

DOCUMENT RESUME

ED 351 555

CE 062 421

AUTHOR Norwood, Janet L.
 TITLE Education: The Key to Labor Market Success.
 INSTITUTION Minnesota Univ., Minneapolis. Industrial Relations Center.
 PUB DATE 90
 NOTE 23p.; Third Annual George Seltzer Distinguished Lecture.
 AVAILABLE FROM Publications, Industrial Relations Center, University of Minnesota, 271 - 19th Avenue South, Minneapolis, MN 55455.
 PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Educational Attainment; Employment Potential; Employment Projections; Futures (of Society); Job Skills; *Labor Force Development; *Labor Market; Labor Needs; Postsecondary Education; Productivity; Secondary Education; Skill Development; *Success; Vocational Education

ABSTRACT

Although education is the key to labor market success, it never has been a sufficient condition for that goal. In addition to the changing educational attainment of U.S. workers, the shifts in the demographic composition of the labor force and in the very conditions and expectations of the workplace have made the task of efficient use of labor a growing challenge for U.S. employers. The cognitive requirements of a changing mix of jobs in the economy have increased. The educational attainment of the work force is also increasing. Projections for the future indicate a growth in the service sectors, but in highly technical and cognitively complex occupations in such areas as health care, financial services, and education. The increasingly global nature of economic transactions will also require substantially greater knowledge of cultures and languages than people have developed in the past. The labor market outcomes of individuals will be increasingly related to their educational attainment and the quality of the education they received. This involves not only their preemployment preparation, but also the continuing investments that individuals and their employers make after careers begin. Employers will be challenged to make changes in working practices, including restructuring of occupational definitions, worker involvement in decision making, and new or improved opportunities for training. (YLB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED351555

CE

Education: The Key to Job Market Success

Dr. Janet L. Norwood

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. L. Norwood

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The George Seltzer Distinguished Lecture
Industrial Relations Center
University of Minnesota
1990

BEST COPY AVAILABLE

CE 062 421

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

**Education:
The Key to Job Market Success**

Dr. Janet L. Norwood

**The George Seltzer Distinguished Lecture
Industrial Relations Center
University of Minnesota
1990**

2

PREFACE

The third annual George Seltzer Distinguished Lecture, and third on the theme "The American Dream: Education and Work," delivered by Dr. Janet Norwood, is entitled "Education: The Key to Job Market Success." In her lecture, Dr. Norwood notes the increased cognitive requirements of a changing mix of jobs in the economy, and notes that educational attainment of the workforce is also increasing.

Projections for the future indicate a growth in the service sectors, but this growth is not in the "hamburger flipper" segment, but rather in highly technical and cognitively complex occupations in industries such as health care, financial services, and education. The increasingly global nature of economic transactions will also require substantially greater knowledge of cultures and languages than Americans have developed in the past.

The labor market outcomes of individuals will be increasingly related to their educational attainment and the quality of the education they received. This involves not only their pre-employment preparation, but also the continuing investments individuals and their employers make after careers begin. Dr. Norwood's lecture elucidates the role that education will play in individual success and the competitiveness of the U.S. economy in the future.

Dr. Norwood's visit involved not only this lecture, but also included meetings and discussions with doctoral students and faculty. Her generosity in visiting with us over two days provided an additional level of enrichment which is consistent with the goals of the Seltzer lectureship.

This year's lecture was again organized and coordinated by Professor Mahmood Zaidi; Donna D'Andrea, Industrial Relations Center Administrative Director; and Jonathan Seltzer. Their efforts substantially contributed to the quality of the lecture visit activities.

The Annual George Seltzer Distinguished Lecture is made possible by various private contributions and University matching funds on the occasion of the retirement of George Seltzer from the University of Minnesota in 1988 and in support of the continuing enrichment of the curriculum and research of the Industrial Relations Graduate Program with which Dr. Seltzer has been affiliated for some 35 years.

Education: The Key to Job Market Success

Dr. Janet L. Norwood

**The George Seltzer Distinguished Lecture
Industrial Relations Center
University of Minnesota**

Universities are in the business of training for success in life. The definition of that success takes many forms, but, like it or not, success in life depends in large measure on success in the job market. Success in the labor market, in turn, depends on many things -- internal, external, and institutional factors. The ability of individuals to perform and their willingness to adjust to change, the state of the economy, and the preparation our people receive both before and after entering the labor force all determine the limits of success.

In these days of concern over the quality of the products this country produces and our ability to compete in world markets, we need to pay more attention than ever before to the quality of our workers, their educational preparation, and the training provided by their employers. While education is indeed the key to labor market success, it never has been a sufficient condition for that goal. Thus, in addition to the changing educational attainment of our workers, the shifts in the demographic composition of the labor force and in the very conditions and expectations of the workplace have made the task of efficient utilization of labor a growing challenge for our Nation's employers.

Today, I would like to review with you what we know about the educational attainment of the workforce and how it interrelates with the shifting industrial and occupational mix of employment. These developments are important because they affect now -- and in the future -- the manner in which workers and employers interact in the workplace. The structure of jobs and the nature of compensation, as well as the ability of the United States to compete in the world economy, will be determined largely by the education and training received by workers. Similarly, the kind of education and training our workers get ought to be determined by the future structure of jobs, and the conditions of the workplace.

We repeatedly hear that jobs are becoming increasingly complex and that the unskilled, the undereducated, and the unprepared are being left behind. And our data do show that the better educated are improving their position in the labor market. Our projections tell us that new jobs are likely to demand even more cognitive ability, suggesting that those without higher levels of education will continue to fall further behind.

Fortunately, we can face the future with some confidence. The educational attainment of the U.S. labor force has increased substantially over the past decade. One-quarter of adult workers (25 to 64 years of age) are now college graduates, and another 20 percent have completed 1 to 3 years of college. The proportion of the labor force ending their formal education with a high school diploma remains at about 40 percent, while the proportion without a high school diploma has dropped over the last two decades -- to 14 percent today. However, we must remember that this decline of about 8 percentage points largely reflects the failure of many school dropouts to work or look for work.

Now and into the Future

Our knowledge of the current labor market, and our projections of the future, underscore the importance of the issues related to these changes. The composition of the labor force is becoming increasingly diverse, and this diversity will continue to increase in the future. The growth of our population has slowed markedly as a result of the great demographic swings since World War II. We expect the labor force to grow in the future at only about one half the rate of the past few decades. These trends, which surely challenge college recruiters, nonetheless afford a prospect of improving the job situation for a changing demographic mix. Women will account for a significant proportion of that growth. And we also know that minority workers will continue to increase their proportion of those Americans who work.

Our projections to the year 2000 anticipate a vastly changed industrial landscape. The service-producing sector will increase its share of total employment, and the share held by the goods-producing sector will decline. The largest growth is expected to be in the health, business, and education services industries. The important point here is that these industries tend to hire technicians, professionals, executives, managers, and administrators -- all occupations that generally require a college degree. While there will continue to be a need for messengers, orderlies, and other occupations requiring little formal education beyond high school, it seems clear that a college degree will constitute an important competitive advantage. In fact, we project that the number of jobs that now require 4 or more years of college education will increase by more than 50 percent between now and the turn of the century.

The jobs that we expect to increase the fastest are those which require cognitive skills as well as technical

and professional training. Importantly, vocational preparation will not be enough. As we participate in an increasingly competitive world, many of our workers will also need the tools to cope with languages and customs that are different from our own.

Our federal and state governments have recently begun a joint effort to improve the quality of education received in this country -- at all levels. But we must not forget that there still remain in our society a significant number of persons who do not have the education and the training to compete in an increasingly demanding economy. Many of our minority youth have grown up in poverty, without the hope and the stimulus needed to improve their status. The increasing need for an educated work force can only exacerbate the problem for these young people. We must remember that a democratic society cannot long flourish when significant groups of its citizens are unable to secure the education or the training required for labor market success.

I would like now to turn to some very interesting recent information about the educational attainment of American workers and the relationship between education and labor market success. I will then comment on the importance of some of the emerging changes in labor-management relations, union representation, and the challenge that I believe employers will face in dealing with a labor force that will be quite different in the future from what it has been in the past.

Labor Market Advantages For College Graduates

Educational attainment is one of the most important variables we can consider when we try to define labor market success. It is common knowledge that groups with the highest educational attainment experience the

lowest incidence of unemployment. The difference in the lower unemployment rates for college graduates and higher ones for persons with less education reflects both the supply and demand for workers at various educational levels. For example, the supply of persons with 4 or more years of college has increased, but the increase occurred at a time of increased demand for those well-educated workers. In contrast, employers reduced their demand for those with lower levels of education.

While most of the well-educated members of the post-World War II baby boom generation entered the labor force during the 1970s, there were still nearly a million bachelor's degrees granted annually during the 1980s. In addition, college graduates who had worked for a time and then left the labor force returned in growing numbers, contributing to the over-the-period rise in the total number of working graduates. A large part of the increase in these re-entrants was composed of once-employed female graduates who returned to the labor force after giving full-time attention to child-rearing and other family responsibilities.

At the same time that the supply of college graduates has expanded, changes in technology and in business practices increased the skill requirements for many jobs. In addition, many employers, seeing that they could secure better educated workers, increased the educational requirements for some of their jobs. That educational upgrading benefitted college graduates, but it, of course, made job success somewhat more difficult for those with less education.

From an occupational perspective, the advantage for the college graduates in the past decade was enhanced by much larger than average employment growth in those occupations -- professional, manageri-

al, and technical -- which employ the most college graduates. Employment in occupations with the lowest proportions of college graduates generally declined in the 1979-89 period. For example, the number of operators, fabricators, and laborers (few of whom are college graduates) declined by 5 percent during that period.

Another factor that contributed to the increased demand for college graduates in the past decade was the employment growth in the service-producing sector of the economy, which employs more than 90 percent of all female college graduates and more than 75 percent of all male graduates. In the past ten years service-sector employment grew by more than 30 percent, while the number of goods-producing jobs declined by three percent. Less than one-fifth of all college graduates are employed in the goods-producing sector of the economy.

The industrial concentration of college graduates had, until recently, also reduced their vulnerability to business cycle downturns. More than 40 percent of all college graduates are employed in the professional services industry, which has been relatively unaffected by past downturns in the business cycle. In contrast, persons whose education stopped with high school graduation are more likely to be employed in the goods-producing sector of the economy, which is highly susceptible to business cycle fluctuations. Additionally, even within industries where there are large fluctuations in employment, college graduates have still experienced less unemployment than do high school graduates. They are more likely to be employed in managerial and professional capacities -- occupations that usually have been the last to be laid off during contractions.

In large part because of these occupational differences, college-educated workers generally earn more than workers with less education. The median earnings of high school graduates who work year-round full-time are less than two-thirds the earnings of college graduates. To make matters worse for those without any college experience, those earnings differentials grew larger over the past decade.

Female graduates fared especially well over the decade. While women were responsible for 70 percent of the increase in the supply of college graduates in the past decade, most of them were able to find jobs in the rapidly growing service sector of the economy. Thus, while college-educated women in all age groups experienced declines in their rates of unemployment in the 1979-89 period, there was a particularly large drop in the rate for 25- to 34-year-old women with 4 or more years of college.

In contrast, the demand for male college graduates in the past decade did not quite keep up with the inflow of men with 4 or more years of college into the labor force. College-educated men in all but the 55- to 64-year-old age group experienced an over-the-period rise in their unemployment rates. In general, male college graduates who did not carefully select their career objectives, acquire the most appropriate academic preparation, or were not adept at locating job openings or marketing their abilities were often crowded out of jobs, or experienced one or more spells of unemployment. Still, male college graduates had much greater success in finding jobs than did less educated workers.

Thus, the unemployment rate differential between high school graduates and persons with some college experience widened during the 1980s. High school

graduates were almost one-and-a-half times more likely than persons with 1 to 3 years of college to experience a spell of unemployment in 1989.

What is the prognosis for continuing the advantages that the college graduates enjoy? It is expected that more than 9 out of every 10 college graduates who enter the labor force over the 1988-2000 period will find college level jobs. College graduates entering the labor force in the future will compete for jobs with each other as well as with many currently employed and underemployed graduates who decide to change jobs. But the real answer to the question about the prognosis for the future is that those graduates who carefully select their career objectives, acquire the most appropriate academic preparation, and are most adept at locating job openings and marketing their abilities will continue to enjoy the smoothest transition from school to work, and establish themselves for future success. Some others will have less satisfactory transitions -- having to scramble for the best available jobs, risking periods of underemployment or unemployment, more often relocating to other areas of the country, or accepting jobs that do not require their level of education, before finding employment that is challenging or exciting.

High School Graduates

Not everyone will, can, or should go to college. But the difference in the prospects of those who do not is abundantly clear. Almost a third of all male high school graduates with no college experience are employed in occupations where employment declined over the decade. In addition, when laid off, many older male high school graduates have become discouraged by their bleak labor market prospects and dropped out of the labor force. A large proportion of those workers

were employed in declining or stagnant industries. Some older workers whose education had stopped with high school graduation chose to exercise early retirement options and exited the labor force.

The situation for female high school graduates was somewhat better because more of them found jobs in the growing service-producing sector of the economy.

High School Dropouts

In a labor market demanding increasingly higher skill levels, high school dropouts face declining employment opportunities in the future, as they have over the past decade. The jobless rate for dropouts is high; the rate of unemployment among dropouts is now almost twice as high as the rate for high school graduates and more than 4 times the rate for college graduates.

Educational Trends By Race And Ethnic Origin

Educational attainment issues have, because of these job market success factors, become intertwined with issues of equity in a free society. The issue is often cast in a simple observation: while there have been significant increases in education among whites, blacks, and Hispanics, white workers still have the highest levels of educational attainment.

Among women college graduates, blacks and whites have similar patterns of earnings and unemployment. This reflects the similarity of their occupational employment characteristics. In contrast, substantial economic differences still exist between college-educated black and white men, and little progress was made toward narrowing that gap during the past decade. Unlike the situation for women, white and black college-educated men have sharply different occupational characteristics.

White men are more likely than black men to work in managerial or professional specialty occupations. Among professionals, black men are more likely to work in relatively low paying teaching occupations, while white men are more likely to be lawyers, judges, physicians, engineers, or mathematical and computer scientists. Even so, for blacks of both sexes college education does provide considerable economic rewards above those generally received with only a high school education.

Jobless rates for blacks are higher than for whites at each level of education. For example, in 1989, the unemployment rate for college-educated black men (ages 25 to 64) was about three times the rate for white men (5.6 versus 1.8 percent). Ten years earlier, the unemployment rate for similarly educated black men was two-and-a-half times the rate for white men.

The Quality of Education

I have stressed educational attainment in my discussion today mainly because attainment is measurable and is generally representative of achievement. But it is also important that we pay attention to the quality of education at every level. More years of schooling are not enough. Students must increase their mastery of reading, writing, and computation; improve their skill in oral communication; and enhance their ability in problem solving and creative thinking.

Last month the National Center for Education Statistics released a report which summarized two decades of data from the National Assessment of Educational Progress. The data showed that students were doing better in gaining basic skills, but that very few students could apply these skills in understanding complex materials or problem solving. Students were able to get

the gist of material they read, but were not able to analyze the content. Few of them could write well enough to communicate effectively, and only small proportions could address science-based problems. Similarly, students were familiar with the major events in American history, but they did not appreciate the significance of those events.

These findings are of serious concern. We must strengthen our educational system to provide our citizens with the knowledge they need to participate in the democratic process, and we must do a better job of preparing our young people for their first job. But we cannot stop there. We must realize that life no longer can be neatly compartmentalized into three stages: school, work, and retirement. Education and training will need to take place over the life cycle, so that workers have the opportunity to update their skills throughout their work life.

Employer-Provided Training

While formal education is the most common form of preparation for work, many other approaches are prevalent. Currently, there has been a great deal of interest in work related training, particularly that provided by employers. Recently, a number of studies and commissions have tried to determine the extent and value of such training. Their efforts suggest that much more needs to be done if we are to fully understand the dynamics of work and training.

Nearly a decade ago, we asked workers whether they needed specific skills or training to qualify for their current job, and whether they had taken any training to improve their skills on their present job. The survey indicated that 55 percent of all workers required some skills or training to get their current job, and 35 percent

took some type of training to improve their skills while holding their current job. Half of all workers who received skill improvement training on their current job received it from their employer either in a formal program or informally as on-the-job training. Because this information may well be out of date, we plan to conduct a similar survey in early 1991, if resources permit.

One thing that we do know is that workers with the most formal education are the most likely to receive further training from their employers. We also know that, in general, employer-provided training increases future earnings, but we do not know very much about how long such effects last and which kinds of training have the most payoff for workers and society.

The Challenge for Industrial Relations

For the Nation's employers, hiring educated workers is not the entire answer to meeting the global competitive challenges that they face today and will continue to face in the future. Their responsibility includes efficient utilization of the skills of educated workers. This will require changes in working practices that employers are just beginning to institute. For example, some of the more advanced offices and factories today are showing that occupational definitions may need to be restructured so that worker skills can be used more effectively. Educated workers are higher paid workers, and there is some evidence -- though still in only a small proportion of the establishments we survey -- that employers recognize that they need to adjust the way they use workers in the business environment.

Fortunately, a shift in workplace organization and operation seems to be emerging. We are moving away from the traditional hierarchical approaches to managing the workplace to more flexible systems which

involve workers in decision making. Occupations are beginning to be defined more broadly so as to permit more flexibility in the use of worker skills. Total Quality Management and other continuous improvement practices, such as Quality Circles, are being employed to improve product quality and to increase the job satisfaction of the workers. Importantly, compensation packages are being designed both to focus on worker needs and to support an increased attachment of the worker to the success of the firm. Although workers and their employers differ on the extent of their desire for such things as challenge, independence, teamwork, flexibility and status, change is clearly on the way.

During the last few years, labor and management have established new or improved opportunities for training as part of their increasing focus on job security. At first, training and education opportunities were provided to displaced employees so that they could obtain a new job. Subsequently, such opportunities were made available to active employees to enhance their career development. Among the agreements which contain these types of provisions are those between General Motors and the Autoworkers, AT&T and the Electrical and Communication Workers, and USX and the Steelworkers.

The changing nature of the workforce also has affected the activities of the trade union movement. The trade union movement grew and built its reputation for success on wage and compensation packages negotiated primarily for workers in the nation's factories. Much of the bargaining involved a traditional adversarial role between labor and management. The industries in which the unions have in the past been extremely strong have been hit hard during the recessions of the early 1980s. The industries that are growing -- and that are expected to grow the most in the future -- are

largely in the service producing sector, and many of them are industries that have traditionally been among the most difficult to organize. And, as the educational attainment of the nation's workforce increases, it brings into the workplace many of those who, in the past, have not always identified with the working class. These types of workers have in the past been difficult to organize. Today, the trade union movement represents only 14 percent of the workers in the private economy. Like employers, unions recognize that they are facing a world of change in the workplace and they are developing new approaches to adapt to these changes as we move into the next century.

Conclusion

Education has become an increasingly important criterion for job market success. The data show clearly that workers with an education fare better than those without one. They earn more and they have fewer spells of unemployment.

Employers are finding college graduates more available in this period of rising educational attainment. They are beginning to organize their workplaces so as to utilize better educated workers more effectively. The trade union movement is shifting its focus. The challenge for the future is to evolve an approach to the industrial relations process that will enhance U.S. productivity so that our country can continue to compete in a world which is increasingly demanding and increasingly complex. We need to find ways to ensure that our workforce has the skills that will be needed in the 21st century.

JANET L. NORWOOD

Dr. Janet Norwood is the Commissioner of Labor Statistics, Bureau of Labor Statistics, U.S. Department of Labor. Dr. Norwood received her BA from Douglas College, Rutgers University; and her MA and Ph.D. from the Fletcher School of Law and Diplomacy, Tufts University. Prior to joining the Bureau of Labor Statistics, she was on the faculty of Wellesley College. Dr. Norwood has been actively involved with scholarly organizations, commissions and committees involved with the collection and use of statistics, and publications. She is a past president of the American Statistical Association, has served on the executive boards of the American Economic Association and the Industrial Relations Research Association, and chairs the Working Party on Employment and Unemployment Statistics for the OECD. Dr. Norwood is a Fellow of the American Statistical Association, the Royal Statistical Society, the National Association of Business Economists, and the American Association for the Advancement of Science. She has been awarded the Doctor of Laws degree from both Carnegie-Mellon University and Florida International University. Her undergraduate alma mater has recognized her by naming her to the Rutgers University Alumni Hall of Fame and to the Douglass College, Douglass Society for Distinguished Achievement. She received the Secretary of Labor's Award for Distinguished Achievement in 1972 and a Special Commendation in 1977, and received the Department of Labor's Philip Arnow Award in 1979.

GEORGE SELTZER

George Seltzer earned his B.A. and Ph.D. degrees in economics from the University of Chicago. Prior to his academic career, Professor Seltzer served in the federal government in a variety of posts including: Special Assistant, Office of Defense Mobilization, Executive Office of the President; Executive Director, Economic Stabilization Agency, Special Assistant to the Secretary, Department of Commerce; Economist, Antitrust Division, Department of Justice; and Labor Advisor to the War Production Board.

Professor Seltzer began his service to the University of Minnesota in 1954. In addition to his research and teaching responsibilities with the Industrial Relations Center, he served as the Center's Acting Director and also held posts as Director of the Bureau of Business and Economic Research and Associate Dean for Academic Affairs of the Carlson School of Management.

Professor Seltzer's expertise has been actively sought in the development and implementation of public policy. He was chairman of the Minnesota Public Employment Relations Board for three terms and was its sole public member between 1972-79. He was also Chairman of the Advisory Council to the Minnesota Department of Employment Services for 20 years.

At the end of the 1987-88 academic year, Professor Seltzer became Professor Emeritus of Industrial Relations. He continues his active involvement in the research and teaching program of the Industrial Relations Center consistent with his other broad interests.

**GEORGE SELTZER
DISTINGUISHED LECTURE SERIES**

- 1988 *Reflections on Learning and Labor in America.*
 Albert Rees
- 1989 *Education and the Decline of the American Economy:
 Guilty or Not?* Clark Kerr
- 1990 *Education: The Key to Job Market Success.*
 Janet L. Norwood

Copies of these lectures are available at no cost as long as
the supply lasts. Send requests to:

Publications
Industrial Relations Center
University of Minnesota
271 - 19th Avenue South
Minneapolis, Minnesota 55455
(612) 624-2500