these individuals had experience with attitude survey construction.[140] The objective of these consultants was to refine the

instrument, with considerations for focus, and the amount of time required to complete the questionnaire, to insure a maximum return.

As a result of these consultations, it was determined to divide section three into four separate pages as previously described. Originally, section three consisted of thirty-eight statements which applied to all four categories of training (Job Skills, Supervisory, Basic Education, and Orientation). These statements were limited to ten, which were reported on separate pages, with each page investigating one specific type of training. From this, it would be possible to more closely examine each category of training as well as contrast the various categories.

Section four was reduced from seventeen statements to eleven. The six items discarded contained material sufficiently covered in the rest of the questionnaire.

This resulted in a total of sixty-one statements for the entire questionnaire: two items in section one, eight items in section two, forty items in section three, and eleven items in section four.

The questionnaire was then presented to a select group of Training Directors to evaluate the reading ease of the statement's wording and to estimate the time required for completion of the instrument.

"Pilot of the Questionnaire"

The instrument was piloted in the manner described by Babbie (1973).[141] There was no attempt to randomize the Training Directors in the pilot. They were chosen from the Official Membership Directory for the American Society for Training and Development, "1984 Who's Who in Training and Development." The A.S.T.D. was organized in 1944, and it's members represent more than four thousand five hundred different organizations. The A.S.T.D. is a nonprofit educational association of more than twenty-three thousand persons serving the professional needs of practitioners, administrators, managers, educators, and researchers in the field of human resources development.

A cover letter explained the research project and requested assistance on the pilot of the instrument. A copy of the questionnaire was enclosed, along with a six-item evaluation form, designed to provide information about their experience completing the instrument as well as to seek their recommendations for changes. Each letter also contained a stamped, return addressed envelope. The request for participation in the pilot emphasized that the responses from the Training Directors were purely confidential.

The letters were followed up after two weeks with telephone calls to the Training Directors to whom the letters had been written. A total of twelve of the survey instruments were distributed in the manner described. The

letters with enclosures were mailed on October 20. The first response was received on October 31. The twelfth response was received on November 28. Returned instruments with evaluation forms represented one hundred percent of those delivered.

"Modification of the Questionnaire"

The set of twelve questionnaires and evaluation forms were scored and coded. All of the participants in the pilot found the structure of the instrument easy to follow and the language to be appropriate. Some minor wording changes were recommended on individual statements. The average time required to complete the instrument was twenty-one minutes, ranging from ten to twenty-five minutes.

The single consistent request by the Training Directors participating in the pilot was for an opportunity to make open-ended responses to elaborate or clarify their ideas which were stimulated by the questionnaire. Nine of the twelve Training Directors made this suggestion. As a result, section five was developed and added to the final instrument. This section was designed to provide for open-ended responses regarding the role of private industry training relative to the purposes of public schools.

"Administration of the Questionnaire"

"Sample"

Participants in the survey were selected from the Official Membership Directory of the American Society for Training and Development (1984). This list was published in alphabetical order, both by company name and by individual member's last name. All members were involved in some capacity of human resources development, designing or administering training and management development programs in all types of business, industrial, educational, governmental, or service organizations publicly and privately. The list also indicated the address and position title for each member. ASTD members assumed a variety of positions aside from the position of Training Director. From this list a sample of three hundred sixteen Training Directors were selected to participate in the survey.

All of the companies that the Training Directors represented were located in the United States although the companies may have overseas divisions. Each individual was selected from the ASTD membership list based upon a job title which appeared to indicate broad supervisory responsibilities for training functions within a particular company. Titles such as "Director", "Manager" or "Supervisor" were used as key indicators, as opposed to "Assistant", "Coordinator" or "Instructor", to insure a broad perspective.

As with the pilot, there was no attempt to randomize the Training Directors selected for the survey. Companies represented were widely spread geographically throughout the United States and represented a cross-section of industries.

The budget for this study was sufficient for the sample of three hundred sixteen Training Directors. Training (1982) estimated that there are two hundred twelve thousand full-time trainers in the United States, but there are no estimates of how many Training Directors there were.[142] The sample of three hundred sixteen yielded a sampling ratio of one out of every six hundred seventy trainers in the United States. While it could not be accurately estimated, it should be noted that the actual sampling ratio for Training Directors in the United States would be substantially less.

On January 17, 1985, a questionnaire was mailed to each of the three hundred sixteen Training Directors in the sample. A cover letter explained the general purpose of the investigation and requested their professional perspective. Each Training Director received a stamped, return addressed envelope. Again, as with the pilot, the letter stressed that all responses were strictly confidential and that the anonymity of the individual and his company would be guaranteed.

On January 31, a follow-up telephone call was made to each Training Director who had not responded. On

February 7, a second questionnaire was mailed to each non-responding Training Director. The cutoff date for receiving responses was March 1.

Return of the questionnaires by the Training Directors was:

Seventy-four returns by January 31 (twenty-three-point-four percent) prior to telephone call.

Nineteen returns by February 7 (six percent) prior to to second call.

Eleven returns by February 21 (three-point-five percent) prior to cutoff date.

Eight returns were not usable due to incomplete information and oversights. The writer was unable to contact the authors of these returns to complete the questionnaires.

The net usable sample was one hundred four (thirty-three percent). Two additional questionnaires were returned after the March 1 cutoff date and were not included in the subsequent analysis. One was received on March 12 and the other on March 25, 1985.

This researcher recognized that the number of questionnaires returned (thirty-three percent) was low. This return was acknowledged to be insufficient for statistically valid measurements. However, the conclusions for this study which resulted from the analysis of these data were fully supported by the related literature. As well, the data compiled from the questionnaire directly

supported the conclusions derived from the pilot questionnaire which had a return of one hundred percent. Therefore, this researcher was confident that the number of questionnaires returned from the sample of the Training Directors was sufficient to form meaningful conclusions for this investigation.

"Design"

This work is designed to describe a sample of private industry Training Directors' responses regarding the role of private industry training programs relative to the purposes of public schools. The data was gathered by means of a survey questionnaire, and the objective was generalization to the population of Training Directors in the United States as they were represented in the sampling frame.

Training Director's responses toward the role of private industry training, relative to the purposes of public schools, were described by the use of tables and tabulations of frequency and percentage of responses, according to methods suggested by Johnson (1977).[143]

The data was presented to address the questions raised in the Statement of the Problem, in Chapter I. More specifically, the analysis focused on two areas to clarify the following underlying issues:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools? Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful?

As used in this investigation, the terms "augment" and "supplement" are defined as follows:

Augment - to make or become greater; enlarge; enrich what currently exists.

Supplement - something added to a completed thing, or to make up for a deficiency.

"Analysis"

The results of the survey are presented in Chapter IV and are divided into five sections.

Chapter IV, section I, contains five tables which illustrate the nature of the companies which participated in the study and the basic scope of the training programs that they provide. This section is provided to establish the current condition of training programs within private industry.

Chapter IV, section II, contains two tables which illustrate the trends indicated by the Training Directors. This section can be contrasted with section I, as well as other sections of Chapter IV, to determine the role of

training programs as they may augment or supplement public schools in the future.

Chapter IV, section III, describes "who, what, where, when, and how" about the training programs offered by private industry. This section is a more specific, close examination of the basic programs and how they operate. From this, one can understand who is receiving training within private industry and recognize the conditions in which they receive training to better contrast training with the purposes of public schools.

Section IV, in Chapter IV, consists of six tables designed to illustrate public education's relationship to private industry training. This section examines this relationship for each category of training (Job Skills, Supervisory, Basic Education and Orientation) as well in general, as described by the Training Directors participating in the survey. Finally, this section illustrates how effective the Training Directors feel private industry's training programs are as they either augment or supplement public schools.

Section V is a narrative summarization of the open-ended responses which were provided in the fifth section of the questionnaire. Simply, these responses are organized to examine the Training Directors' attitudes regarding:

1. What should the focus of public schools be?

2. If public schools took the approach the Training Director recommended, would it change his/her company's training effort?
3. What should be done to clarify the relationship between public schools and private industry's training effort?

Training Directors' responses toward the role of private industry training programs relative to the purposes of public schools are described using percentages, or simple numbers, in the tables within Chapter IV. Survey data often are analyzed by the use of tables and frequency, and percentage of responses are tabulated for each item (Johnson, 1977).[144] As well, Johnson suggested that it is sometimes preferable to present the exact responses of a smaller sample of cases.

Items which are of the Likert type in the questionnaire are determined to indicate a positively expressed attitude if there is a response of "strongly agree" and "agree." An "undecided" response indicates a neutral position. Negative attitudes are indicated by a response of "disagree" or "strongly disagree."

If any items on the questionnaire were omitted, the Training Director was contacted by telephone and asked to respond to the item or items. If the participant was not available, and therefore not able to complete the questionnaire, the instrument was not included in the analysis.

"Perceived Role of Private Industry Training Relative to the Purposes of Public Schools"

The information described in Chapter IV answers the six questions presented in the Statement of the Problem. More specifically, this information illustrates how private industry training programs attempt to augment and/or supplement public schools as perceived by Training Directors. As well, this information represents the responses of these Training Directors concerning the effectiveness of training to augment and/or supplement public schools.

"Summary"

This chapter contains descriptions of the following procedures used in the study:

1. The construction, field testing and administration of the questionnaire.
2. The selection of the sample and its demographic characteristics.
3. Procedures for data anlaysis are explained.

Chapter IV

Presentation and Analysis of Data

OVERVIEW

The purpose of this chapter is to report the findings of this investigation. Data obtained from a questionnaire, which was distributed to a sample of three hundred sixteen private industry Training Directors, is presented to determine the role of private industry training programs relative to the purposes of public schools. The information provided in this chapter is taken from the responses of one hundred four Training Directors who participated in the survey.

More specifically, this data is presented to answer the following underlying issues:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools? Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful?

This chapter is divided into five sections to answer the questions presented above. Section I illustrates the scope of the study, describing what currently exists

within the training programs provided by companies participating in this survey. Section II describes trends which are predicted by Training Directors for private industry training programs relative to the purposes of public schools. Section III illustrates who receives training in private industry programs and more closely examines the nature of the programs currently being provided. Section IV examines the relationship between private industry training and public schools as perceived by Training Directors who participated in the survey. Section V presents a summarization of the open-ended responses provided by Training Directors regarding the focus of public schools and its impact on private industry's training effort.

SECTION I

Scope of the Study

This section is designed to illustrate the nature of the companies that participated in the study as well as the scope of the training programs they provide as described by their Training Directors.

Tables I and II indicate that there were one hundred four companies that participated in the survey through their Training Director. The majority of these companies are described as "manufacturing" organizations, and the rest are distributed among eight other

TABLE I: Types of Organizations Participating in the Survey.
(N = number of companies responding)
(% = percent of companies responding)

Type of Organization	N	%
Manufacturing	64	61.5
Banking/Finance/Insurance	1	1.0
Transportation/Communication	7	6.7
Business Services	7	6.7
Wholesale/Retail Trade	10	9.6
Public Administration	-0-	-0-
Health Services	1	1.0
Education Services	-0-	-0-
Other (Mining, Construction, Agricultural, etc.	14	13.5
Total	104	100.0

TABLE II: Size of Organizations Participating in the Survey.

(N = number of companies responding)
(% = percent of companies responding)

Number of Employees	N	%
10,000 +	45	43.3
2500 - 9999	24	23.1
1000 - 2499	24	23.1
500 - 999	5	4.8
100 - 499	6	5.8
50 - 99	-0-	-0-
0 - 49	-0-	-0-
Total	104	100.1

general categories commonly used to characterize business organizations.

There were no companies defining themselves as "public administration" or "educational services" organizations participating in the survey. As indicated in Chapter III, there was no attempt to randomize or stratify the sample for the survey. Therefore, it cannot be determined if these types of organizations were included within the original sample of three hundred sixteen and were not among the one hundred four companies that participated in the survey.

Most of the companies have a significantly large number of employees with eighty-nine-point-three percent having more than nine hundred ninety-nine employees. None of the companies had fewer than one hundred employees, suggesting that training programs are principally available in larger business organizations, either as a consequence of size or availability of resources. Clearly larger organizations recognize the need for training employees.

Table III indicates that Job Skills and Supervisory training receives the most attention and dominates sixty percent to ninety percent of the total dollars spent for all types of training by businesses. Table III represents the Training Directors' responses regarding their companies' total budget expenditures, divided into the four categories of training commonly provided (Job

TABLE III. Percentage of Companies Who Dedicate a Portion (%) of Their Total Training Budget to Each Type of Training Program. (Job Skills, Supervisory, Basic Education, Orientation)

Percentage of Total Budget

	0	1-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
Job Skills	1.0	1.0	4.8	5.8	17.3	15.4	17.3	15.4	4.8	12.5	2.9	1.0
Supervisory/ O.D.	1.0	2.9	5.8	7.7	16.3	25.0	18.3	9.6	6.7	4.8	1.9	-0-
Basic Ed./ Remedial	42.3	39.4	14.4	3.8								
Orientation	4.8	43.3	27.9	21.2	1.9	1.0						

Skills, Supervisory, Basic Education, and Orientation). The total of all four categories equals one hundred percent of a company's training expenditures.

For example, one percent of the companies in this study spend zero percent of their total training budget on Job Skills and Supervisory training, while forty-two-point-three percent spend zero percent of their total training budget on Basic/Remedial Programs. Four-point-eight percent of the companies spend zero percent of their total training budget on Orientation Programs.

Expenditures for Job Skills training and Supervisory training are wide ranging from company to company. Companies indicated zero percent through one hundred percent expenditures for each of these categories as they constituted a percentage of their total budget.

Concentration of expenditures are in the twenty-one percent to eighty percent range for Job Skills training and are in the eleven percent to sixty percent range for Supervisory training.

Table III also indicates that Basic Education expenditures are less than five percent of the total training budget in eighty-one-point- seven percent (forty-two-point-three percent plus thirty-nine-point-four percent) of the organizations participating in this investigation, and that expenditures for Basic Education programs did not exceed twenty percent of any organization's training budget. This data would indicate that

while there is some commitment to Basic Education skills programs by private industry at this time, as a supplemental role to public schools, this type of training is currently of secondary importance.

Table III illustrates, as well, that Orientation training expenditures did not exceed twenty percent of any organization's total training budget. Forty-three-point-three percent of the companies in this survey spent only one percent to five percent on Orientation training, and forty-nine percent of the companies spent from six percent to twenty percent illustrating a very consistent and concentrated level of financial commitment to this type of training. Only four-point-eight percent made no expenditures on Orientation training.

Table IV represents the data from the first question in each sub-section of Section III in the questionnaire. That question asked, as a qualifier for completing the remainder of the sub-section, whether each company provided training programs of each category (Job Skills, Supervisory, Basic Education, and Orientation). Table IV illustrates a consistency with the budget information presented in Table III. Table IV shows the types of training programs provided by the companies who participated in the survey. Job Skills, Supervisory, and Orientation training programs are a priority. Each of these categories of training are available in over ninety percent of the companies. Even though Table III

TABLE IV: Companies Providing Training, Per Type of Training.

	Job Skills	Supervisory	Basic Ed.	Orientation
Percent "YES"	99.0	99.0	42.3	96.2
Percent "NO"	1.0	1.0	57.7	3.8

indicated a relatively small percentage of the total training budget is spent on Orientation training, it is still regarded as significant in most companies.

At the same time, the companies are divided regarding Basic Education training programs. Forty-two-point-three percent of the organizations are providing programs specifically in Basic Education skills, while fifty-seven-point-seven percent of the companies are not providing them.

Since Table III indicates that only forty-two-point-three percent of the Training Directors indicated that their companies make zero percent expenditures on Basic Education programs, and Table IV indicates fifty-seven-point-seven percent do not provide this type of training, it would suggest that some companies may make limited expenditures toward the development of basic academic skills without having formal programs for this purpose.

Table V represents another form of commitment toward training that private industry makes. Time away from the job is an additional operating expense for a company not often considered as a direct budget expenditure. Table V illustrates some of the variations in the commitment of time that companies make according to the type of training being provided (Job Skills, Supervisory, Basic Education, and Orientation).

Job Skills training and Supervisory training are consistent with seventy-five percent of the companies

utilizing company time for these programs. Only with Basic Education programs do a considerable number of companies expect employees to use their own time, exclusively. Thirteen-point-five percent of the Training Directors indicated that their employees must use their own time to participate in Basic Education programs.

A priority regarding Orientation training programs may be illustrated by the fact that ninety-five-point-two percent of the Training Directors indicated that their companies commit company time for these programs.

The combined percentages for Basic Education programs, in Table V, equals only forty-two-point-three percent because all companies do not provide this form of training for their employees.

SECTION II

Trends for Training Programs

In section II of the questionnaire, the Training Directors predicted trends for the future for their companies' training programs. Table VI indicates the Training Directors' perceptions regarding whether their companies' efforts will increase, decrease, or remain the same for each different type of training (Job Skills, Supervisory, Basic Education, and Orientation).

The most significant change is forecast as an increase in the area of training programs related to

TABLE V: Commitment of Time for Training Programs, Per Type of Training.

	Job Skills	Supervisory	Basic Ed.	Orientation
Percent on Company Time	75.0	74.0	17.3	95.2
Percent on Employee Time	-0-	1.0	13.5	1.9
Percent on Both	25.0	25.0	11.5	2.9

TABLE VI: Predicted Change in Training Effort, Per Type of Training.

	Job Skills	Supervisory	Basic Ed	Orientation
Percent Forecast "Increase"	55.8	65.4	9.6	36.5
Percent Forecast "Decrease"	5.8	5.8	11.5	7.7
Percent Forecast "Remain the Same"	38.5	28.9	78.8	55.8

Supervisory training with sixty-five-point-four percent of the Training Directors indicating this increase. Similarly, fifty-five-point-eight percent of the Training Directors forecast an increase in Job Skills training in their companies. Orientation training was a close third with indications for an increase by thirty-six-point-five percent of the participants.

The most stable area is Basic Education training with seventy-eight-point eight percent of the companies indicating that this form of training will remain the same. Eighty-one-point-seven percent of the organizations spend less than five percent of their budget on this form of training currently.

Finally, and significantly, there does not seem to be a serious trend to decrease in any of the categories. Table VII is presenting data drawn from section three of the questionnaire. Each Training Director was asked to indicate whether his/her company should provide more training in each training category. Even Training Directors whose company did not currently provide a category of training were asked to respond.

Eighty-four-point-seven percent of the Training Directors saw a need for more Supervisory training with fifty-two percent indicating a strong positive response. This clearly parallels predictions presented earlier in section II of the questionnaire and illustrated in Table VI, regarding trends for Supervisory training. Job

TABLE VII: Need to Provide More Training, Per Type of Training.

	Job Skills	Supervisory	Basic Ed.	Orientation
Percent "Strongly Agree"	30.8	52.0	7.7	38.5
Percent "Agree"	43.3	32.7	20.2	37.5
Percent "Undecided"	6.7	6.7	22.1	10.6
Percent "Disagree"	17.3	7.7	39.4	11.5
Percent "Strongly Disagree"	1.9	1.0	10.6	1.9

Skills and Orientation training programs received very similar responses, also calling for increased attention in the future. Seventy-four-point-one percent of the Training Directors indicated the need for more Job Skills training, and seventy-six percent indicated the need for more Orientation training.

Only Basic Education training received a significantly divided response. This division parallels the split in the number of companies who provide Basic Education training. In both cases, the balance is tipped toward the negative responses. Fifty-seven-point-seven percent of the companies participating in the survey do not feel that their company should provide more Basic Education training programs in the future. Ten-point-six percent indicated a strong negative response on this issue. Also, it should be noted, twenty-two-point-one percent of the Training Directors were undecided, which is sizable, and could impact future trends were they to commit to one position.

SECTION III

Who - Where - When - How

This section is designed to examine who the recipients are of private industry's training effort and to examine the nature of this effort more closely as it relates to the purposes of public schools. The data presented in this section is a more specific, close

examination of the basic programs being offered and how they operate.

Table VIII describes who is receiving the training that companies provide. Each Training Director may have responded to more than one employee group under each category of training which a company may provide. As an example, Training Director "A" may have indicated that Job Skills Training is available to just "Other Salaried" and "Hourly" employee groups. Training Director "B" may have indicated that in his company Job Skills Training is available to "All Employees." Training Director "C" may have indicated that in his company, Job Skills Training is available to "Management", "Supervisory", "Other Salaried", and "Hourly " employees (yet they did not elect to check the "All Employees" response).

This variation in responses by each Training Director also applied to the other three types of training (Supervisory, Basic Education, and Orientation). As described above, every Training Director may have indicated a variety of employee groups to whom these kinds of training programs are made available.

Therefore, it is necessary to report the results on Table VIII as raw numbers rather than percentages. As the data illustrates, the totals for each column (each type of training) has a total greater than one hundred

TABLE VIII. Availability of Training to Different Employee Groups, Per Type of Training.

(Note: Each company may respond to more than one employee group for each category of training.) (Number of responses from all companies)

	Job Skills	Supervisory	Basic Ed.	Orientation
All Employees	74	16	32	84
Management	6	80	3	7
Supervisory	11	82	5	8
Other Salaried	12	40	8	6
Hourly	21	3	7	10

four. While one hundred four companies participated, it is clear that more than one hundred four response variations are possible for each type of training.

Most evident from this table is that Job Skills, Basic Education, and Orientation training is available to all employee groups, while Supervisory training is typically limited to personnel already in some supervisory capacity. Hourly workers are noticeably excluded. Concepts such as "Team Building" and "Quality Circles" have apparently not been extended to the hourly worker level in the companies that participated in this survey.

Table IX is another indicator of a company's commitment to training, illustrating whether the training programs that are provided are "Voluntary", "Recommended", or "Required." Clearly, there is strong emphasis placed on participation in Job Skills and Orientation programs.

In comparison, Table IX shows that Supervisory training holds less value, characterized by few companies that require participation and more companies that strongly recommend that their employees receive Supervisory training.

Basic Education programs are primarily voluntary and very seldom are required. As with Table VIII, the data in Table IX is presented as raw numbers.

Table X illustrates an element of a company's commitment to training. This table shows the source of

TABLE IX: Level of Company Requirement for Employee Participation Placed on Participation in Training Programs, Per Type of Training.

(Note: Each company may respond to more than one employee group for each category of training.)
(Number of responses from all companies)

	Job Skills	Supervisory	Basic Ed.	Orientation
Voluntary	31	29	36	7
Strongly Recommended	40	59	15	14
Required	71	45	8	86

TABLE X: Source of Recommendation for Participation in Training Programs, Per Type of Training.

(Note: Each company may respond to more than one level of emphasis for each category of training.)
(Number of responses from all companies)

	Job Skills	Supervisory	Basic Ed.	Orientation
By Job Classification	61	41	5	58
By Their Supervisor	70	82	29	28
By Employee's Request	39	49	35	8
By Training/ Personnel	32	50	14	39

recommendations for an employee's participation in each category of training.

Job Skills training is rather evenly distributed among the sources for recommendations. There is a strong influence by the employee's supervisor to become involved in Supervisory training. Basic Education programs show a great deal of employee self-motivation, while there is little employee option for participation in Orientation Programs.

As Basic Education programs provided by private industry relate to the purposes of public schools, it appears that these activities may be supplemental and provided for self-motivated employees whose needs have been identified by themselves or by the company.

Table XI represents how these training programs are presented. Considering the traditional instruction methods commonly associated with public schools, and the surge of high technology often associated with business, this table lends itself to a comparison of methodologies within these two sources for educational programs.

In all categories of training in private industry (Job Skills, Supervisory, Basic Education, and Orientation), lecture and discussion in a classroom setting is the dominant instructional pattern.

There is also a heavy emphasis placed upon one-to-one, individualized study and self-instruction within

TABLE XI: Training, Per Type of Training.

(Note: Each company may respond to more than one method for each category of training.) (Number of responses from all companies)

	Job Skills	Supervisory	Basic Ed.	Orientation
Lecture	67	78	28	74
General Discussion	58	83	14	64
Case Study	45	84	17	7
Computer Assisted	29	10	6	2
Interactive Computer	18	4	1	-0-
Role Play	46	82	4	5
Programmed Instruction	38	19	18	14
Games and Simulation	25	58	2	8
One to One	66	30	15	43
Individualized Study	50	45	26	26

private industry training programs. These are often supported by "Coaching" and/or programmed instruction.

High technology use of computers, or interactive videotape programs, are primarily used for Job Skills training.

Role Play is commonly used in Supervisory (eighty-two) and Job Skills (forty-six) training, as is the use of Case Studies. Case Studies are used for Supervisory training (eighty-four) and for Job Skills training (forty-five).

Overall, the methodology does not appear to be significantly different in private industry training programs that it is in public schools. If these programs are intended to supplement the efforts of public schools, because of limited effectiveness, private industry's approach is "more of the same" in their own setting. Unique methodological approaches do not appear to be in place.

Table XII illustrates various formats that are utilized in providing training in private industry. As with Table XI, this data lends itself to a comparison between public schools and private industry training programs.

On-the-Job/Off-the-Job training is split evenly for Supervisory programs (sixty to fifty), but it is heavily balanced in favor of On-the-Job training for Job Skills programs (ninety-eight to thirty-three), as well as for

TABLE XII: Training Formats, Per Type of Training.

(Note: Each company may respond to more than one format for each category of training.)
(Number of responses for all companies)

	Job Skills	Supervisory	Basic Ed.	Orientation
On the Job	98	60	12	70
Off the Job	33	50	21	16
Coaching	56	58	8	29
Job Rotation	28	25	-0-	8
Tuition Aid	36	46	19	-0-
Understudy	9	7	-0-	7
Classroom	74	88	27	64
Apprenticeship	27	4	2	3
Self-Study	41	38	21	20

Orientation programs (seventy to sixteen). It is balanced toward Off-the-Job as the setting for Basic Education programs (twenty-one to twelve).

Tuition aid is available for personnel who participate in all categories of training (Job Skills, Supervisory, Basic Education, and Orientation), except Orientation. Clearly, these programs would not be perceived as being available at other educational institutions.

Job Rotation is utilized on a limited basis for Job Skills training (twenty-eight) and for Supervisory training (twenty-five).

Apprenticeships are rarely used and basically only for Job Skills training (twenty-seven). According to this investigation, understudy as an approach is seldom used.

Table XIII looks specifically at companies that spend ten percent or less of their total training budget in any single category of training (Job Skills, Supervisory, Basic Education, or Orientation). This examination is an effort to see if a low level fiscal commitment has any relationship to future expenditures for training their employees.

These companies have a firm position regarding Basic Education programs - the low level commitment will continue. Seventy-seven-point-nine percent of the Training Directors indicated that training in the Basic Education

TABLE XIII: Relationship Between Companies That Spend 10%, or Less Than 10%, of Their Training Budget On A Single Training Category and Predicted Increase, Decrease, or Status Quo (same) In Each Category.

	Job Skills	Supervisory	Basic Ed.	Orientation
Percent Forecast "Increase"	4.8	5.8	8.7	31.8
Percent Forecast "Decrease"			9.6	7.7
Percent Forecast "Remain the Same"	1.0	3.8	77.9	36.5

category will remain the same. But, Orientation training will increase in about half of the companies who are currently making a low-level fiscal commitment.

Table XIV looks specifically at companies that spend sixty percent or more of their training budget in any single category of training (Job Skills, Supervisory, Basic Education, or Orientation). This examination is an effort to see if a high level fiscal commitment has any relationship to future expenditures for training their employees.

Table XIV illustrates that any increase in Basic Education or Orientation training will not be at the expense of an increase in Job Skills or Supervisory training in the companies that already make a heavy commitment. No companies reported expenditures of sixty percent or higher for Basic Education or Orientation training; therefore, this table only provides data for Job Skills and Supervisory training programs.

While there are indications, in Table XIII, that Orientation training, and to a lesser degree Basic Education training may increase, Table XIV shows that this will take place with increases in Job Skills and Supervisory training programs.

Table XV investigates any relationship between the Training Managers' predictions for future changes in the training programs currently being provided by their companies and their belief regarding the need to provide

TABLE XIV: Relationship Between Companies That Spend 60%, or More Than 60%, of Their Training Budget On A Single Training Category and Predicted Increase, Decrease, or Status Quo (same) In Each Category.

(Note: No companies reported expenditures of 60% or Higher for Basic Education or Orientation Training.)

	Job Skills	Supervisory
Percent Forecast "Increase"	12.5	17.3
Percent Forecast "Decrease"	2.9	1.9
Percent Forecast "Remain the Same"	14.4	2.9

TABLE XV: Relationship Between Predicted Change and The Individual's Belief That There Is A Need for Their Company To Provide More Training.

SA = Strongly Agree A = Agree UN = Undecided D = Disagree
SD = Strongly Disagree

Your Company Should Do More ... (Type of Training)		Predicted Change: Increase %		Decrease %		Same %
Job Skills	SA	26.0	SA		SA	5.8
	A	27.0	A	2.9	A	12.5
	UN	1.0	UN	1.0	UN	4.8
	D	1.9	D	1.9	D	13.5
	SD		SD		SD	1.9
Supervisory	SA	37.5	SA	2.9	SA	9.6
	A	21.2	A	2.9	A	9.6
	UN	2.9	UN		UN	3.8
	D	3.8	D		D	3.8
	SD	1.0	SD		SD	1.0
Basic Ed	SA	3.8	SA		SA	4.8
	A	4.8	A	3.8	A	11.5
	UN	1.0	UN	1.9	UN	19.2
	D		D	4.8	D	33.6
	SD		SD	1.0	SD	9.6
Orientation	SA	19.2	SA	1.9	SA	15.4
	A	13.5	A	3.8	A	19.2
	UN	1.9	UN	1.0	UN	9.6
	D	1.9	D	1.0	D	9.6
	SD		SD		SD	1.9

more training for each category (Job Skills, Supervisory, Basic Education, and Orientation).

In each category of training, where an increase has been predicted by the Training Director, there is also a strong belief that the company should provide more of each type of training.

There is evidence of conflict where a decrease has been predicted. There are mixed feelings regarding the need for a company to provide more Job Skills and Basic Education training by Training Directors who forecast a decline with these training programs. Also, Training Directors that forecast a decline in Supervisory and Orientation training do not support this trend. They feel the company should provide more training programs in these areas.

In companies that forecast the same amount of effort being given in the future to a category of training, the reactions by the Training Directors vary. For Supervisory and Orientation training, they clearly feel that the company should do more. Reactions are mixed in companies that predict the same effort for Job Skills training. In companies that forecast the same effort given to Basic Skills, there is a significant number (percentage) of Training Directors who feel the company should not provide more. This may indicate that they feel there should be less effort made with Basic Education programs rather than to remain status quo as

was forecast. The company may elect to continue to provide Basic Education programs despite the feelings of Training Directors regarding the programs appropriateness and/or effectiveness.

SECTION IV

Relationship Between Private Industry Training and Public Schools

This section is designed to illustrate the relationship between the training programs currently being provided by private industry and public schools as perceived by the Training Directors who participated in the survey.

Table XVI is a direct attempt to identify the perceptions of private industry regarding public school's responsibilities in meeting the educational needs of businesses. From the information previously presented, it is evident that private industry is providing educational programs in a wide range of areas. The issue illustrated in the data relates to private industry training augmenting or supplementing public schools.

For Job Skills training, the Training Directors are split as to this being a responsibility of public schools. Since this area of training accounts for a substantial effort by private industry and vocational programs in public schools, this lack of clarity may indicate an inefficiency resulting from these two independent efforts.

TABLE XVI: Public Education's Responsibility to Provide Programs, Per Type of Training.

	Job Skills	Supervisory	Basic Ed.	Orientation
Percent "Strongly Agree"	9.6	2.9	65.4	1.9
Percent "Agree"	34.6	29.9	29.9	2.9
Percent "Undecided"	9.6	12.5	4.8	7.7
Percent "Disagree"	34.6	45.2		45.2
Percent "Strongly Disagree"	11.5	9.6		42.3

Supervisory training is divided, according to the Training Directors in this survey, with some of the weight toward this type of training not being a responsibility of public schools. Forty-five-point-two percent of the Training Directors disagee, and an additional nine-point-six percent strongly disagree that this is public school's responsibility.

There is clear separation of responsibility, in the minds of the participants in this research, with Basic Education and Orientation training. Ninety-five-point-three percent feel that Basic Education is the public school's responsibility (with strong responses from sixty-five-point-four percent).

Equally clear, eighty-seven-point-five percent of the Training Directors do not feel Orientation training is a responsibility of public schools (with forty-two-point-three percent responding strongly). One difference between these two categories of training should be noted. While none of the Training Directors felt that public schools were not responsible for Basic Education, some did feel that public schools have a responsibility for Orientation training (four-point-eight percent).

Table XVII draws information from a series of questions within the questionnaire that are related to the purposes of training within private industry. These questions were distributed in various sections of the questionnaire.

TABLE XVII: Purposes for Training Programs Provided by Private Industry.

	"Public Ed Does Not Understand"	"Training Must Be Co. Specific"	"Public Ed. Doing All It Can"	"Must Teach Communica-tion Skills"	"Must Teach Computation Skills"	"Enrichment"
Percent "Strongly Agree"	20.2	18.3		25.0	10.6	8.7
Percent "Agree"	52.9	47.1	6.7	52.9	37.5	54.8
Percent "Undecided"	16.3	4.8	16.3	6.7	10.6	7.7
Percent "Disagree"	10.6	29.9	66.3	15.4	38.5	23.1
Percent "Strongly Disagree"			10.6		2.9	5.8

Strong positive responses were given for three statements. Seventy-three-point-one percent of the Training Directors felt that public schools do not understand the needs of private industry. Sixty-five-point four percent felt that training programs must be company specific. Seventy-seven-point-nine felt that they (companies) must teach employees communication skills (with twenty-five percent responding strongly).

Equally clear, seventy-six-point-nine percent felt that public schools are not doing all they can for private industry's training purposes.

The only subject that led to a division in the opinions of the participants related to the issue of private industry needing to provide computation skills training. Forty-eight-point-one percent felt they must teach these skills, while forty-one-point-four percent did not.

Finally, sixty-three-point-five percent felt that they provide training programs to enrich their employee's lives. Training programs in these companies are designed to go beyond basic skills development and are concerned with the total individual, according to the Training Directors who participated in this study. These efforts by private industry augment the basic purposes of public schools.

Table XVIII is a direct attempt to identify the perceptions of private industry regarding the

TABLE XVIII: Effectiveness of Public Schools in Meeting the Needs of Private Industry.

	"Cannot Find People w/Skills"	"Doing All It Can"	"Must Teach Communications"	"Must Teach Computations"	"Enrichment"	"Academic Skills Effective"	"Job Skills Effective"
Percent "Strongly Agree"	7.7		25.0	10.6	8.7	3.8	
Percent "Agree"	31.8	6.7	52.9	37.5	54.8	28.9	19.2
Percent "Undecided"	7.7	16.3	6.7	10.6	7.7	23.1	38.5
Percent "Disagree"	52.0	66.3	15.4	38.5	23.1	41.3	35.6
Percent "Strongly Disagree"	1.0	10.6		2.9	5.8	2.9	6.7

effectiveness of public schools in meeting companies' needs. Again, the data relates to private industry training as it augments or supplements public schools.

Some of the statements used with Table XVIII were also used with Table XVII.

The only additional statements, which solicited a clear pattern of response, relates to public schools doing all they can to meet the training needs of private industry. Seventy-six-point-nine percent disagreed with this statement (with ten-point-six percent responding strongly).

With three other statements considered with this table, the responses by the Training Directors were divided with some imbalance toward disagreement. These statements related to not being able to find skilled people (thirty-nine-point-five percent positive responses to fifty-three percent negative); academic skills being effectively taught by public schools (thirty-two-point-seven percent positive to forty-four-point-two percent negative); and, Job Skills being effectively taught by public schools (nineteen-point-two percent positive to forty-two-point-three percent negative).

Thirty-eight-point-five percent of the Training Directors were undecided on the issue of public schools effectively teaching Job Skills. Should this portion of the participants have elected to commit to a positive or

negative position, it would clearly influence the significance of this item.

Table XIX illustrates how effective the Training Directors feel private industry's own training programs are in meeting their company's needs. Eighty-seven-point-five percent feel that their Job Skills programs are effective.

They are less decisive about their ability to teach academic skills effectively. Forty-one-point-three percent believe that they are effective, yet thirty-nine-point-four percent were undecided. This would suggest that they are not over-representing their capabilities and proposing that they can teach anything well - and/or as well as public schools. This indicates a role by private industry training which augments public schools with some reluctance to attempt to supplement areas which are traditionally recognized as the responsibility of public schools.

Table XX represents the Training Directors' opinions regarding who is responsible for providing training, specifically looking at those companies that do not provide any training programs in a particular category (Job Skills, Supervisory, Basic Education, or Orientation). Simply, if they do not do it, do they feel that they should, or do they feel it is the responsibility of public schools?

TABLE XIX: Effectiveness of Training Programs Within Private Industry.

	Academic Skills Effective	Job Skills Effective
Percent "Strongly" Agree	6.7	15.4
Percent "Agree"	34.6	72.1
Percent "Undecided"	39.4	7.7
Percent "Disagree"	18.3	4.8
Percent "Strongly" Disagree	1.0	

TABLE XX: Training Manager's Opinions Regarding Responsibility for Training in Companies That Do Not Provide Training in A Particular Category.

Question #2 = "Their company should do more."
Question #3 = "Public education is responsible."

SA = Strongly Agree A = Agree UN = Undecided
D = Disagree SD = Strongly Disagree

	Percent Responding Question #2		Percent Responding Question #3	
Job Skills	SA	1.0	SA	
	A		A	
	UN		UN	
	D		D	
	SD		SD	1.0
Supervisory	SA		SA	
	A	1.0	A	
	UN		UN	
	D		D	
	DS		SD	1.0
Basic Ed	SA	2.9	SA	34.6
	A	7.7	A	20.2
	UN	14.4	UN	2.9
	D	27.9	D	
	SD	4.8	SD	
Orientation	SA	1.9	SA	
	A	1.0	A	
	UN	1.0	UN	1.9
	D		D	1.0
	SD		SD	1.0

Training Directors strongly feel that public schools are responsible for Basic Education, and they are divided about whether their companies should do more. There is not enough information to make an assessment with the other categories of training since most companies provide training in these categories.

Table XXI illustrates that the opinions of Training Managers about public school's responsibility for providing training in each category (Job Skills, Supervisory, Basic Education, or Orientation) are consistent regardless of what is predicted to happen with a company's training effort in the future.

The Training Directors' responses are distributed the same, for each category, no matter if they predict an increase, decrease, or status quo (same) effort for a category of training.

The Training Directors are divided regarding public school's responsibility for providing Job Skills and Supervisory training. Possibly goals are unclear for both public schools and private industry for Job Skills training. Also, a significant number of Training Directors expect public schools to be involved in Supervisory skills development which may not be seen as a traditional responsibility for public schools.

Finally, even in companies that predict an increase in their own efforts to provide Basic Education training programs, there is a strong belief that this is

TABLE XXI: Relationship Between Predicted Change and The Individual's Belief That Public Schools Are Responsible for Meeting Private Industry's Needs for Training.

SA = Strongly Agree A = Agree UN = Undecided D = Disagree
SD = Strongly Disagree

Public Schools have responsibility to provide...

	Increase %		Increase %		Same %	
Job Skills	SA	5.8	SA	1.9	SA	2.9
	A	22.1	A	1.9	A	11.5
	UN	5.8	UN	1.0	UN	1.9
	D	16.3	D		D	17.3
	SD	5.8	SD	1.0	SD	4.8
Supervisory	SA	2.9	SA		SA	
	A	16.3	A	2.9	A	10.6
	UN	9.6	UN	1.0	UN	1.0
	D	30.8	D	1.9	D	10.6
	SD	6.7	SD		SD	5.8
Basic Ed	SA	5.8	SA	9.6	SA	51.0
	A	2.9	A	1.9	A	25.0
	UN	1.0	UN		UN	2.9
	D		D		D	1.0
	SD		SD		SD	
Orientation	SA	1.0	SA		SA	1.0
	A	1.0	A		A	1.9
	UN	3.8	UN	1.0	UN	3.8
	D	12.5	D	5.8	D	25.0
	SD	17.3	SD	1.0	SD	24.0

a responsibility of public schools. Nevertheless, Training Directors will increase their effort, which may illustrate duplication of effort; and, these data strongly indicate that this effort by private industry is designed to supplement public schools.

SECTION V

Open-Ended Responses

This section presents a summarization of the open-ended responses provided by Training Directors regarding the focus of public schools and their impact on private industry training.

Not all of the participants in the survey elected to complete the open-ended response section.

Table XXII illustrates the responses regarding what approach the Training Directors feel public schools should take in their effort to educate the population. Forty-seven Training Directors felt that the public schools should focus on basic academic skills and a "liberal education" approach, while thirty-three felt that they should provide vocational education as an orientation. Only four felt that the vocational programs should be "Job Specific."

Interestingly, only four of the Training Directors felt that the public school curriculum should be designed to meet the results of a specific "needs anlaysis" for local communities/businesses. Such

TABLE XXII: Open-Ended Responses
Question #1
"What Approach Do You Feel Public Schools Should Take?"
(Note: Not all participants elected to respond.)
(Number of responses from all companies)

Approach	Responses
Provide Vocational Programs Which Are Very "Job Specific"	4
Vocational Education Which Provides A General, Orientation Approach	33
Basic Academic Skills/Liberal Education	47
Curriculum Designed To Meet The Results of A Specific "Needs Analysis" for Local Communities/Businesses	4

analysis is often advocated in the related literature, and in public discussions, as the solution for effective curriculum design. Companies feel that they are better prepared to teach "job specific" skills than are the public schools - even if a "needs analysis" approach was taken. However, in a global economy, in which individuals may need to change jobs and geographical regions several times in their life, a community-specific curriculum may be too limited in scope. Training Directors may recognize that a "needs analysis" approach is too narrow for a contemporary, complex industrialized society.

Table XXIII illustrates responses to the issue of how private industry training programs would be effected by the recommended approaches for public schools indicated in Table XXII.

The Training Directors' responses are almost equally divided among the three options which were provided. Twenty-six felt that they would provide less basic educational/remedial skills if their recommendations were implemented. Thirty-five felt they would have more time or more effectively teach other things. Twenty-eight felt there would be no change in their training effort.

Table XXIV presents the Training Directors' responses to the traditional question, "Who should be responsible to clarify the relationship between public

TABLE XXIII: Open-Ended Responses
Question #2
"How Would Your Recommended Approach for Public Schools Effect Your Company's Training Program?"

(Note: Not all participants elected to respond.)
(Number of responses from all companies)

Effect	Number of Responses
Less Basic Education/Remedial Skills	26
More Time/More Effectiveness To Teach Other Things	35
No Change	28

TABLE XXIV: Open-Ended Responses
Question #3
"Who Is Responsible for Clarifying the Relationship Between Public Education and Private Industry Training?"

(Note: Not all participants elected to respond.)
(Number of responses from all companies)

Who Should Be Responsible?	Number of Responses
Joint Effort	49
Public Schools Should Take the Lead	16
Private Industry Should Take the Lead	7
Government Should Take the Lead	4
American Society of Training and Development (ASTD) Should Take the Lead	1
No Need to Clarify	5
Will Not Happen	4

and private industry training?" The majority responded that this should be a joint effort (forty-nine of eighty-six who responded). Sixteen felt that this should be the burden of public schools. Five felt that there was no need to clarify the relationship, while four responded that it would never happen.

Additional open-ended comments follow:

- All students in college should have to take some basic business courses...to prepare them for jobs in the business world.
- Training as a viable business resource is just being recognized. We are just beginning - perhaps ten percent to twenty percent of the job is done.
- The basics have to be learned first, then we (companies) can follow up with technical skills.
- More emphasis should be given at the public education level on basic academic skills such as math, communication skills, science, etc.
- Higher education will never change. They have no pressure nor desire to...it's very easy to do what little they do!
- The greatest problem exists post high school, for the non-college bound student to acquire job-specific skills for factory employment and adjust to a factory environment.
- Hope your study helps to open and/or widen the door between industry and education.

- Private industry should become involved in identifying basic job skills needs and relay those to school boards along with offers to provide assistance where appropriate.
- Business schools should train more in people management, not just desk management.
- The separation of industry and education may have reached a point where an effective bridge may never be possible.
- Our education system produces enough qualified people to manage and operate industry from certain socio-economic classes. That merely indicates other problems.
- As long as business believes that academia lives in "splendid isolation" and academia believes that their primary function is "institutional preservation" the two will never relate.
- Public schools should provide a general orientation to vocational skills, except in those communities that are one-industry areas.
- We need to realize that training is not just done once, or by a person off in a training department or in a school. We all "train" people who work for us, with us, and in our community.

- Many of the participants in our workshop have poor reading and writing skills, which makes any self-study programs impossible; therefore most of our training is oral and hands-on.
- The academicians still would rather pontificate than listen and react.
- There should be clear descriptions of the responsibilities of public schools and industry to reduce wasted resources and productivity.
- Educators and education in general do not understand the business of business.
- More time should be allocated to examining the benefits of training - how will it change the employee's performance on the job.
- Stereotypes of education (public and higher) and industry exist. Education (public) is incompetent or too theoretical (higher). Industry has money and time. Beter communication would help foster improved teamwork.
- Leave the preparation of future executives to the companies, or to other advanced management programs.
- Rapid change in all fields, not just in technology, makes training a fact of life for industrial organizations.
- Industry can't expect specific training from education!

- Instill in education professionals their purpose - to "sell" learning to students everyday. The adults with the best selling skills should be teachers with appropriate income and status, the lack luster teachers should be order-takers (salesmen) in business.
- There appears to be a gap in communication between the educational system and industry.
- State (or Federal) government should share the training costs when a worker is lacking skills due to improper (formal) education.
- We are burdened with high school grads who can't read or write! Academia needs more accountability.
- In industry, we should focus on "functional training" with the goal being "make the organization self-sufficient, and put ourselves (trainers) out of business.
- If public ed will teach them how to walk, we will take care of the running!
- Public education needs to increase its interface with industry and enhance the programs it delivers to better dovetail with the work environment of today and the '90's.
- Public education requirements have "slipped" backward over the past twenty years. It is time to get back to basics, particularly in elementary and high school curriculums. Quality education creates

quality organizations which are necessary to meet the challenges from foreign competitors.

- Private industry must define its needs, then, public education can begin to prepare students for long-term technical education. The single area lacking, when new workers are hired into our company, is reading comprehension and writing skills - these two are "critical."
- Private industry should be responsible for job skills!
- There is too much tunnel vision - focusing only on one track of training and development. Attitudes from both sides convey this message: "We are the best and we don't need your help."

Many of these comments contain strong negative feelings toward public schools. Elements of these comments have nearly become cliches' in our society: "academia lives in splendid isolation"; "higher education will never change...They have no pressure nor desire to..."; "...an effective bridge may never be possible"; "academicians would rather pontificate..."; "Education (public) is incompetent, or too theoretical." Finally, "We are burdened with high school grads who can't read or write! Academia needs more accountability."

A cliche' is commonly thought to be a trite, overused expression which represents a stereotype. In fact,

these comments may not be cliches'. Given their force, and consistency, they may be real indicators of the honest perceptions of business regarding public schools.

Accepting that these comments by the Training Directors in this investigation are accurate representations of the business community, it is clear that much of private industry's effort to train employees is designed to supplement the effort of public schools. Public schools have not met, nor may not understand private industry's training needs. Consequently, private industry has established its own independent educational system.

The purpose of this chapter was to report and analyze the findings of this investigation. More specifically, the data is presented to answer the following questions:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools. Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools? Are they successful?

As used in this investigation, the terms "augment" and "supplement" are defined as follows:

Augment- to make or become greater; enlarge; enrich what currently exists.

Supplement - something added to a completed thing, or to make up for a deficiency.

The presentation of this material in this chapter reports the findings of this investigation, regarding:

1. The types of training programs being provided by selected companies.
2. The relative amount of resources being allocated to these training programs.
3. The relationship between these training programs and public schools.
4. Whether these training programs meet the needs of private industry.
5. Whether public schools meet the needs of private industry.
6. Significant trends for the future.

Chapter V will present the writer's conclusions, implications and recommendations for further investigations.

Chapter V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

"Summary and Conclusions"

Education and training within private industry are currently being provided for employees at record levels. Equally clear, this research shows that continued growth is being forecast.

This massive effort by private industry to educate America's workforce is only one element of our nation's total education, and re-education, effort. Operating in the shadows of our nation's public schools, private industry training programs represent a dual effort to meet our society's complex educational needs.

As was discussed earlier in this study, Eurich's Corporate Classrooms: The Learning Business has indicated that millions of adults, as employees, pass through corporate classrooms every year (1985).[145] This research has illustrated who is receiving this training, and has clarified the areas of emphasis within these training programs.

This clarification illuminates the seriousness of the potential problems which may occur, as cited by

numerous other observers of this condition. The likelihood of duplication of effort, overlapping purposes, and misunderstood roles in the total educational process is high.

Public schools and private industry need a clear definition of the nature of the training effort being made by private industry, especially as the effort relates to the purposes of public schools. This research may assist the formation of this definition.

The problem investigated in this study was: To what extent are the educational programs of private industry related to the purposes of public schools?

More specifically, this study investigated the responses of corporate Training Directors, through the use of a survey questionnaire, to better define this relationship.

In Chapter IV, the following issues were discussed in detail, based on the data collected with the questionnaire:

1. The types of training programs being provided by selected companies.
2. The relative amount of resources being allocated to these training programs.
3. The relationship between these training programs, and public schools.
4. Whether these training programs meet the needs of private industry.

5. Whether public schools meet the needs of private industry.
6. Significant trends for the future.

The purpose of the study was to examine the educational efforts made by private industry in light of their relationship to the educational purposes of public schools, as those purposes were described in the review of literature. The research focused on two areas, to answer the following underlying issues:

1. Are the educational efforts of private industry intended to augment the educational efforts of public schools?
   Are they successful?
2. Are the educational efforts of private industry intended to supplement the educational efforts of public schools?
   Are they successful?

As used in this investigation, the terms "augment" and "supplement" are defined as follows:

Augment - to make or become greater; enlarge; enrich what currently exists.

Supplement - something added to a completed thing, or to make up for a deficiency.

"Discussion"

The results of this study indicated that larger organizations most often recognize and address the need for training employees, and are the largest providers

of training programs.

Job Skills and Supervisory training receives the most attention in these companies, evidenced by sixty percent to ninety percent of the total expenditures.

Basic Education expenditures are less than five percent of the total training budget in over eighty-one percent of the organizations that participated in the survey. These expenditures did not exceed twenty percent of any organization's budget. Private industry views their role as supplementary to public schools, with regard to teaching basic academic and remedial skills. Basic Education programs are provided in less than half of the companies, and projections for future growth are stable. Over fifty-seven percent of the Training Directors feel their companies should not provide more Basic Education programs. However, twenty-two percent of the Training Directors were undecided, and this could impact on future trends.

Some of this indecision may arise from the Training Directors' indecisiveness about their ability to teach Basic Education skills effectively, and their clear contention that Basic Education is the public school's responsibility (ninety-five point three percent). Any effort by industry to provide basic academic skills is supplementary to the effort of public schools, with doubtful effectiveness. At the present time there is significant duplication of effort by public schools and private industry, in

Basic Education.

In Job Skills and Supervisory training, more significant than the effort currently being made are the forecasts for the future. Forecasts for growth also exist for Orientation training programs. Currently over ninety percent of the companies are offering Job Skills, Supervisory, and Orientation training programs.

The most significant forecasts for change are in the area of Supervisory training. Over sixty-five percent of the Training Directors who participated in the survey indicated that there will be an increase in their companies' Supervisory training effort. The Training Directors strongly support this trend. Eighty-four-point-seven percent feel there is a need for more Supervisory training. Even among the Training Directors who indicated that there would be a decline in their companies' Supervisory training effort, there was a belief that the company should, in fact, increase this type of training.

Supervisory programs seem to augment public schools. Over fifty-five percent of the Training Directors do not feel that this type of training is the responsibility of public schools. However, a significant percentage of the participants in this research feel that public schools should teach Supervisory skills. The teaching of Supervisory skills would not be commonly regarded as one of the public school's traditional responsibilities.

Supervisory skills training is the only area where some restrictiveness occurs, in terms of the types of employees to whom the programs are made available. While Job Skills, Basic Education, and Orientation training is available to all employee groups, Supervisory training is typically limited to personnel already in some supervisory capacity. As with Job Skills and Orientation training, these programs are provided utilizing company time.

These data have demonstrated that there is a pressing need for public schools and private industry to clarify roles and responsibilities related to Supervisory training. These roles are not presently well defined in the minds of corporate Training Directors. At the same time, they are forecasting significant growth. With that growth comes the increased potential for duplication of effort, and inefficient utilization of education resources. These two educational organizations must come together to define this area of training, and determine the most effective means for resources to be utilized.

Job Skills training is a close second to Supervisory training, in the forecasts for future growth. Over fifty-five percent of the Training Directors predicted an increase in their companies' Job Skills training programs. More significantly, seventy-four percent of the Training Directors indicated that there is a need for more Job Skills training by their companies.

This massive effort to provide Job Skills training is not well defined, in terms of its relationship to

public schools. The Training Directors who participated in this research are divided over the issue of public school's responsibilities for providing Job Skills training. When this is linked to the fact that over seventy-three percent of the Training Directors feel that public schools generally do not understand the needs of private industry, there is potential for duplication of effort and waste.

Over eighty-seven percent of the Training Directors feel that their Job Skills programs are effective, while only thirty-eight percent felt that the public school's Job Skills programs were effective.

Job Skills programs in public schools, in the form of vocational or industrial education, are among the most expensive public education programs. These programs often have high capital investments, and low student/teacher ratios. The equipment quickly becomes out of date. In a society of rapidly changing technology, this leads to very high, on-going, replacement costs of equipment if the programs are going to include state-of-the-art technology.

If the Job Skills programs in private industry are as effective as the Training Directors in this survey indicate, it may be most effective to leave these programs to private industry. Clearly, private industry intends to increase their current effort. Any current relationship with public schools is supplemental, given the Training Director's low regard for the effectiveness of the effort public schools are making. Such a new relationship would

liberate significant resources which could be re-assigned to other programs in public schools. This would effect staffing, scheduling, capital expenditures, building space utilization, and numerous other resources.

The Training Directors who participated in this survey do have a vested interest in the programs they described, and they may have over-represented the program's effectiveness. They were more measured in their evaluation of the effectiveness of their other programs, particularly in the area of Basic Education. Since this is traditionally one of the fundamental areas of responsibility for public schools, some separation of purposes and goals is in order. Significant savings can be realized through a definition of responsibilities, and an effective, cooperative effort between public schools and private industry.

Orientation training is consistently provided by the companies in this research. Expenditures are relatively low, but commitment is strong. Over ninety-five percent of the companies in this study sacrifice company time for these programs, and these programs are available to all employee groups.

Very few of the Training Directors (four-point-eight percent) felt that Orientation training is among the responsibilities of public schools. Clearly, these programs in private industry are provided to augment the public schools, and are effective.

In terms of methodology, there are more similarities than differences between private industry training programs,

and public schools. Lecture/discussion in a classroom setting is the dominant instructional pattern. But, in private industry, there is heavy emphasis placed upon one-on-one, individualized study, and self-instruction. These programs are also supported by "coaching" and/or programmed instruction.

While public schools recognize that these techniques often lead to greater effectiveness, they are expensive. Again, should private industry and public schools choose to define their roles clearly, to eliminate overlap and duplication of effort, significant resources may be available in public schools which can be applied to more effective instructional methods. In particular, relinquishing Job Skills training to private industry will allow public schools to concentrate, and dedicate, their resources to other purposes.

At the same time, it should be recognized that private industry training programs, in the minds of Training Directors, go beyond basic skills development. While frequently suggested that private industry is only concerned with "getting the job done", and training is a necessary evil for accomplishing this end; over sixty-three percent of the Training Directors felt that their companies' programs are provided to enrich employee's lives. The training programs in private industry, therefore, go beyond skills development to concern with the total individual. In this sense, private industry's educational

effort augments the purposes of public schools.

"Implications and Recommendations"

Based upon the data provided in this study, it is evident that many of the areas for potential duplication of effort by public schools and private industry training do exist. Given the predictions for continued growth for private industry training, and a strong contention that public schools do not understand, nor successfully meet, private industry's educational needs, the problem will be compounded. Unchecked, precious educational resources in the United States will be mis-managed, and mis-spent.

Our challenge is to come face-to-face with the contention of one Training Director who participated in this research:

> As long as business believes that academia lives in 'splendid isolation' and academia believes that their (private industry's) primary function is 'institutional preservation' the two will never relate.

As illustrated in Chapter II of this study, public school's responsibilities have included the acquisition and practical application of skills - among which are job-related skills. This responsibility dates back to the turn of the century in the United States. During this period, and up to the present, private industry has made an on-going and increasing commitment to their

own educational system, which parallels some goals assigned to public schools. This research has confirmed that these two educational efforts share many of the same goals: duplication of effort exists. This study demonstrates that the feelings expressed by the Training Director in the preceding quote compounds the problem. In many ways, these two educational efforts do not relate. Poor communication is one important element. Significantly, there are strong negative perceptions of public education held by a number of participants in this research, which must be resolved before effective communication can occur.

Undoubtedly, companies are motivated by profit. Commitment toward training employees is founded upon the relationship between employee productivity and profit. Activities to increase employee productivity are seen as increasing the company's "return on investment". In most cases, changing markets, or changing technology force re-training programs. These programs would not otherwise exist in a stable environment.

Equally certain is that public schools are extremely suspicious of private industry's motives for providing education and training programs. Claims by company Training Directors that programs are provided to "enrich" employee's lives, stemming from a sincere "concern" for employees as human beings, are readily dismissed. Educators in public schools see these claims as thinly disguised rhetoric designed, in fact, to motivate employees and in turn

increase productivity and profits. Likewise, extensive philanthropic activity by major corporations is similarly dismissed as deliberate efforts to placate the workers, so business can go on as usual.

Public educator's suspicion toward the educational motives of companies sometimes approaches the level of an aversion - especially when they are called upon to form alliances with private industry to meet companies' educational needs. Public school educators often see private industry's educational needs as narrow and single minded, and especially unconcerned with the total scope of responsibilities commonly assigned public schools. Consequently, private industry's criticism of public schools is easily repudiated, since it is founded upon such a "myopic" perspective. Attempts to define joint efforts to solve educational problems are left to flounder without common ground. Only at the most basic level, with vocational/job skills programs, and with basic academic skills, is there room for shared interests. Even so, many public school educators resist efforts to make any "skills" programs too industry specific, which would naturally play into the profit motives of private industry.

Consequently, companies often feel "put off" by public schools, when efforts for cooperative programs are made. Primarily, private industry's motives are clear - they want and need productive employees. If current employees do not possess required skills, companies

must consider alterantives. If public schools see the exploration and development of these alternatives as somehow "tainted", companies are required to look to other resources.

A poll by Research and Forecasts, Inc. of 108 senior executives in major corporations sheds some light on the foundation of businesses' negative attitudes toward public schools (1983). Nine out of ten of the nation's top business leaders said that improvements in schools are needed, with forty-six percent indicating that education should be an immediate national priority (emphasis by Research and Forecasts, Inc.).[146] Almost three-fourths say students should learn "how to think" instead of memorizing facts and figures, and eighty-four percent think students should learn competitiveness in schools to prepare them for the business world. Two-thirds think today's vocational schools are only "somewhat effective" in training students.

Tom Peters, co-author of In Search of Excellence, recently commented on business and business schools, suggesting that they do not focus enough on teaching people how to lead other people. His statement may also illustrate some of the basis for hostility toward public schools in the context of supervisory development (1985)[147]:

> The difficulty now is that the youngster comes to business school without any experience or taste about managing people, so he or she can't ask challenging questions. So in the class you've got the standard business-school professor who got a PhD in statistics who got 800's on their GMAT's. It sure feels good to both parties, but it doesn't have much to do with business.

These types of issues have led to an undercurrent of suspicion toward the motivations of public schools by many business professionals. Chris Lee, managing editor of Training, illustrates this in his analysis of a recent report by the Business-Higher Education Forum, which recommended that college graduates should have a balanced education in business schools, rather than a strict, one-dimensional technical training program (1985)[148].

> But let me be first to point out that at least two big red flags are attached to everything you've just read. One, the educational establishment obviously has nothing to lose by convincing business that it should give English Lit majors a chance. If college and university placement rates go up, so do their chances of attracting students from a dwindling pool of applicants. And two, the idea that open-minded, flexible liberal-arts graduates make better managers may be about as accurate as the stereotype that portrays all techies as nerds.

In fact, what businesses may be seeking, from any source, is training which fits the specific context of their operation. John Kotter, a Harvard University business professor addressed this issue in The Power Gap: Getting Things Done Without Formal Authority. Kotter (1985) calls for systematic, in-house executive development, or in his words, "a system that finds, selects and develops the quality and quantity of leadership the organization will need."[149] Above all, he adds, "effective leadership develops in an organization only when the line managers drive the leadership development system." Clearly, this

is difficult for public schools to replicate. A comprehensive study at Honeywell found that successful Honeywell managers learn to manage first and foremost from the kind of job experiences and assignments they receive (1985).[150]

The area of management develoment weighs heavily over American business. John Naisbitt, futurist and author of the book Megatrends, speaking at Michigan State University stated, "The big challenge of the '80's is not the retraining of workers, but the retraining of managers." (1985)[151] Zenger (1980) reports that research adds additional confirmation to what most practitioners and academicians have long suspected - for the management staff as a whole, training produces only minor changes.[152]

Zenger adds, it is hard to find thoughtful top executives who could really be convincing about the long term benefits of training for supervisors and middle management. These same feelings of concern for the effectiveness of private industry's training effort may foster frustration toward public schools effort to assist them. Certainly, they are not frustrations which are limited to the training of supervisors, but also extend to all educational activities. Consequently, the dissatisfaction leads to tensions between public schools and private industry, and hinders potential for cooperation.

If School Boards, administrators, teachers, C.E.O.'s, Training Directors, and citizens truly value the educational resources available to them, they must call

for a cooperative effort between public schools and private industry.

Since, in the United States, the local people and state governments provide for public education, and part of the school's financing is voted by the local citizens of the school district, it is important that they fully understand this condition. As well, private industry leaders must share the responsibility for efficient and effective utilization of our society's educational resources. In an era of serious investigation and re-examination of our educational systems, this is a national priority.

"Summary of Major Findings"

- Larger organizations most often recognize, and provide, training for employees.
- Job Skills and Supervisory training programs receive the most attention.
- Basic education skills are part of companies' training programs and are supplemental to public schools.
- Greatest area for potential growth is Supervisory training.
- Job Skills programs in private industry are extremely effective. These programs currently supplement public schools.

"Areas of Education/Training Programs Which "Augment" Public Schools. Are They Successful?"

(in private and public schools)

Orientation - Yes by private industry, no by public schools.

Supervisory - Somewhat by both private industry and public schools.

"Areas of Education/Training Programs Which "Supplement" Private Schools. Are They Successful?"

(in private industry or public schools)

Job Skills - Strongly yes by private industry, somewhat public schools.

Basic Education - Doubtful by private industry, no by public schools.

In conclusion, this researcher recommends:

1. Public schools and private industry must actively strive to define a cooperative relationship which will more effectively and efficiently meet our national educational needs. Traditional barriers of poor communication, "real world vs. theory," government intervention and chauvinism must be overcome.
2. A follow-up of this study should be conducted to see if the predicted growth within private industry training actually occurs.
3. Further investigation of private industry training programs should be conducted with company

C.E.O.'s and Presidents. Training Directors have a vested interest in their programs, and this research may reflect that self-interest. Company C.E.O.'s may have additional insight into each company's plans for future allocations for training and development programs as well as to the programs' effectiveness.

4. In subsequent research, a stratified sample technique should be employed. In this study, as was noted, there were no organizations which are characterized as "public administration" or "educational services."
5. The section of the questionnaire which inquires about the amount of time training programs last should be revised or deleted. (Item #7, in section three of the questionnaire). As it was presented in the questionnaire utilized for this study, the data collected could not be utilized due to multiple interpretations of the statement by the Training Directors.
6. There is a serious need for effective models for supervisory/management development training. Clearly, these programs can be highlighted as significant growth areas in the near future. Yet, this research revealed only moderate support for the effectiveness of existing programs inside private industry or in public schools. This

should prove to be fertile ground for potential cooperative efforts between private industry, which has the need, and public schools, which may have the resources.

7. In subsequent research, smaller companies should be studied and comparisons made with larger companies which naturally have more resources available to commit to training programs.
8. Further investigation of private industry training programs should be conducted related to how program's effectiveness is determined. This study has demonstrated some serious concerns by some company leaders regarding the effectiveness of private industry training programs.
9. This writer was unable to determine the level of cooperative educational activities between public schools and private industry. Subsequent research on a national level should be pursued.
10. A follow-up study should investigate the level of experience with public schools that the Training Directors may have had. A comparison of Training Directors with public school teaching or administrative experience and Training Directors with no public school experience may be significant.

11. This study investigated four general categories of training in private industry (Job Skills, Supervisory, Basic Education, and Orientation). Further research should investigate a fifth form of training which is taking on greater significance in private industry - training programs for customers. These programs are often technical and/or service related and are important elements of many companies' marketing efforts.
12. The leadership of public schools (administration and boards) must realize that private industry training is a major force in our country's total educational effort. Recent studies by the American Society of Training and Development (1985) found that employers train over forty million people a year, rather than seven to ten million estimated by the Conference Board in 1977.[153] More specifically, the studies state that one in eight American employees receives training in formal courses each year. These leaders in public schools must partake in serious self-examination as to how this should impact upon the goals of high schools.

This is especially important in the area of Job Skills (vocational and industrial education programs). Job Skills training is extremely expensive. Public school's

programs may be a duplication of effort with effective programs provided in private industry.

This researcher recognizes that there are serious social and political considerations to be made with regard to this recommendation. In many cases, Job Skills programs have assisted public schools to keep students enrolled who may otherwise have elected to leave school. Consequently, these programs may continue to be provided despite their impact on the rest of the curriculum and limited effectiveness.

Educational programs in private industry have some tremendous advantages. Many times, resources appear to be the most obvious. The greatest advantage is that they are not restricted, as are public schools, with the responsibility for providing social control.

Public schools cannot think exclusively about, "What is the best way to structure schools so students can learn?" They also have to be concerned, sometimes to the point of distortion, about, "How do we keep students under control?"

Private industry is liberated from this.

Rarely is money spent in private industry to develop someone who is not already motivated. If a training program is provided which does not inspire employees, private industry looks to the programs, not the employees, for the source of the problem.

The programs are provided to improve the employee's performance on the job and therefore improve his or her livelihood. If employees are not motivated by that goal, companies have to consider other problems.

Perhaps it is under these conditions that Job Skills are most appropriately taught, and most effectively learned. Wellford W. Wilms (1984), Graduate School of Education, University of California, Los Angeles, reports from his study, "To the extent that they voice a preference for entry-level clerical, blue collar, and service jobs, employers tend to favor applicants with academic rather than vocational education background." (1984)[154] He continues, "High schools should reduce their emphasis on skill training, which is frequently substituted for education and concentrate instead on teaching young people to read, write, compute and think." Finally, among his recommendations he states that employer-based skill training programs should be created. Vocational training should focus more clearly on the needs and demands of specific firms and occupations.

Other research supports Wilms' position. A study report by the Center for Public Resources, Basic Skills in the U.S. Work Force (1983), which surveys corporations, school systems and trade unions, found that school systems seem to educate only for the first job.[155] This is, at best, extremely limited in its effectiveness in a rapidly changing, technical society. Finally, Dr. Curtis W. Tarr,

(1983) representing Human Resources Development in the manufacturing sector before the U.S. Senate, explained that employers do not look to schools to "provide accomplished machine operators. Most of the machine tools in our factories are too specialized to expect our schools to do that training. We look to the schools to concentrate on the basic subject."[156]

We must recognize that public schools are no longer teaching vocational skills for a specific community - for your local industries - but for a world of skills, most of which are rapidly and regularly changing. The old models for vocational skills development are tragically narrow, naive, and out-of-date.

We must find ways to explore new solutions. The gap which exists between public schools and private industry will not be easily bridged. Hungerford (1982) found in his research with training directors that there are important differences in the philosophies of industrial and educational institutions.[157] One is responsible to taxpayers and the other to stockholders. He called for a study to explore the lack of cooperation effort between corporations and educational institutions which would specifically identify areas of philosophical differences.

The Work in America Institute in 1980 organized a group of more than fifty U.S. business, labor and government leaders and issued a series of recommendations to boost the nation's rate of productivity growth.[158] The

participants focused on the serious social, economic, and national security problems facing the United States and the increasing demands these problems place on the leadership and performance of the nation's institutions. One key method for improving productivity recommended by the group was private and public cooperation in education and training. It is noteworthy that the conference, in drafting its recommendations, was particularly interested in attracting the attention of chief executive officers in the private sector who, the participants agreed, are a key factor in productivity improvements.

A recent study titled, "Employee Educational Programs: Implications for Industry and Higher Education," was co-sponsored by the ERIC Clearinghouse on Higher Education, and the Association for the Study of Higher Education (1985).[159] It notes that business and industry's sponsorship of job-related training and continued education for employees has been largely a response to business competition and the changing nature of work in the U.S. Increased job specialization, rapid technological change and the transition from an industrial to an information economy require continuous education of the work force. As well, it states that until recently traditional educational institutions made little effort to work with industry on their terms. The report credits industry's programs for combining some of the best of the tried and true in traditional education with the latest technology

and company-specific information. Finally, it calls for a co-operative effort since "the education of the work force...significantly affects the future of the country's economy," with mutual benefits to both sides. For colleges, industry provides a source of students and an opportunity for faculty to better understand technological changes and needed employee skills. For industry, colleges offer facilities, faculty expertise, research findings, and structures for awarding credit and degrees.

The calls for cooperation between public schools and private industry are underscored by this study. While much of the training effort by private industry is intended to augment the effort by public schools, significant effort is designed to supplement the educational activities of public schools. The effective and efficient utilization of educational resources requires a more clearly defined relationship between these two parties. As a nation, we must strive to bridge the educational gap between public schools and private industry. This research demonstrates that private industry's educational needs will be met, with or without public school's support.

APPENDICES

APPENDIX A

QUESTIONNAIRE

APPENDIX A

QUESTIONNAIRE

We appreciate your willingness to take a few minutes to complete this questionnaire about your company's training programs.

Traditionally, public schools, which include elementary, secondary and vocational/technical schools, along with community colleges and universities, are often considered our society's primary education institutions.

Yet within private industry, another very significant education network has developed.

To better understand the relationship between these two efforts, we are asking you to respond to a number of statements concerning private industry training, and public education.

This information which you provide will lead to a better understanding of the training capabilities and needs in private industry. As well, it will help clarify the relationship between public education, and private industry, and may indicate areas where this relationship can be improved.

Your cooperation will be most valuable.

Fact Sheet (Confidential)

_____ _____

Your Name Organization Name

_____

Date

Organization Type (check one):

____ Manufacturing

____ Banking/Finance/Insurance

____ Transportation/ Communication/Utilities

____ Business Services

____ Wholesale/Retail Trade

____ Public Administration

____ Health Services

____ Education Services

____ Other (Mining, Construction, Agriculture, etc.)

Size of Organization (# of employees):

____ 0-50

____ 50-99

____ 100-499

____ 500-999

____ 1000-2499

____ 2500-9999

____ 10,000 +

Typically, training programs provided by private industry may be described in four general types:

Job Skills - basic job skills training for employees, and sometimes for non-employees, including technical, production, clerical, and sales skills.

Supervisory/Organizational Development - supervisory training and management development for new and/or experienced supervisors, managers, and executives. Organizational development programs which facilitate a company's operation and processes (such as Quality Circles, Team Building, Networks, etc.)

Basic Education/Remedial Academic Skills - basic instruction in academic subjects such as communication and numerical skills.

Orientation - orientation training for new and/or experienced employees, to acclimate them to a company. This may include specific company policies and procedures, as well as general philosophy, work standards, safety, and understanding of the world of work.

Please indicate how much of your company's training budget is spent in each of these four areas.

Next to each type of training program, write a percentage (%) which estimates the portion of training budget spent, relative to your company's total training expenditures. (Note: total of all four areas should equal 100%).

_____	%	Job Skills Training
_____	%	Supervisory/Organizational Development Training
_____	%	Basic Education/Remedial Academic Skills Training
_____	%	Orientation Training
100	%	Total Training Budget

Please indicate whether you anticipate that your company's training effort will increase, decrease, or remain the same in each of the four general types of training:

Please check the most likely response for each type of training:

Increase	Decrease	Same	
_____	_____	_____	Job Skills Training
_____	_____	_____	Supervisory/Organizational Development Training
_____	_____	_____	Basic Education/ Remedial Academic Training
_____	_____	_____	Orientation Training

Please go on to the next page.

Please check the item (or items) that best describe your response regarding Job Skills Training:

1. Our company provides job skills training for our employees. Yes ____. No ____.

   If you answered "Yes", please respond to items 2 through 10.

   If you answered "No", please respond to items 2 and 3, only.

2. Our company should provide more skills training. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

3. Public education has the responsibility to provide job skills training to meet private industry's needs. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

4. Please check the category (or categories) that best describe the method (or methods) used in conducting this type of training. Lecture ____. General discussion ____. Case study ____. Computer-assisted instruction ____. Interactive computer ____. Role play ____. Programmed instruction ____. Games and simulation ____. One-to-one instruction ____. Individualized study ____.

5. Please check the category (or categories) that best describe the format (or formats) used in conducting this type of training. One-the-job ____. Off-the-job ____. Coaching ____. Job rotation ____. Tuition aid ____. Understudy ____. Classsroom instruction ____. Apprenticeship ____. Self-study ____.

6. These programs are given on: Company time ____. Employee time ____.

7. These programs average approximately ____ hours long, in total.

8. What levels of employees are eligible for job skills training? All employees ____. Management ____. Supervisory ____. Other salaried personnel ____. Hourly workers ____.

9. How are employees selected for job skills training? By job classification ____. By their supervisor____. By employee's request ____. By training/personnel recommendation ____.

10. Participation in job skills training is:
Voluntary ____. Strongly recommended ____.
Required ____.

Please go on to next page.

Please check the item (or items) which best represent your response regarding Supervisory/Organizational Development Training:

1. Our company provides supervisory/O.D. training for our employees. Yes ____. No ____.

   If you answered "Yes", please respond to items 2 through 10.

   If you answered "No", please respond to items 2 and 3, only.

2. Our company should provide more supervisory/O.D. training. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

3. Public education has the responsibility to provide supervisory/O.D. training to meet private industry's needs. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

4. Please check the category (or categories) that best describe the method (or methods) used in conducting this type of training. Lecture ____. General discussion ____. Case study ____. Computer-assisted instruction ____. Interactive computer ____. Role play ____. Programmed instruction ____. Games and simulation ____. One-to-one instruction ____. Individualized study ____.

5. Please check the category (or categories) that best describe the format (or formats) used in conducting this type of training. On-the-job ____. Off-the-job ____. Coaching ____. Job rotation ____. Tuition aid ____. Understudy ____. Classroom instruction ____. Apprenticeship ____. Self-study ____.

6. These programs are given on: Company time ____. Employee time ____.

7. These programs average approximately ____ hours long, in total.

8. What level of employees are eligible for supervisory/O.D. training? All employees ____. Management ____. Supervisory ____. Other salaried personnel ____. Hourly workers ____.

9. How are employees selected for supervisory/O.D. training? By job classification ____. By their supervisor ____. By employee's request ____. By training/personnel recommendation ____.

10. Participation in supervisory/O.D. training is:
Voluntary ____. Strongly recommended ____.
Required ____.

Please go on to next page.

Please check the item (or items) which best represent your response regarding Basic Education/Remedial Academic Skills Training:

1. Our company provides basic education/remedial academic skills training for our employees. Yes ____. No ____.

   If you answered "Yes", please respond to items 2 through 10.

   If you answered "No", please respond to items 2 and 3, only.

2. Our company should provide more basic education/ remedial academic skills training. Strongly agree ___. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

3. Public education has the responsibility to provide basic academic skills to meet private industry's needs. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

4. Please check the category (or categories) that best describe the method (or methods) used in conducting this type of training. Lecture ____. General discussion ____. Case study ____. Computer-assisted instruction ____. Interactive computer ____. Role play ____. Programmed instruction ____. Games and simulation ____. One-to-one instruction ____. Individualized study ____.

5. Please check the category (or categories) that best describe the format (or formats) used in conducting this type of training. One-the-job ____. Off-the-job ____. Coaching ____. Job rotation ____. Tuition aid ____. Understudy ____. Classroom instruction ____. Apprenticeship ____. Self-study ____.

6. These programs are given on: Company time ____. Employee time ____.

7. These programs average approximately ____ hours long, in total.

8. What level of employees are eligible for basic education/remedial academic skills training? All employees ____. Management ____. Supervisory ____. Other salaried personnel ____. Hourly workers ____.

9. How are employees selected for basic education/ remedial academic skills training?
By job classification____. By their supervisor ____.
By employee's request ____. By training/personnel recommendation ____.

10. Participation in basic education/remedial training is: Voluntary ____. Strongly recommended ____.
Required ____.

Please go on to next page.

Please check the item (or items) that best describe your response regarding Orientation Training:

1. Our company provides orientation training for our employees. Yes ____. No ____.

   If you answered "Yes", please respond to items 2 through 10.

   If you answered "No", please respond to items 2 and 3, only.

2. Our company should provide more orientation training. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

3. Public education has the responsibility to provide orientation training to meet private industry's needs. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

4. Please check the category (or categories) that best describe the method (or methods) used in conducting this type of training. Lecture ____. General discussion ____. Case study ____. Computer-assisted instruction ____. Interactive computer ____. Role play ____. Programmed instruction ____. Games and simulation ____. One-to-one instruction ____. Individualized study ____.

5. Please check the category (or categories) that best describe the format (or formats) used in conducting this type of training. On-the-job ____. Off-the-job ____. Coaching ____. Job rotation ____. Tuition aid ____. Understudy ____. Classroom instruction ____. Apprenticeship ____. Self-study ___.

6. These programs are given on: Company time ____. Employee time ____.

7. These programs average approximately ____ hours long, in total.

8. What level of employees are eligible for orientation training? All employees ____. Management ____. Supervisory ____. Other salaried personnel ____. Hourly workers ____.

9. How are employees selected for orientation training? By job classification ____. By their supervisor ____. By employee's request ____. By training/personnel recommendation ____.

10. Participation in orientation training is:
Voluntary ____. Strongly recommended ____.
Required ____.

Please go on to next page.

The following statements are presented as generalizations, and represent opinions rather than facts. As opinions, they are neither right nor wrong, and your agreement or disagreement will be determined largely in terms of your particular experience.

Please check the answer which best represents your response.

1. Public education does not understand our training needs. Strong agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

2. We cannot find people with the skills and knowledge we need. Strongly agree ____. Agree ____. Undecided ___. Disagree ____. Strongly disagree ____.

3. Training must be company specific. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

4. Public education is doing all that it can for our training purposes. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

5. We have to teach employees basic communication skills. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

6. We have to teach employees basic computation skills. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

7. We provide educational programs to enrich employee's lives. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

8. In our experience, our company's academic skills training is effective. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

9. In our experience, public education's academic skills education is effective. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

10. In our experience, our company's job skills training is effective. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly Disagree ____.

11. In our experience, public education's job skills training is effective. Strongly agree ____. Agree ____. Undecided ____. Disagree ____. Strongly disagree ____.

Open-Ended Questions

1. Some people feel that public education should provide vocational programs which are very "job specific", while others feel that there should be a general, orientation approach. Still others feel that public education should concentrate exclusively on "basic" academic skills. Given the needs of your organization, what approach do you feel public schools should take, and why?

2. If public education took the approach you indicated above, would this effect the training programs provided by your company? Why?

3. Should more be done to clarify the relationship between public education and training within private industry? If so, who should be responsible?

4. What additional comments should be made regarding your responses in the questionnaire, or about the subject of training generally?

APPENDIX B

QUESTIONNAIRE COVER LETTER

APPENDIX B

QUESTIONNAIRE COVER LETTER

Dear Colleague,

The purpose of this letter is to ask for your cooperation and to utilize your professional perspective. I am conducting research about training within private industry, and examining it's relationship to public education.

I am the Training Manager for Kawneer Company, and this research project is designed to clarify the purposes of training programs as an element of our country's total education effort. The results of my research will be used as a dissertation for a Ph.D. degree from Michigan State University.

I have selected your name from the membership of the ASTD. It is important, for the purposes of this research, to seek the ideas of individuals who have a broad perspective regarding a company's training needs and expectations. Be assured that the anonymity of you and your company will be guaranteed.

Enclosed is a copy of a questionnaire form. Most people have found that it only takes 10 to 15 minutes to complete the form. It would be extremely helpful if you would fill out the questionnaire and return it in the envelope provided. If you have any questions, please feel free to call me at (404) 449-5555.

Your cooperation is greatly appreciated.

Jerry Shaffer
Kawneer Company, Inc.
Training and Recruiting Manager

APPENDIX C

PILOT SURVEY COVER LETTER

APPENDIX C

PILOT SURVEY COVER LETTER

Dear _____

The purpose of this letter is to ask for your cooperation and perspective. I am conducting research about training within private industry, and examining it's relationship to public education.

I am the Training Director for Kawneer Company, and this research project is designed to clarify the purposes of training programs as an element of our country's total education effort. The results of my research will be used as a dissertation for a Ph.D. degree from Michigan State University.

I have selected your name from the membership of the ASTD. Be assured that the anonymity of you and your company will be guaranteed. Your participation and comments will help me gather information in a concise, meaningful manner.

Enclosed is a copy of the questionnaire which will be used for this research project. It would be extremely helpful if you would complete the questionnaire and then fill out the "comment" sheet, and return them in the envelope provided. If you have any questions, please feel free to call me at (404 449-5555.

Your cooperation is greatly appreciated.

Jerry Shaffer
Kawneer Company, Inc.
Training and Recruiting Manager

APPENDIX D

PILOT SURVEY EVALUATION FORM

APPENDIX D

PILOT SURVEY EVALUATION FORM

Comments

Name _____

Company _____

Please indicate the time that was required to complete this questionnaire. _____ minutes.

Was the structure of the questionnaire easy to follow?

_____ Yes _____ No

What suggestions would your make to improve the structure?

_____

_____

Was the language in the questionnaire appropriate?

_____ Yes _____ No

What suggestions would you make to improve the language?

_____

_____

What other changes should be made to the questionnaire?

_____

_____

FOOTNOTES

FOOTNOTES

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