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PUBLIC POLICY RESPONSES AND DISPLACED WORKERS IN THE U.S. AUTO INDUSTRY

A Thesis Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Social Sciences

by

Robert Edwin Gwizdala

June 1995

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Approved by:



<u>5-30-195</u> Date

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Dr. Paul D. Guymon, Paralegal Studies

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PREFACE

Now Main Street's whitewashed windows and vacant stores seems like there ain't nobody wants to come down here no more They're closing down the textile mill across the railroad tracks Foreman says these jobs are going boys and they ain't coming back to your hometown Your hometown Your hometown Your hometown

Last night me and Kate we laid in bed talking about getting out Packing up our bags maybe heading south I'm 35, we got a boy of our own now Last night I sat him up, behind the wheel and said son take a good look around, this is your hometown

> ---"My Hometown," from Bruce Springsteen's Born in the U.S.A. album

ABSTRACT

The primary focus of this thesis is to evaluate the government-initiated programs in the United States domestic auto industry. Attention shall focus on retraining programs geared towards the retention of auto workers at Ford, General Motors, and Chrysler. Retraining programs shall encompass technical and vocational training, basic education skills, and personal development studies. Contract agreements between the United Auto Workers (UAW) union and the three U.S. domestic auto producers shall be the reference source regarding retraining programs.

Viewpoints from authorities within the domestic auto industry will be assimilated into this thesis to discuss the necessity of a highly-skilled labor force. A Massachusetts Institute of Technology (MIT) study on U.S. manufacturing competitiveness will point out areas of improvement for American industry. Apprenticeship programs and the establishment of national skill standards are two specific areas that will be analyzed for improving American competitiveness.

The thesis concludes by discussing the importance of federal government funds for retraining programs. America's future economic prosperity will depend on government, industry, and educational institutions working together to promote a highly-skilled work force.

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ACKNOWLEDGMENT

This thesis is dedicated to Clifton Prysock who passed away on February 14, 1995. As a close friend, Cliff would take time out of the day and share his humor and wisdom with neighbors. He was also willing to provide his assistance when people needed help with projects. I will always remember Cliff as a special and outgoing friend.

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CHAPTER ONE Introduction

Technological advancements and competition in a global marketplace have resulted in the displacement of many American workers. Modernized production facilities have led to job obsolescence for many individuals working in U.S. industry. This is especially true in the U.S. domestic automotive industry. The purpose of this thesis is to evaluate the government-initiated programs in the United States domestic automotive sector. The primary goal will center on retraining programs geared towards the retention of auto workers at Ford, General Motors, and Chrysler. Retraining programs will be defined as technical and vocational training, basic education skills, and personal development studies. Contract agreements negotiated by the United Auto Workers (UAW) union and the three U.S. domestic producers shall be the reference source regarding retraining programs. The benefits of these retraining programs will be elaborated to explain the need for employees to effectively utilize technology in the auto industry. Total quality management concepts and viewpoints from authorities within the industrial sector will be used to discuss the positive aspects of empowering workers to become more productive members within the automobile industry. Germany's training and appren-

ticeship programs can serve as a model for U.S. carmakers to adopt some established features within the United States automotive industry. Based on production efficiency, it will be pointed out as to which U.S. domestic producer has the most effective training program.

Another area that will be investigated is the United States' auto manufacturers' efforts to assist former (displaced) auto workers in finding employment through the development of new job skills. An important area that will be discussed is the commitment of union and corporate officials to cooperate in assisting these displaced auto workers in making the transition into new employment opportunities. It will be pointed out that federal government assistance is essential in helping displaced automotive workers develop new work skills so that they can reenter the labor force and become productive members within society. Three public policy responses for improving U.S. auto retraining programs will be discussed in the analysis. Adoption of national industry skill standards, federal government assistance, and consolidation of retraining programs will be the specific areas of focus for the improvement of retraining programs.

Background

Before addressing retraining programs at Ford, General Motors, and Chrysler, it is necessary to provide

information on some of the key factors that played a role in the decline of the U.S. auto industry during the 1970s and 1980s.

Core corporations and the national bargain agreement with unions, a lack of commitment in manufacturing high quality products, oil price increases by the Organization of Petroleum Exporting Countries (OPEC), and protectionist measures were four factors that led to a downturn in the U.S. auto industry during the last two decades. These elements made it increasingly difficult for U.S. carmakers to be efficient and profitable operations. In relation to the U.S. auto industry, Robert B. Reich, U.S. Secretary of Labor in the Clinton Administration, explains in his book, The Work of Nations, that the national bargain was an implicit agreement involving the federal government, American core corporations, and labor unions from 1945-1970.² The national bargain emphasized expanding America's manufacturing capacity with a minimum amount of conflict among these three groups. During the 1950s, America's economy was based on mass production of standardized products in which approximately five hundred major corporations manufactured nearly "half of the nation's output."³ Automobile production in the industrial output sector was determined by General Motors, Ford, and Chrysler as the American core corporations. These core corporations

were responsible for planning and implementing the production of a large volume of goods such as the production of automobiles. Manufacturing autos in large numbers would result in reducing the cost of each unit. Secret agreements among the core corporations (General Motors, Ford, and Chrysler) in coordinating vehicle prices would allow each firm to earn high revenues on their products. In turn, these revenues would be reinvested in new production facilities and machinery. Profits would also provide middle managers and production workers with higher salaries and wages. The role of labor unions in the national bargain would be to refrain from strikes and work stoppages that might interfere with the high-volume production of goods such as automobiles. Both industry and labor agreed not to set prices and wages so high that they would fuel high levels of inflation.⁴

Government's role in the national bargain equation was to avoid policy-making which would infringe upon corporate decision-making.⁵ As a consequence, centralized economic planning was not pursued by the federal government. The government would allow core corporations to undertake private planning in utilizing resources and coordinating prices and output levels of goods. The government would also smooth out the business cycles so that it would assist core corporations in pursuing high

production of goods. The government also assisted core corporations in the following areas: providing public education for America's youth, allocating government funds for citizens to purchase new homes, and appropriating money for building a strong national defense for the protection of American interests.⁶

Robert B. Reich points out that by coordinating prices in the automobile, steel, rubber, glass, and electrical equipment industries of core (American) corporations:

> it was relatively easy for company negotiators to accede to generous wage and benefit increases, and then pass them along to consumers via higher prices.

This agreement minimized strikes and work stoppages in large-scale production and provided unionized American production workers with higher wages and benefits (i.e., pensions, life, accident, and health insurance, as well as paid vacations) from the end of World War II until 1973.⁸ Since the costs of production were reflected in the final price of the product, some consumers were priced out of the market. Lower purchase prices and repair costs were major reasons why many Americans chose imports over American brands.⁹ Continuous price increases for U.S.-made autos prompted more and more American consumers to buy import models for their transportation needs. This was an early sign of gradual erosion of the Big Three's market share in the domestic automobile sector.

A second important factor which contributed to a downturn in the U.S. auto industry was the declining quality in manufacturing automobiles. Alton F. Doody and Ron Bingaman point out in their book, <u>Reinventing</u> <u>the Wheels</u>, that Detroit automakers in the 1950s were content in producing:

> throwaways that rattled, rusted, and steered as though their front ends were made of whipped cream.

With the Big Three adhering to this mentality, foreign-made cars continued to make inroads in the American market. Although total imports during the 1950s accounted for only three percent of U.S. sales, this figure would steadily increase over time.¹¹ By 1975, foreign imports share of the U.S. auto market had risen to 18.2 percent.¹² U.S. automakers believed low price was the main reason Americans bought imports. They did not seem to realize or admit:

> that cars like the Beetle and Sweden's Volvo were basically better built and longer lasting than American cars. The imports may not have offered extravagant styling, abundant interior space, creature comforts, or fast acceleration at high speeds; but they were carefully engineered and generally made of higher quality materials. They held the road better, their steering was tighter and more responsive, they didn't rattle, they didn't rust out as fast₁₃ and they got much better gas mileage.

Quality and economy in producing autos seemed less important to Detroit than to its foreign competitors during the 1960s and 1970s. Donald E. Petersen, former president and chairman of Ford Motor Company, acknowledges this when comparing American and Japanese cars from 1970 to 1980. He states:

> The common wisdom is that American cars deteriorated badly in the 1970s. In fact they didn't; the quality was about the same at the end of the decade as it was at the beginning. But, Japanese cars steadily improved year after year. The Japanese had opened a real lead on us in quality, because they understood that continuous improvement leads to lasting improvement.

Continuous refinements in the production of automobiles are a good indicator that a company has made a long-term commitment to provide customer satisfaction and cultivate product loyalty. By the late 1980s, Japanese automakers had nearly 30 percent of the U.S. market.¹⁵ Quality and value were two factors which allowed foreign producers to take advantage of Detroit's inattentiveness and make further inroads into the American automobile sector.

A third factor which adversely affected U.S. auto producers were the increases in oil prices in 1973-1974 and 1979 by OPEC.¹⁶ With the cost of gasoline 50 percent higher than before, Americans purchased small, fuel-efficient foreign cars in record numbers. Between

1978 and 1980, imports constituted 27 percent of the domestic market.¹⁷ General Motors, Ford, and Chrysler were not prepared for these major oil price increases. Detroit's profits revolved around "ponderous, gaudy, gas-swilling showboats."¹⁸ They were dependent on selling big cars with many costly options to provide them with hefty profit margins. Ultimately, Detroit ventured into producing small cars, but the effort was a feeble one. For example, General Motors' Vega was shoddily built, while Ford's Pinto had a poorly designed gas tank which was prone to explode in rear-end collisions.¹⁹

Protectionist measures served as another impediment within the U.S. automobile sector. Protectionism is a legal safeguard of certain domestic markets from foreign competition. It may take the form of a tariff barrier, quota, or restriction placed on foreign goods by a government to protect its industries.²⁰ Protectionist measures allow high-cost producers to survive with the enactment of trade restrictions. It constitutes a type of welfare that raises consumer prices and allows American industry to operate in an inefficient manner, resulting in less productivity.²¹ Tariffs and quota restrictions were two protectionist measures used effectively against foreign imports by the U.S. auto industry. Economist Randall Crandall estimated within the automobile sector that: quotas drove up the price of the typical Japanese import by about \$2,500 in 1984, which added about \$5 billion to the bills of American households. Behind the protectionist shield, U.S. auto makers were also able to raise the prices of domestic models-- by something between \$500 and \$1,500 per car. Using \$1,000 as a middling figure, the extra bill for domestic cars comes to about \$8 billion per year, which accounts for most of Detroit's annual profits in 1984 and 1985.

Protectionism also served as a reward system to U.S. auto producers in which American consumers paid approximately:

> \$13 billion in 1984 in order to boost the combined profits of General Motors, Ford, Chrysler, and American Motors by about \$8 billion.

These safeguards did not encourage American automobile producers to utilize their resources (materials and human labor) in an efficient manner. There was less incentive for American auto manufacturers to improve their product lines. It also helped in the retention of jobs within the industry for a period of time. However, protectionist measures were used as a shield to raise the price of foreign vehicles in relation to domestic models. A sense of complacency developed in which U.S. automakers were too concerned with huge profit margins and paid scant attention to product quality and customer satisfaction. The Big Three emphasized short-term profits over a long-term outlook for customer retention.

Each of the four factors (core corporations and unions

embracing the national bargain, lack of quality-control standards, oil price increases by OPEC, and protectionist measures) had a negative impact on the competitiveness of the U.S. auto industry during the 1970s and 1980s.

The future of America's domestic auto industry is dependent on educating personnel who must be proficient in utilizing high technology in the workplace. Ford, General Motors, and Chrysler must invest in their work forces in order to remain competitive on a global level. Additionally, retraining programs should be made available to displaced (former) workers so that they can make an easier transition into another career. Attention will now turn to the individual companies and their efforts to promote educational programs.

CHAPTER TWO

Ford Motor Company's Educational Retraining Programs In the early 1980s, Ford Motor Company continued to see its financial base deteriorate. Working capital plunged dramatically "from \$2.3 billion dollars in 1979 to less than \$237 million in 1981-- a ten-fold drop in just two years."²⁴ This can be attributed to the fact that Ford was losing market share to both domestic and foreign producers, customer satisfaction with Ford products was dropping, and its rating for quality and styling of its cars was the lowest among the Big Three automakers.²⁵ These conditions prompted Donald E. Petersen, president and chief operating officer at Ford in 1980, to take immediate steps to turn the situation around.²⁶

One of his first steps was to consult with Dr. W. Edwards Deming. Deming is a noted American statistician and total quality management consultant.²⁷ He was instrumental in helping Japanese companies manufacture quality products through the implementation of his teamwork management approach and statistical quality control methods. Petersen utilized Deming's methods to promote teamwork throughout Ford's organization and to make continuous improvements in products through the active involvement of people.

There are many benefits associated with total quality

management concepts in the automotive sector. Joseph
R. Jablonski defines total quality management as:

a cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve guality and productivity using teams.

Total quality management is implemented through company policies and labor. Management personnel are responsible for providing workers with skill development training as a tool in accomplishing their jobs. Workers must also be given latitude in making decisions that meet quality product standards. Within the auto sector, an example of this practice involves worker discretion in halting the assembly line. This procedure is conducted to make necessary quality-control corrections before the finished product is sold to the consumer.²⁹

The use of statistical methods is another device for total quality management. These methods involve verification of part specifications where "each variable in the process is identified and measured as the process continues."³⁰ Auto workers use this procedure to check tolerances of automotive components to determine whether or not they are within specified guidelines. Needed corrections are made if major discrepancies are found. This helps reduce expensive recalls and lowers overall production costs. Another advantage of putting employees

in charge of quality is that it raises their self-esteem and pride in workmanship.³¹ Personal involvement allows workers to receive recognition for their contributions in reducing product imperfections and improving manufacturing efficiency.

Realizing that people are an important asset to a company, Petersen also acknowledged the importance of an educated work force. He states:

> It's a built-in fact that people are the real resource of any enterprise and that those people have to be given every chance to optimize their abilities and knowledge and skills. If you don't give people the chance to achieve, you'll seriously diminish the results of their combined efforts.

A 1987 U.S. Bureau of Labor Statistics study points out that "technology, job skill obsolescence, and retraining... are major factors that auto workers face in a changing industry."³³ Technology is a driving force which transforms auto production in a significant way. This claim is substantiated by the viewpoint of Ford Human Resource staff personnel. Their claim is that:

> the nature of work at Ford is being rapidly altered by technology. Jobs are continually made more demanding and involve more tasks per function, and employees are being asked to develop and/ or improve their computer and technical skills. But even as they develop the required skills, new processes come out which make the old skills obsolete. The training workers used to receive would

last for as long as 30 years, a full career. Today, the development of new technology means that skills become obsolete every 6-9 months.

Employing technology in the auto industry is contingent upon an ongoing company program to educate its personnel. Ford is making an attempt to overcome "severe technical and general skill deficiencies in both their old and new workers... through continuous education programs."³⁵ Blue collar workers are not the only Ford employees that require education. A Ford Human Relations executive remarks:

> [A]t Ford everybody has gone back to school. The needs of the business are forcing Ford to implement measures for a total transformation in the entire work force in terms of competence (gaining skills to do the work), commitment (wanting to do the work), and ability (natural inclination for the work).

Ford realizes that its employees need to be re-educated on a regular basis since company needs and technological processes change over a relatively short period of time. In the 1980s, Ford's training and retraining programs were conducted in factories. Blue collar workers, supervisors and management personnel began "to receive training in problem-solving skills, statistical processes, interpersonal skills/conflict training and technical training."³⁷ These training programs help employees gain more knowledge and expertise in their

respective areas of work and foster effective communication within the organizational structure. These education programs have also led to a participative form of management at Ford where hourly employees are encouraged to express their ideas to managers in devising new methods or proposing solutions to work situations.³⁸

Ford's training programs have developed over time to include "11 employee development centers that offer general skills training ranging from technical skills to program management and team management."³⁹ Ford has also undertaken the task of training its supplier's employees, since approximately "60-70% of components are purchased from outside producers."⁴⁰ Proper training is essential in producing high-quality vehicles and helps in minimizing the number of defects in an automobile. In addition to these continuous training programs, Ford negotiated an agreement in 1982 with the United Auto Workers (UAW) regarding worker retraining programs. The program is "financed by an employer contribution of 5 cents per hour."⁴¹ The agreement between Ford and the UAW established the following retraining objectives:

> Provide individual and group training, retraining and development opportunities to enhance the dignity and on-the-job skills and abilities of employees which can lead to greater job security and personnel development. Seek ways of arranging (and, in some cases, providing) for training, retraining

and development assistance for employees displaced by new technologies, new production techniques and shifts in customer product preferences.

A successful case concerning job dislocation where Ford and UAW officials cooperated together was at the Ford plant in Milpitas, California. In 1982, Ford gave advance notice that it would be closing the Milpitas plant in one year. This provided a time period for company and union officials to assist more than 2,000 workers affected with "the needed support services, counseling, basic education, skills retraining, and job search training."⁴³ Work force characteristics at this plant primarily consisted of married male workers who:

> had an average age of 42, and had an average of almost 16 years service among the hourly workers; furthermore, more than one-third of the workers had less than 11 years of schooling.

Prior notice and careful planning allowed for the development of a placement center with financial and technical support by the UAW-Ford National Development and Training Center.⁴⁵

The Ford-UAW program assisted the affected workers in various stages.⁴⁶ The first stage involved testing and counseling along with the in-plant planning seminars and basic adult education. The second phase of the program helped the individuals in selecting vocational retraining

which included the negotiated tuition cost for the institutional training. The final stage provided training in job search skills and on-the-job training regarding employment opportunities. According to data from the United Autoworkers Union:

> 2,800 persons enrolled for in-plant vocational training orientation sessions, and 750 enrolled in full-time vocational retraining programs, with 500 receiving technical training. Furthermore, 438 went through a job search skills workshop, and 800 took adult basic education courses with 183 completing high school diplomas or equivalents.

Despite the age factor, these people at the former Ford Milpitas facility undertook the personal challenge to educate themselves and learn new vocational skills. Although faced with misfortune, they directed their efforts toward constructive goals. Data from the U.S. Department of Labor indicate that job dislocation retraining programs were beneficial in helping former Milpitas workers find new employment. The statistical information found that:

> only 17.6 percent of the Milpitas displaced workers remained unemployed 2 years after closure; also a strong correlation exists between participation in the testing and assessment programs (70 percent) and the education and training programs (30 percent) and success at gaining new employment in obtaining higher wage positions after termination at Ford. On-the-job-training opportunities led to the greatest post-layoff employment and suggest the importance of linking job retraining to real employment opportunities.

Foresight and planning by Ford and UAW officials were essential elements in making the program a successful one. Displaced auto workers at the Milpitas facility were given an opportunity to make a transition into a new career field that moved them beyond the auto industry. Ford's ongoing efforts to provide counseling, job retraining, and placement programs portrayed it as a worthy employer to its personnel.

Ford's training and retraining programs were some of the factors which contributed to the teamwork effort that helped the company improve its financial standing among U.S. auto producers. In 1986, Ford:

> out-earned General Motors for the first time in sixty-two years, posting a profit of \$3.29 billion, compared to GM's \$2.94 billion. In 1987 Ford reaped the highest profit in the history of the auto industry--\$4.62 billion, which was a 41 percent increase higher than GM's earnings, and three and a half times the earnings of Chrysler.

Ford's financial success was based on manufacturing quality-made vehicles. In 1987 and 1988, Taurus became America's best-selling car in America.⁵⁰ In 1992, Taurus regained this title over the Honda Accord which had previously held it from 1989 to 1991.⁵¹ Other notable accomplishments included the Ford Escort which became:

> the best-selling car of any type in the world for six consecutive years (1982-87), with more than 6.5 million sales in 60

countries. And for the first quarter of 1988, three of the five top-selling auto nameplates in the United States were Ford's. The Taurus was America's bestselling car across all classes and market segments; the Escort was second; and the Tempo was fifth.

Although its financial standing has improved, Ford's profits have come at the expense of cities like Milpitas. Closure of the Milpitas Ford facility has had lingering effects on the local economy. Economic opportunity and prosperity within the area have been replaced with economic disparity for many people. Besides factory workers, service sector employees are furloughed since there is reduced demand for their labor. Coupled with higher unemployment levels, shortfalls in tax revenue occur. This results in less money to finance public programs such as education and municipal services. These are some of the economic rippling effects that are likely when an auto manufacturer suspends operations in a community. Company retraining programs will not fully alleviate economic hardship within a locality. In the following section, we shall analyze and evaluate Ford's training German managerial-employee teamwork approaches programs. and apprenticeship and training programs shall serve as a model in helping Ford and the other domestic auto producers in adopting some of these features within their respective business operations.

Analysis and Evaluation of Ford's Training Programs

Ford's training programs have greatly changed in the past decade. The automaker has embarked on multiple training programs in an attempt to meet the needs of the labor force in the modern auto industry. The former hierarchies of top-down communication have gradually been transformed into flexible organizational arrangements with communication channels open in many different directions. These training programs have also focused on improving workers' and managers' problem-solving skills, technical skills, and expertise in computer-related areas. This training format draws a parallel to the Japanese auto industry. Special attention focuses on the value of individual initiative where employee involvement enhances a corporation's image.⁵³ This improvement in training has been a continuous process since 1982 when Ford and the UAW reached an agreement to establish clear objectives for training.

Also, since that time, training programs have been offered to help re-educate and retrain laid-off Ford workers to find jobs in other career areas. For example, the Ford-UAW program provides a three-phase retraining program for Ford employees who face permanent layoff. The first phase involves testing and counseling accompanied by in-plant seminars to prepare the employees for the

job market. The second phase helps individuals choose an area of vocational training. The third phase provides training in specific employment areas selected by employees.

Ford's cooperative apprenticeship program called ASSET began in 1985 at Broward Community College in Florida. Ford provides automotive curriculum materials, vehicle components, and training for college instructors. Within the program, emphasis is placed on electronics. Ford also contracts with colleges for in-service training for dealer technicians.⁵⁴

Although Ford has introduced some employee participation programs which have produced some positive and beneficial results in the past decade, there are some drawbacks concerning them. For example, these programs do not appear to be adequate enough to meet the demands and requirements of the job tasks and job environment of today's industrial workplace, especially in the auto manufacturing industry. German auto producers have been more effective in combining innovation with skill development on the shop floor than their U.S. counterparts. Workplace training is a practical setting where individuals can apply academic knowledge to a given assignment. This experience helps reinforce concepts and instills confidence in skill development. This training also allows German

employees to enhance their self-esteem and self-motivation through high-level performance in work-related behavior.⁵⁵

When considering some lessons from German auto producers, Ford's management can concentrate on the managerial-employee teamwork approach in improving efficiency and production in the work environment. Teamwork evolves from relationships based on trust, loyalty, and respect from one another. In current times, strains still develop in management-employee relations at Ford due to different backgrounds in Germany and the United States in this dimension. However, today, Ford can gain some valuable lessons about training from the Germans as well as the Japanese.

Quality circles are one area of attention. Quality circles are "meetings organized in the work place around a small group of workers whose jobs have some elements in common."⁵⁶ These employees meet on a regular basis. Team discussions address identifying problems, discussing possible solutions, coordinating activities, and making implementation proposals to management personnel.⁵⁷ German and Japanese auto manufacturers have effectively used quality circles in bottom-round management over the past decade. This concept deals with a management-type process that requires people to work together in a group to achieve a production goal. Auto workers in these two

countries are trained to communicate openly and at length on problems and problem-solving approaches. German auto production has improved significantly since these bottom-round approaches were implemented in the 1970s. Ford's employee participation program does not focus enough on instructing employees to resolve problems as a team. At Ford, workers are trained to try to participate in decision-making. However, they are not trained in the areas of communication and decision-making like German workers are exposed through seminars, night classes, and on-the-job retraining programs. Ford officials might make greater use of communication specialists and videos so that workers can learn to better express their ideas within groups. Various groups should be integrated in order to understand different concerns and promote better working relationships among employees.

During the prosperous 1960s and early 1970s, American management style ignored the "bottom-round approach" and "quality circles" in manufacturing operations. Then, the economy began to slow and productivity slipped dramatically in its major industries. This was a factor which led U.S. management to search for better, more effective methods and techniques to increase efficiency and productivity. Ford Motor Company has been struggling ever since to train and retrain auto workers in this type

of new work environment.

Using people closest to the work being done is paramount in finding ways to improve work methods and performance. This is the central idea that Ford's employee participation program overlooks and lacks in scope. Ford's auto workers can utilize these new skills and training if they are facing permanent layoff in the future. These management skills can be translated into valuable experience for a managerial position for a smaller company or another industrial employer. Ford can reduce the burden on the apprenticeship and retraining programs by producing laid-off workers with managerial, leadership, and decision-making skills.

Ford Motor Company also needs to improve training and retraining workers in the area of microcomputers and information-related skills. The significant use of robotics by auto manufacturers in Germany has resulted in a greater percentage of the work force being computer-trained to handle complex systems associated with the operation and production of robots and machinery. Although the utilization of robots within the auto sector will result in job losses, technology will open other avenues of opportunity. According to Robert U. Ayres, a leading authority on technological change, he believes "humans and machines are complementary, not competitive.⁵⁸

People will be released from monotonous tasks such as welding and paint-spraying on automobile assembly lines. Some of the responsibilities undertaken by the work force will entail installation, modification, maintenance, and machine repair within the factory setting. The development of robotic technology will also provide technical positions in sectors related to robot manufacturing and robot system engineering. Employment in these areas will hinge on employees applying knowledge to product development with less emphasis being placed on manual operations.

Seminars and courses that educate the entire work force will help Ford remain competitive in the auto industry. Computer knowledge and technical skill proficiency are two key areas that Ford must accentuate in order to continue a resurgence into the next century. The guarantee of success in unifying and motivating the employees in their job performance cannot be overlooked. German and Japanese methods have shown how important it is in opening the communication channels that top-down management usually did not acknowledge. This open communication is greatly needed to improve productivity which also empowers the auto workers with new opportunities to diversify and expand one's career through job enrichment.

Ford Motor Company can also benefit from the German

approach to apprenticeship programs. Ford is geared towards the vocational training method which allows an individual more selective initiative to pursue off-the-job training. The German apprenticeship program is distinctive from Ford's in that the displaced German auto worker receives formal training and skill at the auto manufacturers' expense. Accompanying this apprenticeship program are short-time compensation programs, in which German workers are given the opportunity to work shorter hours to attend and learn in the trade program. Once the necessary requirements are met in the specific program, this training can be used through a lifetime of work opportunities. Vocational training programs, on the other hand, are less systematic and are not as well-designed to meet employers' long-term needs like the German apprenticeship system. American auto companies are oriented towards short-term profits and generally do not look beyond this horizon to long-term profit opportunities. In a 1986 study conducted by the Massachusetts Institute of Technology (MIT), the committee analyzed the scope of West Germany's training programs and made the following assessment. MIT determined that:

> the majority of German 16-year-olds enter apprenticeships on leaving school. Apprenticeships are offered in 400 occupations. For each of these a training curriculum has been negotiated by offi-

cials from government, employers' associations, and trade unions. These curricula are regularly revised to keep pace with technological change.

Apprenticeship programs and short-time compensation programs would assist Ford Motor Company in preparing for displacement of auto workers in the future. Their work force would be better trained and more productive in the meantime. Furthermore, these workers would be more loyal to an employer who has a system of retraining that adds to a worker's skills and knowledge while he or she is being paid for it. The combination of an apprenticeship program and short-time compensation program could further improve the quality and quantity of opportunities for displaced auto workers at Ford.

CHAPTER THREE

General Motors Corporation Retraining Programs General Motors Corporation's training and retraining programs have not helped it garner prestigious automobile awards or generate profit margins like Ford's programs have done. To help ensure quality, Ford has gone beyond GM by training its component suppliers. Despite these factors, GM has instituted training programs for its employees. Document 106 of the United Auto Workers (UAW) 1990 contract serves as the source document for training programs at GM.⁶⁰ It provides for adult educational facilities called Skill Centers to be established at all GM plants. The major goal of these centers is to help employees develop their skills in becoming a more valuable asset to the corporation. According to Blanca Arnold, a UAW education and training coordinator:

> [b]oth the union and the company felt that for GM to be more competitive--and for its employees to understand new technologies- $\overline{}_{6}$ we needed to focus more on education.

Like their counterparts at Ford, GM employees are afforded an opportunity to expand their horizons through education. GM realizes that employees are a key to innovation. Finding solutions in the design and production of vehicles depends on having a knowledgeable work force. Curtailing costs is of prime importance in competing on
a global scale. Costly design delays result in lost profits and market share. These are some of the important reasons why each employee serves as an integral team player in manufacturing quality-made and defect-free products. Their suggestions offer valuable input in streamlining production costs.

Totalling thirty-six GM plants across the United States, Skill Centers have been developed for the employees.⁶² The centers are operated by a coalition of GM and UAW personnel, and are overseen by the Human Resources Center located in Detroit, which is also composed of both GM and UAW representatives. It is responsible for General Motors' Human Relations issues including "preretirement, child care, health and safety, and quality networks."⁶³ The Human Resources Center pays the bills for the Skill Centers which includes teachers' salaries, facility costs, and students' class materials. These expenditures are paid from a:

> joint UAW and GM training fund that's collected in this way: For every hour that each of the 280,000 nationwide UAW members works, GM contributes 5 cents into a local fund at the workers' place of employment, and 5 cents into a national fund. Overtime draws greater amounts into the funds.

The Skill Center encompasses three specific programs: (1) Adult Basic Education (ABE), (2) General Educational Development (GED), and the (3) Educational Enrichment Services (EES).⁶⁵

ABE is designed to improve:

adult students' reading, math, writing, problem-solving and communication skills up to the eighth-grade level.

These classes also serve the needs of second-language learners who have lived in the U.S. long enough to be able to communicate adequately but require additional assistance in utilizing English more effectively.

Assessment tests are given by the teaching staff to determine the class level of the participants. For example, the Skill Center at the former GM facility in Van Nuys, California, identified seventy-five workers who had "skills below the fifth grade level."⁶⁷ These individuals were enrolled in the ABE program to overcome deficiencies in reading, math, writing, problem-solving and communication skills. This program serves as a starting point for learning the fundamentals and building upon them. Without it, these people would have difficulty completing employment applications and communicating with prospective employers unless someone was present to assist them.

The second major program offered through the Skill Center is General Educational Development (GED). This program allows people to earn the equivalent of a high

school diploma or a large block of credit that can be applied toward high school graduation as an adult.⁶⁸ Rosa Negron was a former employee at the Van Nuys facility who is enrolled in this program. She endorses the program by stating, "Now I feel it isn't too late to learn. I learn every day."⁶⁹ Although she is fifty years old, Negron realizes that education is very important in becoming reemployed.

The Educational Enrichment Services (EES) is the third major Skill Center program. These are individualized program offerings chosen by participants to advance their skills in such areas as:

> math, writing, reading, comprehension, communication, problem-solving and science. EES provides participants with technical training and help with 70 courses or other personal goals.

These courses are conducted in an individual-instruction lab, which is a high-school lab program under teacher supervision. The students make progress through their program based on how much time they devote to their studies. An exact timetable is not imposed on the participants.

Computer courses are another essential component of the Skill Center's program. Students become computer-literate through class instruction and application of this knowledge in a practical manner. It also helps

in learning other computer skills and software programs.⁷¹

Closely associated with the Skill Centers provision of the 1990 contract, GM and the UAW created Article K which is a Jobs Bank provision.⁷² This essentially is a job-security provision that allows employees to be paid for "nontraditional work, such as going to school, rather than being laid off."⁷³ For example, in a plant that has a shortage of jobs, the alternative to laying off employees would be to place a displaced worker into the job of an employee who wants to attend school full-time and improve his or her skills. This would allow both employees to be paid. Blanca Arnold, UAW education and training coordinator, points out the merits of the Jobs Bank program by stating:

> The purpose of the Jobs Bank program is to find ways to make employees more productive, thus making them more valuable to the corporation and therefore less likely to be laid off.

One of the benefits of these retraining programs is that GM and the UAW have made a cooperative effort to educate the work force and enhance worker skill levels. Former (displaced) employees have an opportunity to use GM's established programs to help them in local and national job searches. For example, a GM Human Resource Center (HRC) in Cincinnati, Ohio, provided many resources to assist former workers in finding new employment.

Those resources included:

a phone bank with ten phones where workers can make free phone calls to anywhere in the United States, videotaping equipment, and a reference library containing₅ occupational guides and job almanacs.

These centers help buffer the impact of losing a job. Rick Behymer was one of 3,000 displaced workers at the closed GM Norwood facility in Cincinnati, Ohio. His wife, Sandra, sums up GM and UAW efforts in assisting displaced workers. She remarks:

> Some companies have no compassion at all. UAW-GM is going out of its way to help families cope with what they are facing and give them a ray₆ of hope that there is someplace to go.

Jerry Fike, a HRC co-administrator and a former production foreman for GM, provides details about 3,200 displaced Hamilton plant workers in Cincinnati. He makes the following statements:

> Of the 3,000 laid-off workers, around 70 have been transferred to other plants, and approximately 700 have signed up for outplacement services. In 1988, when the Hamilton, Ohio plant closes, 900 more employees will relocate to other plants, accept early retirement or buyouts, or exercise the option to use the HRC's outplacement facilities.

General Motors' retraining programs offer quite a number of opportunities to their present and former employees. Although GM must restructure its operations to become more competitive in the marketplace, it still has a strong commitment towards retraining programs.

A comparison of General Motors' retraining programs with Ford's programs indicates some similarities and differences. Both auto producers have allocated financial resources for the purpose of alleviating deficiencies in literacy, providing opportunities for workers to earn the equivalency of a high school education, and upgrade job skills in manufacturing technology and computers. An educated work force has the ability to take on more responsibility in making pertinent decisions concerning efficient production of quality automobiles. Without these retraining programs, there is a greater likelihood that efficiency and quality goals would not be met.

General Motors' retraining programs are different from Ford's in that they are more extensive in coverage. Workers at GM have programs which are tailored to meet personal needs of the individual. For example, GM's Educational Enrichment Services (EES) is a program which provides the individual with more personal instruction by the instructor than programs offered by Ford. In addition to this difference, GM retains displaced workers on the company payroll while they are in a retraining status. Although this may be a costly measure for GM, the displaced worker can concentrate on upgrading his

or her skill levels without experiencing severe financial hardship or incurring expensive health care costs since they are still provided company health insurance. Ford's programs are geared more towards group instruction within the factory and classroom instruction where groups of workers attend classes. This approach allows Ford to save money and provides workers with close proximity to one another in communicating ideas. Group instruction helps keep Ford's costs down in administering these programs.

Despite General Motors foresight in providing training and retraining programs like the Skill Center which offers Adult Basic Education, General Education Development, Educational Enrichment Services, and computer education development courses, displaced GM employees may or may not acquire the formal skills and training to provide any high-salary job opportunities in the competitive job market. Instead, displaced GM workers may improve their basic education skills, but not necessarily in the information-related skills demanded in the information, high-tech workplace. General Motors also offers workers facing layoffs the alternative to attend school full-time while being paid a salary. This Job Bank program is also linked to the GM Resource Center which serves as an avenue in helping a displaced worker in finding employment that

fits his or her new skills and training.

However, General Motors largest operating loss of \$23.5 billion in early 1993 has prompted the corporation to streamline its operations and programs.⁷⁸ GM has announced that cuts must be made in various operating areas to meet new budget demands. Although specific cuts have not been announced, the loss of any retraining programs for displaced auto workers would be detrimental to the fortunes of these workers in finding good employment prospects in the future. General Motors has faced a series of tough years in which various programs, including training, are not exempt from the budget-cutting process.

For General Motors, retraining both managers and workers should become a chief objective for the benefit of all. Here are some suggestions for GM:

^oThe first decision by the CEO should be the development and implementation of a more flexible working relationship that encourages more cooperation between union and management personnel.⁷⁹ Seminars and workshops are important in retraining GM managers at all levels on the principles of a people-oriented leadership style. This goal of achieving horizontal communication channels and bottom-up communication flow will achieve many objectives for GM's mission to reverse the trend of market share loss.

°Since the facilities and equipment are in place, the people must be led by motivated leaders. This is essential in bringing about the necessary improvements to become a low-cost, efficient producer and a market leader in sales and revenue. Retraining programs will help employees believe that GM is making an investment in their futures and job security.

°GM's new leadership style with an emphasis on human resources would help its workers perceive that more employment opportunities are available to them within the organization. Workers should be given opportunities to achieve a secure and rewarding career at GM. Retraining programs, like German apprenticeship programs, ⁸⁰ can assist GM in providing the workers with formal skills and knowledge that are essential in today's highly competitive job market.

°An example of a human resource-based management strategy would be job rotation in which workers learn other jobs so that they can utilize different skills. This approach helps reduce boredom in the production of automobiles. GM's large organization would greatly benefit from job rotation or job enrichment which involves the worker learning additional skills and knowledge. Furthermore, if these managers or workers are displaced, then skills that are acquired at GM can be used in other jobs.

°GM's top management echelon must fully support such changes in management style.⁸¹ These issues must be fully addressed in company newsletters and memos so that change is a conscious one for the entire organization. Displaced employees can be prepared for whatever action is necessary if forewarned and retrained by GM with top management's endorsement of retraining programs.

°The seminars and workshops could be implemented over a period of time for both managers and employees so that participation of every GM worker and manager is assured. These seminars and workshops can introduce and familiarize GM workers with apprenticeship programs and provide them with opportunities to acquire skills and education that may be needed if a layoff becomes imminent.

°Top managers participation in these programs will illustrate the teamwork concept and willingness to embrace change for the benefit of the enterprise. Changes are necessary to improve efficiency, production, and quality. Once this period of retraining and education of new strategies for the human resources has occurred, assessments can be made of these changes in terms of production performances, managerial effectiveness, and sales/revenue figures.

CHAPTER FOUR

Chrysler Corporation Retraining Programs

Being the smallest in size of domestic auto producers, Chrysler and the UAW spend approximately \$30 million a year on training programs.⁸² Lee A. Iacocca, former chairman and chief executive of the Chrysler Corporation, points out that a major portion of money spent on training at Chrysler does not:

> go to train workers on how to run computers or robots or stamping presses. A big part of it goes to teach our people the three Rs that they didn't learn in school.

According to Iacocca, twenty-five percent of Chrysler's workers read at the sixth-grade or below, which makes them functionally illiterate.⁸⁴ Economic statistics provided by Michael H. Cimini, Susan L. Behrmann, and Eric M. Johnson in the Division of Developments in Labor-Management Relations, Bureau of Labor Statistics, consider Chrysler's work force to be "about 54,000 production and maintenance workers and 6,000 salaried workers."⁸⁵ Although training manuals and printed materials are written at the eighth-grade level and above, many workers still cannot read and understand them. Chrysler must allocate financial resources for remedial math and reading programs so that factory workers can overcome these deficiencies. Poor reading and math skills hinder American productivity

in competing effectively on a global level.

Retraining programs at Chrysler are geared towards recalling displaced auto workers from the "UAW/Chrysler Corporation closed plant pool to work within the Sterling Heights Assembly Plant in Detroit."⁸⁶ This facility would produce the Dodge Lancer and Chrysler LeBaron GTS automobiles utilizing robotics, programmable controllers, weld controls, paint building systems, and conveyor systems. Since many of these hourly production workers had been laid off for nearly five years, there was a need to update their assembly skills in the comprehension and application of modern technology. This prompted Chrysler officials to establish the Chrysler-WeldTech Approach to Retraining Displaced Workers training program.⁸⁷

As a pilot training program, eighteen dislocated workers went through 280 hours of technical training in welding fundamentals.⁸⁸ They were provided "hands-on" training to become proficient welders and this instruction was supplemented with forty hours of onsite follow-up at Sterling Heights Assembly. A WeldTech instructor helped the trainees transfer their basic welding skills to a practical work situation requiring improved speed skills, bending and stretching agility, and adaptation to the moving assembly line.

After the initial training was completed at the

WeldTech training center, certain skill deficiencies became apparent at the plant assembly line.⁸⁹ Four of the trainees were moved to other jobs shortly after their return to Sterling Heights Assembly when it became obvious they were not suited to the demands of assembly welding. According to Chrysler's personnel training records on these four individuals:

> one required a medical leave, one was extremely tall (6'8") and experienced difficulty positioning himself in the moving vehicles to complete the required welds, and two others did not make satisfactory skill progress upon return to the plant.

These participants were replaced by other displaced workers who successfully completed the program and earned WeldTech certificates of completion. Although there were a few students who experienced difficulty with classroom portions at WeldTech, they made an easy transition into assembly welding upon returning to Sterling Heights Assembly.

Feedback provided by the students in the WeldTech Retraining program indicated that the training was worthwhile. Responses from student surveys concerning the training curriculum denoted that:

> approximately 90% felt that training consisted of about the right combination of practical skills and theory and only 11% felt the length of training too long. None said they were bored or on the other hand, that training was overly hard to understand. It was especially gratifying

to note that 78% responded by indicating the instructor was very knowledgeable and helpful.

In regards to manufacturing output at Sterling Heights, Chrysler records determined that:

> 94% of some 78,000 cars built through mid-May 1985 met Chrysler's "FTC" (first-time through capability) target, compared to the 60%-90% of most U.S. plants using conventional technology.

Chrysler's goal is to produce vehicles (including the welding operations) and ship them to dealers without the need for remedial corrections to be made. This data lends support to the fact that retraining programs help Chrysler achieve quality control measures in the production of cars and trucks.

Instead of concentrating exclusively on training programs, Chrysler has heavily invested in product development teams in producing automobiles. Product development teams consist of design, engineering, purchasing, supplier and manufacturing personnel who take an active role in the development and production of vehicles.⁹³ The team is empowered to make decisions about the product and its development. Decisions are based on a consensus of team members with minimal involvement from management. Chrysler's vehicle development is centered on four teams in small-car operations, large-car operations, minivan operations and Jeep-truck operations.⁹⁴

The large-car segment is a prime example of Chrysler's commitment to team member training. Team members of the LH (Chrysler's newest car model in this large-car category) program receive a minimum of "80 hours of training split evenly between classroom and "hands-on" instruction."⁹⁵ This dual training approach allows workers to discuss concepts before they carry out the actual procedures in the production process. Chrysler endorses product development teams because its survival in the auto industry depends on it.

Chrysler's retraining programs are similar to those implemented at Ford and General Motors. Programs have been enacted to improve reading, writing, and math skills so that workers can communicate more effectively with one another through written and verbal means. Incremental improvements in the production of automobiles is contingent upon personal involvement of employees throughout the organization. For example, an automobile engineer must be receptive to employees' ideas in an attempt to minimize product imperfections and reduce the likelihood of costly vehicle recalls. Like GM and Ford, Chrysler relies on teamwork to achieve quality control in manufacturing automobiles.

Although Chrysler, like Ford and GM, has focused on providing basic educational skills to its displaced

workers, these fundamentals will not allow them to compete on an equal level with other people searching for employment. In the job market, these basic educational skills are essentially irrelevant if a person is seeking a high-paying, secure job. An individual must combine classroom instruction with job experience and continually refine their skills to a higher standard. Personal autonomy is important in order for a skilled worker to excel within a particular occupation specialty.

Similar to Ford and GM's deficiencies, Chrysler Corporation needs to improve the retraining programs over the length of a worker's employment in the auto business. Through job rotation, job enrichment, apprenticeship programs, and short-time compensation programs, a worker has a better opportunity to contribute more to the organization and perform closer towards his or her full potential. In conjunction with bottom-round management approaches, Chrysler can continually prepare and broaden an individual worker's skills and knowledge to be used in other types of jobs at Chrysler.

Job retraining can only become an important component in Chrysler's long-term strategy if the top management is able to restructure its top priorities and objectives. With recent increases in sales and profits, job retraining programs can be afforded to be implemented and used more

proficiently. Chrysler management needs to rethink the strategic management process to focus on such important objectives.

Strategic management is the foundation of success for any effective policy used in an organization. John Grieve Smith defines strategic management as related to business as:

> concerned with the general direction and long-term policy of the enterprise as distinct from short-term tactics and day-to day operations.

Companies lacking strategic management perspective do not have an appropriate focus on both the external environment and the firm's internal capabilities and resources. Strategic management combines these dimensions, integrates their importance, and provides long-term planning for the firm.

When goals and the direction of a company are clarified through a strategic management process, a particular stability and productive atmosphere is sustained in the workplace. Employees understand that their managers are aware of both the present problems and needs while aiming to motivate the work force to accomplish positive, longterm goals and objectives. Another advantage of strategic management is the company's capability to adapt to changing market conditions. Management and hourly employees must

concentrate their efforts on the retention of customers and attempt to expand their market share among competitors.

For instance, a firm can utilize the strategic management process in either a proactive or an aggressive-reactive position. A **proactive decision** would feature forecasting environmental conditions, then require motivating the work force to achieve the firm's goals. An **aggressive-reactive decision** would feature forecasting future environments facing the firm and taking action to optimize the firm's position to avoid potential problems. This approach would allow a firm to take better advantage of opportunities.⁹⁷

In contrast, the firms disregarding the importance of the strategic management process usually assume the **passive-reactive decision**, which refers to decisions made after the changes take place in the environment. The competitive environment concerning business operations today demands that firms seriously consider the strategic management process as a necessity to take advantage of opportunities, predict environmental changes, and control destiny.⁹⁸ For Chrysler to implement an effective retraining program, it must utilize a strategic management system. This system continually analyzes requirements in the production center, selects from various alterna-

tives, implements strategies, and evaluates and controls performance.⁹⁹ Integration of these components would provide continuous feedback which would also allow the company to chart training effectiveness and make appropriate changes.

In the area of job retraining for potentially displaced workers, Chrysler has lost sight of strategic decision-making to meet the needs and requirements for workers today. It has primarily focused on its financial status without adequate reinvestment in work force training This places many workers in a precarious programs. position where they fall further and further behind other workers within the auto industry who are pursuing new skills and knowledge in retraining programs. Retraining workers according to the German model involves a specific apprenticeship program to acquire knowledge and skills in a formal manner. Having discussed retraining programs provided by the three U.S. domestic auto producers, attention shall now shift to which company has the most effective program.

CHAPTER FIVE

Most Effective Domestic Auto Retraining Program

Among the Big Three auto producers, Ford seems to have the most effective training program. Ford's training programs have played a role in helping the company increase profit margins and market share within the United States. Training programs which have fostered technical proficiency have enhanced worker skills in producing a number of prominent vehicles like the Ford Taurus and Mercury Sable. Although General Motors is considered the world's largest corporation, its investment in training programs has not resulted in similar success like Ford. Part of the problem is that GM officials and union workers have not developed mutual respect and commitment in unifying efforts to build quality vehicles. Unions have resorted to strikes in overcoming differences. Solving problems in this manner is not conducive in developing teamwork. Due to this adversarial relationship, GM employees pursue retraining programs with a perception that they will not be able to fully utilize their skills within the work setting. Without total cooperation from the work force, GM will continue to have higher labor costs in producing autos than Ford or Chrysler.

As for Chrysler's training programs, they are not as effective as Ford's since Chrysler must spend a

major portion of its training funds on basic education courses for its workers. Before a worker can pursue additional job knowledge through course instruction, he or she must first master reading and math fundamentals. These educational deficiencies cannot be totally attributed to the public education system. One must note that from the end of World War II until 1973, American firms produced and sold a number of products in the world market.¹⁰⁰ Since many countries were rebuilding their cities in the aftermath of World War II, America was the main provider of various products. Many U.S. citizens chose to earn high wages in unionized factories instead of placing an emphasis on education. Requirements for many of these jobs involved workers possessing:

> an ability to comprehend simple oral and written directives and sufficient self-control to implement them.

Unionized factory workers who did not complete high school were not penalized for not meeting basic educational requirements. They reaped the fruits of their factory labor in which union officials secured higher wages and benefits on their behalf. However, this era of prosperity changed when U.S. firms, especially in the auto sector, faced growing competition from foreign rivals.

The United Auto Workers (UAW) union has played an important role in the retraining process. Through

collective bargaining with the three U.S. automakers, the UAW has secured retraining programs on behalf of their membership. Seniority rights help keep the Big Three from dismissing long-term employees who have educational deficiencies.¹⁰² Instead, these auto firms allocate funds for basic learning programs in order to raise the educational levels of these workers. These efforts help educate workers and allow them to learn other skills that are essential in operating technologically-advanced machines in a modern manufacturing plant.

Regarding education, Ford does not have to contend with employee-management friction and learning problems on the scale that its domestic competitors face. Before hiring new workers, Ford carefully screens potential candidates by administering a test which takes nearly four hours to complete.¹⁰³ Specific test areas include: arithmetic which emcompasses fraction and percentage calculations, reading technical material and answering questions, and performing dexterity tests. Ford also conducts teamwork sessions to determine how well prospective applicants can work together. This hiring procedure has not been fully adopted by General Motors because it is continuing to shrink its work force. In the past, Chrysler has recruited new workers based on giving preference to Chrysler workers' families and friends. 104

5.0

Although Ford may have the most effective training programs among the Big Three, U.S. auto producers and the American manufacturing sector are dependent upon countries like Germany and Japan for machine-tools. The machine-tool industry is responsible for machines producing replica machines that are used in making products. Lathes and milling, drilling, and grinding machines are some examples of products made within this industry.¹⁰⁵ Within the auto industry, these tools are used extensively in forging metal into intricate components that comprise a finished vehicle. Without a well-established machine tool industry, a nation's domestic manufacturing capability is stifled and becomes reliant on foreign producers. According to manufacturing data in 1965, U.S. tool builders accounted for more than twenty-eight percent of total worldwide production. By 1986, this percentage had dwindled below ten percent, and foreign producers, which included West Germany and Japan, supplied forty-nine percent of total machine tools used in the United States.¹⁰⁶

Within the U.S. domestic auto industry, General Motors purchased eighty-eight new presses from West Germany and Japan.¹⁰⁷ Acquisition of these foreign models provides GM with improved efficiency because these manufacturing dies are readily adaptable in production processes. GM has also bought large computer numerically controlled

horizontal milling centers from Sharmann in West Germany.¹⁰⁸ This machinery allows GM to produce parts that hold close tolerances over a wide range of part sizes. This is an indicator of American industry's inability to keep pace with other countries' advancements in manufacturing technology because American machine-tool companies have not upgraded their models for many years. Instead, they have resorted to:

> licensing and distribution agreements with Japanese firms to sell foreignbuilt machines in the American market, especially at the low end of the American manufacturers' lines.

This arrangement provides U.S. companies with higher short run profits, but a long-term effect is the loss of skills needed to design and build low-cost machines.¹¹⁰ This reliance on other countries for machine tools as an exploitable national weakness underscores the importance of American public policy in improving U.S. auto retraining programs.

CHAPTER SIX

Public Policy Designed to Improve U.S. Auto Retraining Programs

In this section, three specific public policy areas shall be analyzed for improving U.S. auto retraining programs. National skill industry standards, federal government assistance, and a consolidation of dislocated worker retraining programs shall be discussed as public policy measures. Germany will be used as an example in pointing out the merits of national skill standards. Worker retraining programs are dependent upon collaborative efforts by industry and government involvement.

The first public policy measure designed to improve U.S. auto retraining programs is the adoption of nationally recognized industry skill standards. National skill standards within industry would establish uniform qualifications of knowledge and skill proficiency within a specific trade. These standards would allow unemployed skilled workers to seek employment elsewhere in the U.S. with a minimal amount of difficulty. Workers that meet national skill standards would be recognized as a certified craftsworker. Possessing this credential would signify that a worker possesses a certain degree of competency within a certain occupational specialty. Vocations such as welding, metal-working, and electronics are some occupational

fields which would be governed by these skill standards.¹¹¹

As a national economic policy measure, the U.S. General Accounting Office made the following assessment regarding industry skill standards. In a June 1990 report to the Joint Economic Committee, the U.S. General Accounting Office stated that:

> insufficient attention is devoted to preparing U.S. non-college youth for employment. About 9 million of the nation's 33 million youth aged 16 to 24 will not have the needed skills to meet employer requirements for entry-level positions. Most of the major industrial nations have established competencybased national skill standards. The common U.S. practice is to certify only program completion, not attainment of specific skill levels.

These governmental statistics lend support to a deficiency in basic education in public schools.

A 1986 study conducted by the Massachusetts Institute of Technology (MIT) Commission on Industrial Productivity in America furnishes additional support to findings made by the U.S. General Accounting Office. Their research of former West Germany determined that beneath:

> the technical sophistication of the West Germans is a strong infrastructure of apprenticeships, polytechnic schools, universities, and technical institutes. This system generates manufacturing expertise at all levels of the enterprise, including skilled shop-floor workers, practical engineers who can make things work and solve real-world problems, and more research-minded

engineers who₃push the limits of process technology.

Neglecting improvements and insufficient funding for public education will cause the U.S. to lose a competitive edge over Germany, Japan, and other industrialized nations.

Within the U.S. domestic auto industry, the establishment of national skill standards and closer working relationships between educational institutions and the Big Three would enhance their manufacturing capabilities. An emphasis on applying knowledge to actual manufacturing problems would help solidify concepts in a practical manner. It would also help an individual develop confidence in their ability to undertake an assignment, promote teamwork with co-workers, and discover solutions to production problems. National skill standards would serve as a minimal qualification that workers possess within a certain field. This groundwork of knowledge could be built upon through additional research and experimentation by group members.

There are certain reservations associated with the enactment of national skill standards. Some of these drawbacks involve worker acceptance, government oversight, and incremental public policy problems. Many people resist changes which would make it difficult for auto workers to accept a newly adopted program that regulates their

daily work activities. National skill standards would involve new requirements and certification for workers employed in a specific trade. Union officials may lobby against this proposal because it may diminish their influence in determining job classifications for its rank and file.

Government oversight problems could arise in which industry officials may view government as intervening in their operations. Company officials may also view national skill standards as government encroachment on their ability to contract directly with workers or union representatives. It would also add another layer of bureaucratic administration for industry to comply with which would be an added cost factor in the production of goods. Additional federal and state regulation may prompt companies to transfer business activity to other countries in order to circumvent the national skill standards policy.

The creation of the Occupational Safety and Health Administration (OSHA) in 1970 is an example of additional federal government legislation which curtailed business activity in America.¹¹⁴ OSHA was responsible for:

> drawing up safety regulations for virtually every type of private employment and then enforcing these regulations with 2,500 inspectors issuing citations against businesses,

large or small, found to be in violation of the regulations.

OSHA also hampered business activity by imposing requirements on firms without considering their costs or weighing the benefits against the costs of these regulations. In turn, these regulatory compliance costs were passed onto the consumer in the form of higher prices for goods and services. Recurrent violations with OSHA standards served as a disincentive for domestic companies to continue or expand operations in the United States.

Incremental public policy is another potential problem regarding national skill standards. Incrementalism views public policy as a continuation of previous government activities with only slight modifications. 116 According to political scientist Charles E. Lindblom, originator of incrementalism, policy makers use a conservative approach in accepting the legitimacy of established programs and generally agree to continue previous policies. 117 Policy makers accept the legitimacy of previous policies because of the uncertain impact of totally new or different Legislators are unlikely to pursue a national ones. industry skills standard agenda if an existing program is already in place. Similar to a mechanic, legislators will tinker or modify current programs before revamping them altogether. Another avenue available to lawmakers

is to defer this matter to industry officials for further consideration before any legislative action is taken on this policy proposal.

Federal government assistance is an essential element of public policy designed to improve U.S. auto retraining programs. There are three important reasons why the U.S. federal government should provide financial assistance for these programs. First, the U.S. must allocate more funds for training and education programs to keep pace with other industrialized nations. Lois Gray, a New York City-based professor of labor-management relations for Cornell University in Ithaca, New York, supports this position by stating:

> The U.S. has lagged behind other industrialized countries in providing training and education. In Western Europe, the government funds training and eduation, and the unions play an active role in it. With [Labor Secretary] Robert Reich emphasizing training and education, I would expect more of that here--probably not on the scale of European countries, but a move in that direction.

There will be a widening gap in knowledge and skill levels between U.S. and European workers unless additional funding is provided by the federal government. The federal government is tasked with this responsibility because it has greater resources available than state governments. It can also implement public policy more uniformly than

individual state governments.

The U.S. is competing in a world economy where many low-skilled and labor-intensive jobs have been transferred to nations with cheaper labor costs.¹¹⁹ It is imperative that the U.S. move forward and make an investment in retraining workers so that multinational companies and other firms may be inclined to set up operations in the U.S. and utilize a highly-educated and skilled American work force. A good example of a company that has agreed to establish operations in the U.S. is Mercedes Benz. The German-based automaker chose Tuscaloosa, Alabama, as "the first independent plant to be established outside of Germany."¹²⁰ The \$300 million plant will produce approximately 600 vehicles a year. According to Mercedes' Dr. Dieter Zetsche, deputy board member for passenger car development, training and education were two important reasons for choosing the Tuscaloosa location over 169 other cities in the United States. 121 He states:

> We at Mercedes-Benz base our decisions on the future. And the future is defined on training and education.

These statements made by a high-ranking German auto official should influence U.S. government officials in placing a high priority on retraining programs. A nation must invest in its labor force to advance work skills so that companies have an incentive to relocate or expand

operations in a particular country. Otherwise, companies will seek other nations that will provide them with highly-skilled workers.

The second and third reasons that support government assistance for retraining programs are closely related to one another. These reasons involve a laid-off worker's personal finances and time period for completing a retraining program. A laid-off worker who is enrolled in a retraining program such as the Economic Dislocation and Worker Adjustment Assistance (EDWAA) program is normally entitled to receive unemployment benefits for only twenty-six weeks.¹²³

During this six month time period, an unemployed person in a retraining status must contend with paying their bills (home mortgage, personal living expenses, monthly auto payments, among many others) while on a restricted budget that is primarily derived from unemployment compensation. In addition to meeting financial obligations, the individual is also burdened with the task of finishing a retraining program and finding a new job.

Once this time period has elapsed, the individual loses his or her unemployment benefits and must return to the work force in order to meet financial obligations. Progress in a retraining program may come to an abrupt

halt since the person must return to work. Six months does not allow an adequate amount of time to complete a retraining program when additional weeks or months may be required to successfully finish it. Federal government assistance must take into account reasonable time parameters for the completion of retraining programs. In the following section, an analysis of ways in which the federal government attempts to alleviate personal hardship problems will be made regarding retraining programs.

Within the Clinton Administration, U.S. Secretary of Labor Robert B. Reich is a staunch supporter of retraining programs. Reich provides insight concerning the benefits of retraining programs by stating:

> The payoff to skills is surging. Technological evolution is spawning a profusion of good new jobs. Integrated, expanding global markets create many more opportunities than they close off. And the skills needed for many of these high-skill, highwage jobs can be learned, often through two-year associates degrees, apprentice ship programs and on-the-job training.

As a strong advocate for retraining programs, Reich has "proposed spending \$3.5 billion on worker retraining over the next four years."¹²⁵ Reich supports this position by making the following assessment:

> All of the studies show that if you get long-term training for a year or more, you're going to affect your future incomes

by increasing that future income 126 by an average of 5 to 6 percent.

In an effort to reduce the number of problems in dislocated-worker retraining programs, Clinton Administration officials have proposed to consolidate these programs (dislocated-worker programs) into "a single, comprehensive scheme."¹²⁷ Some of the key proposals advocated by Reich in dislocated-worker programs include the following: universal access for every laid-off worker, identifying who needs help through speedy entry into reemployment and job-retraining programs, and long-term income support and training for laid-off workers who desire or require long-term retraining.¹²⁸ In reference to the previous section on personal hardships, these three areas would help lessen financial difficulty and time constraints that are currently imposed on many dislocated workers who are enrolled in lengthy retraining programs. Reich's proposed changes in dislocated-worker programs would allow individuals to primarily concentrate on their training programs without worrying about financial matters.

Although Reich has good intentions for restructuring unemployment benefits and retraining programs in public policy, many Congressional members and American citizens will not be receptive to his ideas. There may be a perception that these changes will result in another type

of welfare program that will overburden taxpayers. Another claim that may be lodged against Reich is that it is too costly for Americans to simultaneously support extensive changes in retraining programs and provide national health care for its citizens. One of these programs (national health care or retraining programs) will have to be given priority over the other because endorsement of both programs will encounter stiff opposition due to the projected costs of financing both of them. Currently, the federal government spends approximately \$2.4 billion on 150 different training programs. 129 Since medical care in America is expensive, a national health care system would probably equal or exceed this \$2.4 billion mark. Now that an analysis of consolidating retraining programs has been made, an overall evaluation is the next area of consideration.

CHAPTER SEVEN Summary and Conclusion

The American auto industry's emphasis on short-term profits and superficial attention to market conditions placed it in a serious predicament. The Big Three based their profitability on large autos but did not contemplate other factors that would lead to an erosion in domestic market share. Higher oil prices caught General Motors, Ford, and Chrysler off-guard in which they could not readily meet consumer demands for smaller and more fuelefficient vehicles. This short-sightedness allowed German and Japanese automakers to make inroads in this market segment. Many American buyers who purchased foreign makes discovered that these autos had better quality and reliability than domestic vehicles.

U.S. auto firms responded by producing smaller automobiles with advanced technology. New machinery for manufacturing vehicles also required worker retraining. Various worker retraining programs were implemented at the Big Three in upgrading their production operations. These programs have helped Ford, General Motors, and Chrysler become more competitive with German and Japanese auto producers. However, communities paid a price for this progress. Since the Big Three uprooted jobs and transferred them elsewhere in the country and abroad for
cheaper labor, communities can be devastated by the brunt of these cutbacks. In this type of situation, retraining programs play an important role as in the case of Ford and the closure of its Milpitas plant. Active retraining of displaced workers should be seen as a minimally appropriate measure taken by manufacturers who abandon American workers. This retraining approach can help alleviate the severity of plant relocations.

Ongoing worker retraining is beneficial in a longterm profit orientation for auto manufacturers. Workers are given an opportunity to improve their technical skill levels and utilize their expertise within the production process. A 1986 study conducted by the Massachusetts Institute of Technology (MIT) Commission on Industrial Productivity determined that further refinement of American skill levels could be attained by adopting an apprenticeship system and national skill standards that is similar to the German model. Advancements in technical proficiency are achieved through continuous skill application. The German apprenticeship system and national skill standards policy has helped Germany excel in the manufacturing sector. Since both of these countries have developed a highly-regarded machine-tool industry, German and Japanese companies supply a large number of lathes and milling machines to American manufacturing firms. Α

dependency on these foreign suppliers could pose implications for American manufacturing capability in the event that the supply was no longer available.

Three public policy areas were examined for improving U.S. auto retraining programs. The first area analyzed was the adoption of nationally recognized industry skill The purpose of this public policy would standards. establish specific knowledge and proficiency guidelines within different job classifications. These standards would help determine a worker's level of competency within a given trade. Like Germany's program, competency-based national skill standards would also require individuals to demonstrate their technical skills before being granted skill certification. This method would set up objective guidelines for workers to meet. Although a worthy goal, some drawbacks with this public policy measure involve opposition from unions and company officials which would produce counteractive results. It was also pointed out that incremental public policy would dilute the implementation of a full-fledged national skills standard proposal.

Federal government financial assistance was the second area discussed concerning the improvement of U.S. auto retraining programs. Additional funding in training and educational programs is needed if American workers are to possess similar knowledge and skill levels that corre-

late with their European counterparts. Government expenditures for retraining workers is designed to promote a highly-educated and skilled American work force that will influence multinational companies to set up business operations in America. Mercedes Benz is an example of a company that has taken advantage of American skilled labor. In turn, U.S. workers will pay federal taxes based on their incomes. This tax revenue will be used to pay for domestic government programs such as Social Security benefits and help finance other domestic and foreign programs. Additional employment opportunities will also assist in the expansion of the U.S. economy. Economic growth within a capitalistic system is dependent upon increased levels of consumption in which workers purchase consumer goods and services with their spendable incomes. High-paying jobs also allows individuals to improve their standard of living. This approach will enhance long-term economic stability over short-term profit margins.

Consolidation of dislocated-worker retraining programs is the third public policy measure that was analyzed for improving U.S. auto retraining programs. Clinton Administration officials like U.S. Secretary of Labor Robert B. Reich is a strong proponent of retraining programs. He believes that a personal investment in retraining programs helps increase future incomes. Reich

has advocated easier accessibility measures for reforming dislocated-worker retraining programs. Critics of Reich's public policy proposals point out that allocating federal money for retraining programs is a costly venture.

Retraining programs shall serve as a catalyst that will arm American workers with appropriate skills in the technological age. As manufacturing companies continue to integrate computers, electronics, and robotics within their operations, there will be a greater need for a knowledgeable and technically proficient labor force. This is evident in the U.S. domestic auto industry where Ford, General Motors, and Chrysler have initiated private training programs for their personnel. Emphasis will continue to shift from manual labor to an educated work force that will learn new skills within educational institutions.

Public policy regarding the improvement of U.S. auto retraining programs is contingent upon federal government assistance. Federal retraining public policy programs will provide a better outlook for idle workers. These government-initiated programs will help encourage a strong work ethic where unemployed workers are more optimistic about future employment opportunities. These programs will also help people improve their income potential instead of settling for jobs that pay at or slightly above

the minimum wage level. Minimum wage jobs limit a person's standard of living to the point that an individual is subsisting barely above the poverty line. This situation is exacerbated when a worker is not provided company medical and dental insurance coverage. These economic and political ramifications can be alleviated by synchronizing government, industry, and educational institutions' efforts in the development of a better educated and highly-skilled work force. It is imperative that America undertake this challenge by striving for optimum performance in a highly competitive world economy. As national destiny is being charted, the U.S. educational institutions shall serve as the cornerstone for propelling America forward into the twenty-first century.

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