Economics and Equity in Employment of People with Disabilities

International Policies and Practices

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ECONOMICS AND EQUITY IN EMPLOYMENT OF PEOPLE WITH DISABILITIES: INTERNATIONAL POLICIES AND PRACTICES

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# CONTENTS

| ACKNOWLEDGMENTS | vii |
| INTRODUCTION | ix |
| William D. Frey |

## OPENING SESSION: AN OVERVIEW OF POLICY ISSUES
Moderator: Donald Galvin

| Policies for the Employment of Disabled People | 3 |
| Norman Acton |
| A Corporate Perspective | 7 |
| Jane Belau |
| The Future of Work for People with Disabilities—A View from Great Britain | 10 |
| Paul Cornes |
| A Sociopolitical Perspective | 18 |
| Harlan Hahn |
| Panel Interview | 22 |
| Moderators: Frederick Collignon and Donald Galvin |

## SESSION I: EMPLOYER INITIATIVES—POLICY APPROACHES
Moderator: Kenneth Mitchell

| A Review of U.S. Corporate-Sponsored Programs for Accommodation and Early Intervention | 33 |
| Frederick Collignon |
| A Disability Management Program for Employees: The Federal Government as Employer | 40 |
| L. Deno Reed and Richard P. Melia |
| The AFL-CIO as a Partner in Employment for Disabled People | 44 |
| Rod DuChemin |
| Early Rehabilitation in the Workplace | 49 |
| Juhani Karjula |
| Impact of Employee Assistance and Risk Management on Disability Costs | 58 |
| Edward J. Hester |
| Reactor’s Comments | 63 |
| Sheila Akabas |

## SESSION II: EMPLOYER INITIATIVES—POLICY IMPLEMENTATION
Moderator: David Evert

| Pilkington Group PLC Rehabilitation Scheme | 67 |
| D.M. Jones |
| 68 |
SESSION III: GOVERNMENT INITIATIVES
Moderator: Robert McConnell

Employment in the Context of Disability Policy
John H. Noble, Jr.
Quota System Policy in the Federal Republic of Germany
Kurt-Alphons Jochheim
The Japanese Quota System and the Role of the National Association for the Employment of the Handicapped
Ryosuke Matsui
Affirmative Action Policy in the United States
David L. Brigham
Ontario Workers' Compensation Board Vocational Rehabilitation Division: Service Strategies
John D. Carroll
Hoensbroeck Vocational Training Centre
Jan Albers
Reactor's Comments
Monroe Berkowitz

SESSION IV: PARTNERSHIP INITIATIVES
Moderator: Herb Mosher

The Swedish Approach to Employing the Disabled
Birger Sjostrom
GIRPEH A New Approach to a Social Problem: Employment for the Handicapped
Annick Mallet
The Projects with Industries Approach
Jim Geletka
The Kodak Approach
Robert Jones
A Partnership Approach to Unite the Private and Public Sectors to Achieve Employment Goals for Disabled People
Geraldine H. Gobell
A View of Vocational Rehabilitation in Poland:
The Invalids' Cooperatives
Chrisann Schiro Geist and Glen Geist
REMPLOY—Its Work and Its People .................................................. 163
Terry True
Strategies to Facilitate the Transition from School to Employment of Disabled Young People .............................................. 168
Trevor R. Parmenter
Reactor's Comments .................................................................... 176
Edwin Martin

SESSION V: SYMPOSIUM OUTCOMES AND RECOMMENDATIONS FOR THE FUTURE .................................................. 183
Moderators: Rochelle Habeck and Donald Galvin

Part I: Reactions and Recommendations
Edward Berkowitz ........................................................................ 184
Harlan Hahn ................................................................................. 188
Gail Schwartz ................................................................................ 191
Birger Sjostrom .............................................................................. 193
John Noble .................................................................................... 195

Part II: Future Trends and the Implications for Policy and Employment of Disabled Persons ...................................................... 197
Frank Bowe

Part III: Conclusion ....................................................................... 203
Rochelle Habeck and Donald Galvin

APPENDICES

APPENDIX I
ERTOMIS System ........................................................................ 209

APPENDIX II
Presenters ...................................................................................... 225
ACKNOWLEDGMENTS

Almost three years ago we set out to promote a broader discussion of solutions to the embarrassing discrepancies between the employment rates of disabled and nondisabled persons. We recognized that the reasons for these discrepancies were complex, but it was also clear that successful models in the forms of policies or programs were in place around the United States and around the world to combat them. It was our contention that to convene key proponents of these policies and programs together with professionals from a wide range of disciplines could serve to stimulate the broader discussion we desired and hopefully begin to reduce the existing discrepancies.

Our meeting entitled "International Symposium on the Employment of Disabled People: Economics and Equity" was held April 29-May 2, 1984. The following manuscript is the product of this Symposium. The proceedings represents many hours of tireless effort on the part of UCIR staff members involved in its preparation and, of course, the contributions of the many authors who provided papers or essays. However, this entire effort would not have been possible without the dedication of many rehabilitation professionals throughout the United States.

We are indebted to our Symposium Planning Committee, composed of leading figures in vocational rehabilitation, who answered our many requests and questions with knowledgeable guidance and countless suggestions. The members included: Sheila Akabas, Columbia University; Thomas Backer, Human Interaction Research Institute; Donald Brolin, University of Missouri; Darrell Coffee, University of Wisconsin-Stout; Greg Dixon, Partners of the Americas; Barbara Duncan, Rehabilitation International; Chrisann Schiro Geist, Illinois Institute of Technology; Peter Griswold, Council of State Administrators of Vocational Rehabilitation; H. Allen Hunt, Upjohn Institute for Employment Research; John F. Jonas Jr., Wichita State University; Robert Means, University of Arkansas; Richard Mella, National Institute for Handicapped Research; Elizabeth Minton, West Virginia University; Kenneth Mitchell, International Center for Industry, Labor and Rehabilitation; Claude Myer, North Carolina Division of Vocational Rehabilitation Services; Robert Ransom, Goodwill Industries of America, Inc.; Robert Ruffner, President's Committee on Employment of the Handicapped; Paul Scher, Sears Roebuck, Inc.; Rudolf Schindele, University of Education, Heidelberg; Allen Searles, Chicago Jewish Vocational Services; Jack Victor, Human Resources Center; George Wright, University of Wisconsin-Madison; and Diane Woods, International Exchange of Experts and Information in Rehabilitation.

We also wish to express our appreciation to the members of our UCIR Advisory Council, who provided both general and substantive
support to the development of the symposium. They include: Bobbie Atkins, University of Wisconsin-Stout; Terry Conour, Rehabilitation Services Administration-Region V; Marcus Fuhrer, Baylor College of Medicine; Andrew Halpern, University of Oregon-Eugene; Byron Hamilton, Northwestern University; Robert McConnell, Michigan Rehabilitation Services; Colin McLaurin, University of Virginia; Paul Ryder, Ford Motor Company; Jack Sarney, Canadian Rehabilitation Council for the Disabled; John Toerge, National Rehabilitation Hospital; Ann Turnbull, University of Kansas; Carolyn Vasil, Institute for Information Studies; Henry Williams, Creedmoor Psychiatric Center; and George Wilson, Royal Association for Disability and Rehabilitation.

Fourteen nations were represented in this Symposium. The costs of such an international interchange would have been prohibitive without the generous assistance of our sponsors from business and government, expenditures which we consider to be an important investment for both. We are grateful to these sponsors who are the Ford Motor Company, the Sony Corporation, the German Marshall Fund, the World Rehabilitation Fund, and our primary sponsor, the National Institute of Handicapped Research (U.S. Department of Education). Many of our presentors supported part and in some cases all of their own expenses in order to participate in this interchange. We appreciate their personal support and that of their employers or governments who assisted their attendance.

We would like to single out and thank our NIHR project officer, Mr. George Engstrom for his continuing belief in the concept of the Symposium. George was supportive of this effort from the very beginning of our earliest discussions. An authority in his own right about dissemination and utilization issues, George provided our staff with both the license and the direction necessary to convene what became a very successful symposium.

Finally, we want to acknowledge the central role that many of our colleagues, staff and graduate assistants played in facilitating the meeting and the production of these proceedings. We especially appreciate the preparation of this manuscript by Maxine Holp, our secretary.

William D. Frey
Director
Rochelle V. Habeck
Symposium Coordinator

University Center for International Rehabilitation
July 1985
INTRODUCTION

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Unemployment and Inequity

Work is one of the most valued roles in society today. We are taught to view work as an essential key to successful adult integration into community life. We have come to associate work with greater independence and more fulfilling social interaction. Indeed, for many, work is the very essence of a meaningful life. And, on a broader level, work is viewed as a contribution to the greater good of all individuals. It is for these reasons that those who are unwilling or unable to participate in work are relegated to a lower status in society. According to Norman Acton of Rehabilitation International:

Ten percent or more of the potential workforce may be left idle, skills and talents wasted, the time and resources of other persons are deflected from productive activity to caring for and supporting those who are disabled. These losses of productivity are accompanied by economic drains on the nation, which must provide pensions and other benefits for disabled people who are not gainfully occupied.

The fact that rehabilitation efforts over the past 60 years have been uniquely focused on assisting people with disabilities to enter the labor market and sustain employment attests to the central role of work in our society. However, despite this concentration of effort, labor market studies conducted in recent years indicate that people with disabilities still achieve only limited access to the labor market. For example, in 1972 the full-time employment rate for disabled persons was 29.3 percent, while the rate for nondisabled persons was 60.6 percent (Schroedel and Jacobsen, 1978).

In 1984, after years of concentrated effort, the employment rate for people who have disabilities is only 27.4 percent, a decrease of nearly two percent from 1972, as compared to an employment rate of 70.6 percent for nondisabled persons, an increase of 10 percent from 1972. Further, the poverty rate among the employed disabled is 26 percent, as compared to 10 percent among nondisabled persons. This discrepancy reflects the unskilled, low entry-level positions and low salary rates that characterize the employment status of many people with disabilities.

The employment picture becomes further complicated when one recognizes the tremendous cost of chronic disease and disability to
business and industry. In 1975, U.S. industry spent $50 billion in lost work days, disability payments, medical expenses, and personnel replacement costs resulting from illness, premature death, or disability (Berry, 1982). More recently, Walter Maher, Chrysler's director of employee benefits and health services, told a U.S. House of Representatives Committee that each Chrysler worker must produce $6,000 in goods or services before Chrysler can pay for anything else but health care costs (Lansing (MI) State Journal, May 22, 1983).

Overriding all of this data is the clash between economic and social issues. On the one hand, industry and government are annually spending more than $100 billion on disability payments in some form or another (including costs of decreased productivity, sickness and accident benefits, social security, and other income transfer programs). On the other hand, it is readily apparent that despite this investment, individuals with disabilities are trapped in a world of personal frustration, insecurity, and unwanted social dependence—in short, in a world without full access to desirable employment. How then do we maintain fiscal prudence and sound management and, at the same time, reduce the inequities that handicap our fellow citizens who have disabilities?

The World of Vocational Rehabilitation

Few persons can deny the interdependent nature of the world in which we live. Increasingly, we rely upon one another for the sharing and exchange of raw materials, food, and vital information. In the field of rehabilitation, there also exists a critical need for worldwide cooperation in the exchange of information about policies, programs, methods, and technology. Only through pooling our financial and technical resources to discover and disseminate new knowledge will we effectively begin to address the needs of disabled persons in the world today.

The recent International Year of Disabled Persons and the activities of a variety of international programs have inspired new awareness and crossnational developments in rehabilitation. Through the exchange of experts, collaborative research, study tours and international conferences, the art and science of vocational rehabilitation has evolved into a worldwide enterprise.

The U.S. federal government is recognizing the importance of this enterprise and is a fully active participant. In 1973, the U.S. Congress authorized and funded a program for international rehabilitation demonstration, training, and information exchange for the purpose of assisting persons with handicaps in the U.S. through the importation of methods, techniques, and approaches from other countries. In furtherance of this work, the National Institute for Handicapped Research (NIHR) awarded international grants to a number of organizations, including Rehabilitation International, the
World Rehabilitation Fund, Partners of the Americas, Rehabilitation International-USA, the Carroll Center for the Blind, and the University Center for International Rehabilitation (UCIR).

The University Center for International Rehabilitation

UCIR, the only international program located in a university setting, conducts research on rehabilitation topics of international significance, supports graduate level education at Michigan State University for foreign students in rehabilitation/special education, conducts programs of continuing education, sponsors overseas study tours, maintains cooperative arrangements with academic centers of excellence in several foreign countries, and publishes and exchanges information internationally. UCIR's core research topics include: (1) Functional Assessment Systems, (2) Independent Living Rehabilitation, (3) Technology and Rehabilitation, and (4) Employment Policies and Practices.

The Employment Policies and Practices project focuses upon alternative models for effective employment maintenance, preparation, placement, and replacement. Rehabilitation of the industrially-injured, employer-based approaches, and public service/private sector collaboration constitute the primary scope of the project effort. As part of their project responsibilities, the UCIR staff have collected and analyzed information on a wide variety of successful employment models from around the world.

While no individual country has resolved all its employment issues related to disabled people, a number of countries have made significant strides in particular areas. Recently, it has become increasingly clear that many of these innovations speak directly to the priority needs of both industry and disabled persons in the United States. Early rehabilitation and prevention programs, employer incentive programs, work cooperatives, unique assessment systems, and technology applied to improve productivity of disabled workers are but a few of the advances in other countries that are not widely practiced at this time in the United States.

An International Exchange

Much of the information that is currently available in the U.S. on many of these programs and policies has been either incomplete or difficult to access. In some cases, available information is not clear in the context of a particular program, specifically how it is structured and implemented. Other programs report little data relevant to program performance, thereby leaving impact issues largely unanswered. And, all of this is critical information if U.S. business, industry and rehabilitation experts are to understand and adopt those programs which appear to be most successful.
With an eye toward enhances international understanding of these issues, the University Center for International Rehabilitation (UCIR) held an international symposium between April 24 and May 2, 1984 entitled: "Employment of Disabled People: Economics and Equity." The symposium was founded on the principle that both economic rationality and social justice will be satisfied by the development of progressive policies and the implementation of action programs that support and promote the disabled person's capacity to contribute and to share in the economic and social life of the community and the nation.

The meeting was intended to provide a unique opportunity for policy makers, industry representatives and elected rehabilitation professionals in the U.S. to learn about "state of the art" employment practices in a number of foreign countries. At the same time, innovative employment practices in the U.S. were presented.

In our preliminary search for what appeared to be innovative approaches, we felt that the initiatives for these employment efforts originated from essentially three sources: business (or labor) initiatives that develop with the employment setting; government initiatives that develop from public policy to modify the existing labor market experience, either through regulatory policy or through the provision of funding for various services; and partnership approaches, either voluntary or sponsored, that develop from and unite the resources of the private sector and public sector to achieve or retain employment.

From this preliminary research, UCIR staff concluded that the symposium should be developed and implemented as a beginning point toward achieving four specific outcomes. These included the following:

1. **Information Exchange**: To publish and disseminate internationally a resource document containing pertinent descriptions of the policies and practices presented;

2. **Policy Recommendations**: To publish and disseminate a synthesis of critical elements that have been associated with effective employment strategies as recommendations for further policy information and implementation;

3. **Interdisciplinary Policy Network**: To foster an ongoing international network for communication and interaction among persons interested in the area of policy analysis as regards employment and rehabilitation of disabled people; and

4. **Research and Development**: To identify issues and opportunities that arise from this interchange to stimulate an agenda for further research and implementation of effective approaches.
The UCIR Symposium

The format of the symposium included a series of five panel sessions that covered a variety of topics consistent with the overall theme and desired outcomes of the symposium. These sessions included:

**Opening Session: An Overview of Policy Issues.** Whether government or employer initiated, policies for the employment of disabled people address the issues of economics and equity. Various perspectives on the nature of employment problems and disability were discussed, and alternative policy approaches for cost-benefit and equitable treatment of disabled, as well as nondisabled, employees were presented.

**Sessions I and II: Employer Initiatives-Policy Approaches and Implementation.** Innovative policies and programs intended to prevent disability that occurs as a result of, or is exacerbated by, employment and to retain workers who acquire a disability were presented. In addition, innovative approaches by employers to hire disabled people using cost-effective and equitable methods were described.

**Session III: Government Initiatives.** Most governments justify their rehabilitation programs for disabled people on the basis of economic return on investment and humanity; i.e., productivity and equity. There are two principal means for accomplishing these objectives: enabling legislation and providing services. Selected examples of each approach were presented.

**Session IV: Partnership Initiatives.** Government working in partnership with employers, unions, rehabilitation professionals, and disabled employees have produced effective results. Model programs that demonstrate this collaboration were presented.

**Session V: Symposium Outcomes and Recommendations for the Future.** This session highlighted the results of the symposium and implications for further policy and practice innovation. Anticipated social change—evolving employment patterns, consumer technology, and global economics—were considered, along with the implications of these changes on the employment of disabled people. And lastly, reactions and recommendations, summarized from the proceedings of the symposium, appear as a final outcome of the proceedings.

This document has been published by the University Center for International Rehabilitation as one measure to further disseminate this international collection of effective policies and practices. While many employment and retention issues that affect disabled people in the labor market remain unresolved, progress has been achieved in specific settings that merits our immediate consideration. The policies and practices presented in the following pages demonstrate that with innovation and partnerships, solutions can be found that achieve equitable and cost effective employment for disabled persons.
OPENING SESSION

AN OVERVIEW OF POLICY ISSUES
OPENING SESSION: AN OVERVIEW OF POLICY ISSUES

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The symposium, at which the following presentations were originally presented, was developed around the principle that both economic rationality and social justice could be satisfied by the development of progressive policies and the implementation of action programs that support and promote the disabled person's capacity to contribute and to share in the economic and social life of the community, the nation and the community of nations. The Universal Declaration of Human Rights, put forth in the UN General Assembly in 1948, clearly states: "Everyone has the right to work, to free choice of employment, to just and favorable conditions of employment, as well as protection against joblessness." Individuals with disabilities are no exception. Yet some will assert, with striking evidence, that our policies and programs have failed to bring about the physical, psychosocial and economic rehabilitation of the disabled person.

Our nation is faced with a serious policy dilemma. On the one hand, our health and disability programs have experienced more than a 500 percent increase in the last 10 years, consuming well over $100 billion annually in public and private expenditures. On the other hand, it is apparent that individuals with disabilities are trapped in a world of economic insecurity, personal frustration and unwanted social dependency. The question, then, is how can we as just societies maintain fiscal prudence and sound management in our public and private efforts without abdicating our responsibility to citizens who are disabled? Or, as Gerben De Jong wrote in the Scientific American, "How can we make our disability policies and programs more viable and fair in the face of current political and economic realities?"

In summary, low labor force participation and high unemployment among the disabled represent serious economic and social issues in most nations. The cost to industry and government are multibillion dollar concerns, while, as Harlan Hahn, professor of political science at the University of Southern California, has pointed out, the costs to disabled persons come in the form of the highest rate of welfare dependency and unemployment and extreme forms of discrimination, segregation and paternalism. Yet, as Harlan also asserts, these conditions can be ameliorated by informed public and employer policies.

Of special concern to governments, employers and insurance companies today are the rising costs of social security and other transfer payments, such as disability benefits and workers' compensa-
tion. Both the public sector and the private sector are eager for methods that may reduce these costs, as well as to improve opportunities for full participation of disabled people in society.
POLICIES FOR THE EMPLOYMENT OF DISABLED PEOPLE

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Norman Acton was formerly Secretary General of Rehabilitation International, one of the foremost international organizations dealing with the problems of disability prevention, rehabilitation, and social action. Mr. Acton received his bachelor's degree in journalism from the University of Illinois. He is currently chairman of the Council of World Organizations Interested in the Handicapped, and President of Acton International, providing research and advisory services.

If the talent assembled in this room could address itself to the employment of each person in the world who has a problem because of an impairment, we could no doubt suggest a large number of workable solutions. If, however, as a very rough estimate, there are some 200 million people who are unemployed or underemployed in the world due to an impairment, and if we worked eight-hour days and devoted an average of 15 minutes to each of them, we would need to work more than 24,000 years. Undoubtedly, this solution is not a practical approach, but it does give us some idea of the enormity of the issue before us when we look at its global dimensions.

The employment problems facing people who are disabled are as myriad and multifaceted as the individuals themselves and their impairments. Certainly, each one of these individuals deserves individual consideration, but for our purposes here, it is necessary to create some generalized categories. Nevertheless, we must not forget that these categories are to some extent artificial, and we must not permit such categories to conceal from us the individuals they include.

The first category includes those few severely impaired individuals for whom maintenance and care are the best we can provide. The second category is composed of those whose impairments produce restrictions that make sheltered or otherwise supported employment essential. Parenthetically, it should be said that around the world we put too many people in each of these categories. As our understanding, our procedures and our technology advance, we should constantly be moving people from maintenance to sheltered employment, and from sheltered employment to open employment.

The vast majority of people who are labeled "disabled" are in a third category: those who, with appropriate training and little or no modification of the task and environment, can function successfully
in the usual workplaces of humankind. However, when we subtract from the total population with impairments those who are capable only to be maintained, those who cannot work in other than sheltered and noncompetitive situations, and those who are suitably employed, we are left with a majority that is quite significant: the disabled people who are either unemployed or underemployed. Here is our greatest failure and our greatest opportunity.

The remedy requires four coordinated lines of action, and it is by these actions and by their relevance to the socioeconomic circumstances of the country that any national policy must be judged.

First, the national policy must require the removal of barriers—physical barriers of the workplace as well as transportation, attitudinal, regulatory, barriers and economic barriers that in times of high employment have excluded disabled people and in times of unemployment have compounded their disadvantage.

Second, this policy must ensure that education and training are provided to prepare disabled people for work opportunities. For most of the world's people who are impaired, illiteracy and the absence of a basic education impose restrictions as severe as their impairment.

Third, the policy must require the creation of more employment opportunities for people with disabilities. As I look at the situation around the world, I believe that this requirement is at the heart of the matter, and successful programs are almost always built around it. In its absence, the other procedures often provide more employment for the bureaucracy working with the disabled than for disabled people themselves.

And finally, of course, there must be systems that service disabled people and employers and that make effective connections between them.

A review of employment policies and programs in a variety of nations discloses five crucial issues that appear to be collectively challenging all of these nations.

The first issue is a sharp increase in the numbers of people who, because of impairment, require special measures for employment. The increase is due partly to population increase, improved longevity and better medical care, but the more important considerations are the emergence of disabled people from seclusion, the creation of more ambitious expectations, the transfer of populations from rural, extended family modes of life to urban conditions, and the expansion of our concern toward mentally impaired people and for those with psychosocial disadvantages.

Second, while all of the barriers, both physical and social, that exist in the community and impede successful employment for
disabled people are important, the barriers of attitude pose a particularly thorny patch of problems. Rehabilitation International recently conducted a survey among its member organizations concerning the impact of the current economic recession and general unemployment on disabled people. Many respondents, while recognizing that the more general economic conditions make the situation worse, stated that faulty attitudes were the most important factor in an unsatisfactory state of affairs; the attitudes of employers, of the general public, and of disabled people themselves.

The third challenging issue is that of creating jobs that are suitable and in the quantities needed. We live in an era in which there are many changes occurring in the structure of employment, changes affecting everyone. The practical possibilities of creating work functions that can be performed by people with many different combinations of capabilities and limitations are realities today. This reality can be seen in the physical design of the tasks, where computers, robots and other technological marvels are changing the qualifications required for many jobs. It also applies to the organization of work and the division of labor where many traditional patterns are being shaken up. And it applies to the structure and financing of enterprises, within which realm exciting examples are to be found in both socialist and capitalist economies, as well as in economies that are a combination of these concepts. Countries in early stages of economic and social development find special difficulties in meeting the challenge of job creation at a time when their production, their markets, their international trade, and, frequently, their political base are all in states of flux.

The fourth issue is people. In whatever combination the programs are assembled and activated, they require trained people to lead and staff the attack on all types of barriers, on the design, funding and administration of job creation efforts, and on the selection, training, placement and support services needed by disabled workers. Recall our earlier estimate that if we give only 15 minutes to each person needing guidance, we would need 24,000 years to complete the task. The difficulties in recruiting and keeping skilled personnel for these functions must be overcome worldwide. And, in the developing countries, these problems are only the tip of an overwhelming iceberg. Radical innovation will be needed everywhere.

And lastly, of course, the culminating issue is money. The balance sheet among the costs and gains that must be considered is complex. There are many human and social values involved on which it is difficult or impossible to place a monetary value, and most projects that are active and reaching significant numbers benefit from direct or indirect subsidies, tax concessions, monopolies or other preferential treatment. There is no doubt that the eventual gain in human and social terms is of value and, assuming reasonable prudence in the management of such employment projects, the net result is a benefit to society.
That fact alone, however, does not necessarily produce the governmental or private funding necessary to launch needed programs, nor does it necessarily generate the political muscle required to support spending and investment in an era of economic uncertainty.
A CORPORATE PERSPECTIVE

Jane Belau
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Minneapolis, Minnesota

Jane Belau is vice president and executive consultant for Strategic Programs with the Control Data Corporation. She has served as chairperson of the National Advisory Council on Developmental Disabilities and the Minnesota Governor's Council of and for Handicapped Individuals. She was a member of the Planning Council for the 1977 White House Conference on the Handicapped.

First, let me briefly give you some background on Control Data to put the company's disability policies and services into a larger context. Control Data, a computer and financial services company, was founded as a small business in 1957 and has grown to 57,000 employees worldwide today. One of Control Data's corporate strategies is to address society's major needs through its business. These needs include education, health care services, small-scale agriculture, the start-up and growth of small businesses, creation of new jobs, urban revitalization, correction system services and also services to people with disabilities.

During the past 17 years, Control Data has contributed to solving a variety of social problems based on this strategy. Among numerous examples is a special program called "Homework."

A few years ago, realizing the enormous cost of disability to the company, both in dollars and in lost expertise, Control Data took steps to do something about employees who become disabled. We have a significant number of employees who are severely disabled--long-term workers with significant talents, expertise and knowledge of the company--and we wanted to give these individuals a chance to return to work. For those who could not be expected to return to the work site, Control Data used an individualized learning system, called "Plato," to deliver education, training, re-training, and ultimately employment right in their homes.

The home terminals were connected by telephone to a central location at our headquarters building in Minneapolis, where a counselor, teacher or trainer would be available via a company-based computer. The system itself was individualized, self-paced, competency-based, accurate, and easy to use. It had infinite patience and memory, the benefits of personal attention to the student, and the availability of peer group conversation and counseling via the terminal. This was Data Control's first Homework network, built especially for our disabled employees.
Disabled individuals were initially trained to become either a Plato course developer or a business applications programmer. Now, Control Data's Homeworkers are providing a variety of types of work to the company, including programming, authoring and editing courseware, word processing, and telemarketing. In some cases, Homework has even been used for individuals with terminal illnesses to assist them in maintaining purpose and dignity.

One can see how the company benefits by being able to utilize the resources and talent of a disabled employee and how that individual gains from both the training and the ability to contribute once again. Moreover, the person gains in self-esteem, a renewed sense of community with other workers through the network rather than a sense of isolation, and the person achieves a sense of control in the world of work rather than a sense of helplessness.

Homework is now provided by other corporations, insurance companies, the Veterans Administration, and the rehabilitation community. Alvin Toffler, in his book The Third Wave, discusses the "electronic cottage"—how the use of technology will dramatically change the way work is done and the site of work. The Homework program is one of the finest applications of that concept. It has its logical extensions from use by homebound disabled individuals to use by people in small-group homes, community residential facilities, and independent living centers.

Access to technology can provide information from data bases for training programs, for assessment of skills, for information about employment opportunities, and for communication with rehabilitation counselors and peers. Ultimately a computer terminal, for example, must be recognized as an important assistive device if the technology is to be widespread in its use and application. Voice recognition computers give individuals who have little or no muscle the ability to control not only the computer itself and to access information and conduct transactions, but also the ability to answer the telephone, turn lights on and off from a remote site, and receive and send electronic mail.

Technology holds great promise for individuals with disabilities, but the issues of economics and equity are real. All of these benefits depend on access and affordability of that technology. While these developments hold promise, they require that reimbursement mechanisms recognize their value. Thus, the affordability and accessibility of technology is one of the public policy issues that require attention.

A second public policy issue, one which resulted in considerable discussion during the White House Conference on the Handicapped in the mid-1970's, is the issue of work disincentives. The work disincentives faced by individuals in America as they proceed gradually to reenter the work force are the counterproductive policies set by the government that actually encourage dependence.
on public funding sources. The lack of a sliding scale of benefits that enables disabled workers to gradually increase earnings without the threat of a total cutoff of health benefits prevents those same individuals from daring to become independent. The risk is too great, and the waiting period of reeligibility for benefits is too long. Today, we are still talking about pilot programs and demonstration projects. Control Data has spent a great deal of time on this issue over the past years, working with our Homeworkers who face these challenges as they reenter meaningful employment, and our company wishes to collaborate in broad efforts to address this and other issues related to independent living and return to work.

From the corporate viewpoint, the most important element in private sector employment is the commitment of top management. It is imperative to have top management committed to the rehabilitation, education, training and retraining of individuals with disabilities. From this commitment at the top comes the corporate culture that recognizes throughout the company the value of contributions by all employees.

A current example of this commitment at Control Data is the employee assistance program, a 24-hour counseling service which is sensitive to the needs of all employees for a confidential service. The employee assistance program also provides a source of referrals to sound, credible programs and conveys the understanding that problems affect people and their families not only during working hours, but at home as well. Such a program contributes to a corporate culture of caring that requires flexibility, accommodation, and sensitivity; and, which, in turn determines employee attitudes.

Of course, a factor affecting corporate response is costs, and corporations are clearly interested in reducing disability-related costs. Homework was a program that not only benefited the individuals involved but also the company as well. As a result, it shortened the length of the retraining period for the disabled employee, recovered reserves at a faster rate, and returned the employee to productivity and the generation of taxable income in less time. The program also eliminated recruitment and replacement costs and prepared employees for high-demand jobs at competitive salaries.

Finally, in addition to the need to make technology affordable and accessible to individuals with disabilities and the need to deal at last with work disincentives, there is one last public policy I would like to address. This is the need to provide research funds, from both the public and private sector, not only for the development of new technologies, but also for applications of existing technologies to create jobs for people with disabilities. The application of technologies to job creation for handicapped individuals is of increasing importance. Research from data that can indicate job trends and training requirements for people with disabilities is one area in which we can look for further applications of technology.
THE FUTURE OF WORK FOR PEOPLE WITH DISABILITIES—
A VIEW FROM GREAT BRITAIN

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Paul Comes is an occupational psychologist and a senior research fellow with the Rehabilitation Study Unit of the University of Edinburgh in Scotland. In 1976, he was appointed as director of the Employment Rehabilitation Research Center in Birmingham, England, where he undertook a five-year program to evaluate the effectiveness of the national vocational rehabilitation service and to make recommendations regarding its future development. He is a recent fellow of the World Rehabilitation Fund and last year visited and lectured throughout the United States.

The picturesque town of Ironsbridge occupies that part of the Severn Valley, called Coalbrookdale, where the river has carved a gorge through the Shropshire hills. The surrounding countryside, framed by these "blue remembered hills," as they are so aptly described in A.E. Housman's verse, is one of the least spoil'd, idyllic aspects of rural England. All things considered, it is difficult to imagine a more unlikely birthplace for the Industrial Revolution. Yet is was here in the early 18th Century that Abraham Darby experimented with the substitution of coal for charcoal in iron smelting, a technical innovation that was essential to the development of the modern steel industry.

Today, Coalbrookdale is a center of tourism, not industry. Darby's accomplishments are marked only by relics of that early industrial age, such as the cast iron bridge that still spans the river and from which the town has taken its name, iron tombstones in the local churchyard, and an internationally acclaimed, open-air industrial archaeology museum. Since Darby's pioneering work freed iron smelters from dependence on forest fuel, paving the way for migration to the coalfields, the familiar landscapes of industrial society are found elsewhere—In Pittsburgh, the Ruhr or the English Black Country.

Changes in the Nature, Organization and Meaning of Work

These historical references serve two purposes. First, they are a reminder of the comparatively recent origins of industrial society and, hence, of the scale of change in finance, industry and commerce over the past 200 years. It is increasingly apparent that the traditional heartlands of industrial society are in decline, with
new, science-based industries poised to assume command over the high points of the economy in much the same way that the manufacturing industry supplanted agriculture in the transition from pre-industrial to industrial society. Some would argue that we have already arrived at the threshold of changes that may be just as momentous as those of two centuries ago and that, sooner or later, may render the trappings of modern industrial society as much an object of historical interest to later generations as Coalbrookdale is to us now.

The second reason for referring to history is that it serves as a reminder regarding the equally recent origins of modern work habits and attitudes toward work. It should not be overlooked that, in addition to its influence on social structures (the economy, technology, and the distribution of occupations), the Industrial Revolution brought profound shifts in cultural and political spheres of life. Who is to say that the emergence of a post-industrial society will not have an equally profound influence on the nature and organization of work and thus on the work ethic in which modern industrial societies place so much store?

Most commentators are agreed that the advent of science-based industries is already affecting not only working conditions and the organization of work but also the nature of job opportunities and the demand for labor. This is apparent in sectoral shifts from manufacturing to service and hi-tech industries and in changes in working hours and other conditions of employment. It is also apparent in the declining demand the manufacturing industry has for semi-skilled and unskilled labor, as well as low-grade "white collar" workers. It is apparent in the levels of structural unemployment in many industrial societies and in the proliferation of temporary, part-time and job-creation scheme employment that has followed in its wake. While there is increased demand for technical, scientific and professional skills, the spread of automation and the introduction of fifth generation computers are expected to place many skilled manual and middle management occupations equally at risk.

Some commentators go further in suggesting that more fundamental changes may be anticipated, changes affecting the very meaning of work itself. For example, studies of job satisfaction suggest the emergence of an increased preference for more leisure time at the expense of higher wages. Also, high levels of structural unemployment have produced sharper distinctions between unpaid work and paid employment and, consequently, between the right to an income as opposed to the right to work. Such distinctions, of course, pose very difficult problems for established social insurance and social welfare policies and programs.

The Future of Work

Attempting to work out how these changes may shape, or be shaped by, other changes in cultural or political spheres is a yet more
daunting task. This is evident in the often conflicting conclusions reached in different forecasting exercises and is illustrated by three scenarios regarding the future of work.

1. A cornucopia of abundance? This perspective assumes the desirability of maximizing economic growth and regards the present recession and high levels of structural unemployment as temporary intervals in "long waves" of economic growth. This scenario assumes, but does not guarantee, that economic growth will generate new jobs. It also assumes that such growth can be maintained without exhausting the necessary resources of food, energy and raw materials and that social and economic developments can be achieved without altering the shape or undermining the stability of existing social and political institutions.

2. An Athens without slaves? This perspective is represented by forecasts suggesting that new productive forces will sever the links between the creation of wealth and the creation of employment in industrial society, and, hence, between the right to a job and the right to an income. It envisages the eventual abolition of work, as we have come to define that term. Proponents differ in their views on how such opportunities might be exploited. In 1982, Gorz, in Farewell to the Working Class, and fellow French Marxists perceived an opportunity to develop a form of post-industrial socialism. Macarow, in his 1980 book Work and Welfare: The Unholy Alliance, and others see in the abolition of work an opportunity to create a new age of leisure and creativity akin to ancient Athenian culture but without its dependence on human slave labour.

3. A middle course? While extreme views may make the headlines, in their own ways both may underestimate the essentially dynamic and adaptive nature of existing economic, social and political institutions. Over time, it is equally or more probable that the problems involved will be more accurately construed not as fundamental tension between capitalism and socialism but as problems that are common to both systems as they confront the ongoing transition from industrial to post-industrial society. Arguments such as Bell expressed in 1974 in The Coming of Post-Industrial Society are possibly more to the point in drawing attention to the complexity of the problems involved in casting the two preceding scenarios as polar positions within which new maps of our economic, social and political worlds might be drawn. In this view, industrial societies are much more likely to follow courses of development that fall between these extremes by pursuing economic and social policies that represent different ways of reconciling the inherent conflict between economic growth and the implementation of employment and social welfare policies that are appropriate to a changing world.
Nevertheless, social forecasting must be regarded as a very inexact science. The three scenarios considered here are typical in presenting little more than an outline framework within which future economic, social, and political decisions might be made. While identifying some of the more probable issues for debate, they are, for obvious reasons, unable to give precise indications of the scope, rate or direction of any new developments.

It is also noteworthy that they tend to be pitched at macro-economic or macro-social levels, giving little or no attention to the possible impact of social and economic change on such disadvantaged groups as the disabled. The remainder of this paper presents some of the conclusions reached in an analysis of the implications of these different scenarios for the employment of disabled people, using Great Britain as the example.

The Future of Work for People with Disabilities

Development of vocational rehabilitation in Great Britain, as in most industrial societies, was harnessed to the Keynesian "solution" to the mass unemployment of the 1930's. Its promise of managed economic growth required the fullest mobilization of the labor force, including such previously marginal groups as people with disabilities. In 1943, the Report of the Interdepartmental Committee on the Rehabilitation and Resettlement of Disabled Persons, completed by the Tomlinson Committee, provided the blueprint for British policy and services for the employment of people with disabilities. Its recommended package of services was part of the postwar provision for a welfare state.

While recognizing that most disabled people needed no special help to enter or return to work following illness or injury, Tomlinson identified a substantial minority who would need special assistance to enable them to compete on equal terms with non-disabled counterparts. Tomlinson also identified a need to provide sheltered employment for those who would never be able to achieve competitive work standards.

Periodic official reviews of policy and services in 1956, 1970-72 and 1979-82 have, without exception, reaffirmed Tomlinson's analysis and have, therefore, produced only minor or cosmetic changes in Great Britain's quota scheme or in the operation of the rehabilitation, training, resettlement and sheltered employment services introduced on his recommendation at the end of the war. The most recent official proposals—to make the quota scheme more effective, to promulgate a code of practice on the employment of disabled people, and to develop better "marketing" strategies to assist placement—do not suggest that more radical changes are envisaged.

However, official conclusions have been challenged by research and other non-governmental evaluation of policy and services. Such
evaluations highlight the lack of investment in research and development to improve assessment, rehabilitation, training, and resettlement procedures. They also point out the poor housekeeping of professional resources and the inadequate liaison both with employers and with other relevant social, health and educational services. They draw attention to the decreasing effectiveness of services, the failure to develop policy or services on the basis of the detailed analysis of the labor market for disabled people, and the absence of any formal review of the allocation of resources to different services. Furthermore, they point to the general failure of Tomlinson's policy and package of services to achieve equality of opportunity for disabled employees or job seekers.

Formal criticism has been reinforced by consumer evaluation. There was comparatively little evidence of any consumer dissatisfaction before 1970, when vacancies were available in the kinds of work for which services prepared clients and organizations representing disabled people were mainly concerned about offering advice on how to improve official services.

The decreased effectiveness of services through the 1970's, however, was accompanied by heightened consumer dissatisfaction and increased awareness of the vulnerability of disabled people to long-term unemployment. This led to the emergence of a politicized lobby. The International Year of Disabled People, with its theme of integration, has mobilized concern over basic rights and the need for antidiscrimination legislation. There is, therefore, a widening gulf between official proposals for the development of policy and services and the aspirations of disabled people. Disenchantment with official services is evident in decreased usage by disabled people and in their active participation in alternative developments.

Disabled people are now much more inclined to be discerning consumers rather than passive recipients of services. They are also leading, rather than acquiescing to the official line, in the quest to create equal opportunities, not only in a changing labor market but in all spheres of life.

Evaluations suggest that British policy on the employment of people with disabilities has tended to be reactive, accommodating change rather than anticipating it. As a result, specialist vocational rehabilitation services still retain the imprint of thinking that, while essential to the postwar recovery, may bear much less relevance to modern economic problems. This has almost certainly restricted their capacity to respond to ongoing changes in the distribution of occupations and the nature and meaning of work, and it could also limit their potential response to future developments in these spheres. There has been comparatively little investment in the evaluation of services or in experimentation with alternative approaches. Few resources have been allocated to the examination of alternative scenarios for the development of policy and services.
At the same time, however, other policy options are being examined by people with disabilities, around whom a more politicized lobby has developed in recent years. If vocational rehabilitation is not to decline or lose out to competing interests, it may have to embark in a radical stocktaking. What are the issues to be confronted and the problems to be solved, if it is to remain an effective force?

The Future of Vocational Rehabilitation

While aspiring to lofty ideals, the main achievement of vocational rehabilitation has been the placement of clients into semi-skilled and unskilled manual jobs or lower grade "white collar" work in manufacturing industry; in other words, into the least attractive and less well-paid service occupations. But as human labor is displaced, these are the jobs that are most rapidly disappearing, and, consequently, the past strength of vocational rehabilitation may become a source of future weakness.

In addition, while vocational rehabilitation has claimed to be reasonably comprehensive in scope, it can also be argued that substantial areas of need have been comparatively neglected. For example, is it possible that existing services could have been made more responsive to the needs of those who are not capable of undertaking full-time employment, the needs of women with disabilities, or the needs of disabled people from rural areas?

And finally, resources for more effective policy decision making have not been made available. Policies have not been rooted in any detailed labor market analysis and have lacked a clear future orientation. As with many other aspects of social policy decision making, "planning" has, at best, been based on occasional, simple, short-term, linear extrapolations from contemporary trends. Use has yet to be made of the more sophisticated planning and decision-making aids found in such areas as economics or defense. Now, however, the different scenarios regarding the future of work may imply a need for contingency planning to evaluate different options for policy and practice, anticipating qualitative dimensions of change, and taking different time scales into account.

What are the implications for vocational rehabilitation within these different scenarios?

1. Economic growth scenarios have mainly technical implications regarding the development of programs and professional expertise to help people with disabilities find suitable employment in the labor market of the future. But, given the prevailing practice of placement in those jobs that are most rapidly disappearing, this in itself is no small challenge.

2. Alternative society scenarios anticipate significant changes in the use of work and attitudes to work. They also
anticipate changes in the use of "liberated" time, one aspect of which is the expectation that families and local communities will re-assume responsibility for its members' education and training, health care, and social welfare. This perspective envisages the provision of a social wage and the eventual eradication of disadvantage, and, hence, implies a diminishing and/or more specialized role, not only for the professions, but also for the statutory and voluntary agencies currently involved with disadvantaged citizens.

3. Middle course scenarios suggest that future economic and social policy decision-making will be confronted by increasingly complex problems that will only be capable of solution by reconciling the inherent conflict between economizing and socializing tendencies.

If this last scenario is the pattern for the future, what challenges does it present to vocational rehabilitation? Four possible dimensions of change may need to be anticipated:

1. Present policy and practice are mainly formed by an economic growth model. To the extent that the future brings further changes in the nature, organization, and meaning of work, vocational rehabilitation may need to undergo transformation from its current "labor market instrument" orientation to involvement with a much broader range of economic, social, health, and educational policies. As a result of such changes, cost-effectiveness issues that have been integral to economic growth assumptions and policies may become less relevant and/or replaced by other qualitative indices.

2. Anticipated changes may also necessitate diversification from mainly bureaucratic or clinical approaches to a multi-professional orientation.

3. To the extent that a sincere commitment to integration is retained, changing attitudes and aspirations on the part of disabled people may generate pressure for greater equality of opportunity, not only in a changing labor market but also in other spheres of life. It may also be expected that changes in outlook may be accompanied by rejection of bureaucratic or authoritarian professional/client relationships and an increasing demand for more participative approaches.

4. In comparison to its commitment to other aspects of research and development, vocational rehabilitation's investment in policy studies has been quite meager. Future changes in the labor market, and possibly other spheres of life, will both extend the range and increase the number of options to be considered in policy decision making. There will, therefore, be an increased demand for specialized contingency planning and
evaluation. To maintain an effective voice in the corridors of power and to secure the resources needed for its own development, vocational rehabilitation will itself need to modernize by making the fullest possible use of the various aids to planning and policy decision-making made available by new technology.

**Conclusion**

Most previous discussions about the costs and fairness of policies concerning the employment of people with disabilities—the themes of this symposium—have been dominated by assumptions of continuing economic growth and the availability of full-time, paid employment for all citizens of working age. Although this may have sufficed in the past, it is possible that the validity of such viewpoints may be increasingly challenged by ongoing changes in the nature, organization, and meaning of work, as well as by the emergence of post-industrial society. To the extent that such developments do occur, future debate and policy decision-making will need to consider a far wider range of options than hitherto.

**References**


Note: A longer version of this paper has subsequently been published by the World Rehabilitation Fund (Monograph Number 28), October 1984.
I have long subscribed to the strange notion that it is useful to know what we are talking about. I would like to start by trying to define disability, so we can arrive at a definition that will clarify our discussion. In looking over the literature, I have identified three major definitions of disability, and they seem to suggest three different sources and solutions to the problem to be addressed.

The first, and perhaps the most popular, view of disability is primarily a medical definition that focuses on functional impairment. The notion implies that a disability is lodged within the individual, and it is the responsibility of a rehabilitation professional to increase that individual's functional capacity to the maximum extent possible. No reference is made within the context of this definition to the environment in which this takes place.

The second definition of disability focuses on work disability and has been a primary focus of attention in rehabilitation. It is a concept that grew out of an historical period in which the economy was based primarily on the performance of manual labor. As we move into an increasingly technological society, our understanding of work disability will require a significant revision. Nevertheless, the emphasis in this definition is still placed primarily on changing or altering the individual as the primary solution to the problem. We have begun to understand that job prospects for people with disabilities are better in periods of prosperity than they are in periods of recession, and to that extent, the economic environment may affect work disability. But most professionals still see the primary method of dealing with the problem as increasing the vocational skills or overcoming the occupational liabilities of a person with a disability.

There is a third definition of disability that has become increasingly prevalent since the legislation of the 1970's. It is what I call a sociopolitical definition of disability. In this definition, the
emphasis is shifted away from the individual towards the environment. In fact, I believe we are increasingly beginning to understand that disability is not primarily a characteristic of an individual; it is principally the product of a disabling environment. Whereas the other two definitions focused on changing the individual, we now recognize that the major means for dealing with this problem is to change the environment. We are also beginning to recognize that people with disabilities constitute a minority group in this and other societies. From this perspective, the principal problem is not the functional impairment or the occupational limitation, but a visible physical characteristic that operates as a mechanism for triggering prejudicial responses in the minds of others. I think this is the principal problem in employment, as well as in many other areas of life.

People with disabilities, like members of other minority groups, are stereotyped. Assessments are made of their probable or potential abilities without a clear understanding of the nature of disability or even the nature of minority group problems. If we address the issue from the perspective of this third definition of disability, we are led to some very different kinds of considerations as to how we can overcome employment barriers and other problems.

First, we must recognize that the efforts of people with disabilities is part of a struggle to gain equal rights and not as attempts to overcome functional impairments or work limitations. We must recognize then that the environment is a major source of the problem, an environment that inherently provides unnatural advantages for nondisabled people.

If we take these concepts seriously, we also have to recognize that a solution cannot be achieved only by establishing processes and procedures to ensure impartiality and fairness in the evaluation of individuals. We have to go beyond that. We have to alter the environment so that it is conducive to the needs and interests of people with disabilities rather than asking disabled persons to accommodate to the environment. We also have to recognize that public policies dealing with employment for disabled people are fundamental reflections of social values and existing policies in the United States, Europe, and in other areas of the world which reflect different social values.

Two important values—freedom and equality—are highly prized in a democratic society. In this society, which has a written constitution and which recognizes freedom of movement as a basic constitutional right, it seems incongruous that the Supreme Court should strike down hundreds of laws dealing with restrictions on passports, while at the same time so many people with disabilities do not have freedom of movement in their own neighborhoods and in their own communities.
With regard to equality, we have to recognize that in this society we have a peculiar view of equality. Our notion of equality essentially revolves around the issue of equality of opportunity. We somehow assume that, if we have a race in which all participants are lined up at the same point at the starting line, meritocracy will prevail. We assume that the person who is most virtuous or most capable will win the race, even though the track may really be an obstacle course that imposes significant disadvantages on many of the participants. In a fundamental sense, mastery of the environment should not be a prerequisite for citizenship in this or any other society.

In talking with leaders of organizations of people with disabilities during my tour of European countries, I was struck by the prevalent European understanding of the concept of equality in which there is much less emphasis on individualism. In Europe there is a much greater emphasis on the need to balance social and economic factors, as well as the important and legitimate role of government in redressing the balance to make sure that all segments of the population have relative equality in terms of the distribution of resources.

Alva Myrdahl, in a Swedish report, best summarized this European understanding of equality when he said:

Equality means that where nature has created great and fundamental differences and abilities, these must not be allowed to determine the individual's chances in life, but rather that society should restore the balance. These differences in the form of physical or intellectual handicaps can be reduced in a generous social climate and one can work against their leading to social discrimination.

The emphasis here is not on the individual, the emphasis is on the responsibility of society and government to redress the balance to promote equality among different segments of the population. It is within this context that I want to address the issue of the quota system in Europe.

In my interviews with a variety of people in Great Britain, France, West Germany, and Sweden, I was impressed initially by their understanding of the principle of equality and the different kinds of policies that those values lead them to adopt. Significantly, in all of my discussions with diverse segments of the population, I found no mention of reverse discrimination with regard to the issue of quotas, which may be somewhat surprising in an American context, and no indication of hostility on the part of the workers who might be displaced by a quota system.

On the other hand, I also discovered, as others have stated, that the quota system is not working very well. But we must understand
that there is an important distinction between the principle and its 
administrative problems. I believe the reason quota systems have not 
worked effectively in many instances is because there has not been 
any real intention to implement or enforce them. There have been no 
significant rewards and penalties involved in the application of this 
principle.

In the West German model, the quota system is combined with a 
levy for noncompliance. The cost of the levy becomes an economic 
Incentive to the employer, assuming that the market is truly com-
petitive and that such costs are reflected in the price of goods. It 
seems to me that this combination of quota and levy could be highly 
effective.

One of the reasons that I support the principle of the quota 
system is because, among other devices available to us, it represents 
a collective approach to the problem of unemployment among people 
with disabilities. It shifts the emphasis from training, rehabilitation, 
or counseling with individuals to the use of government policies to 
Improve the status of a minority group in seeking the goal of 
equality. Consequently, it seems to me that policy is the area in 
which we must fccus our interest and our attention.

We have to recognize that there is emerging in this country, 
and throughout the world, a major social and political movement of 
people with disabilities. This movement will require many academic 
disciplines, like rehabilitation, to fundamentally alter their para-
digms. Input from people with disabilities has not been sought in the 
past, and many theoretical constructs in rehabilitation have not been 
Informed by the disability perspective and the disability experience.

We are dealing with a minority group seeking a form of equality 
that cannot be achieved simply through impartial procedures. In this 
case, the goal of equality must be achieved through a significant 
restructuring of the environment—a massive social and political 
agenda, to say the least. In addition, we may encounter the issue in a 
context that is not necessarily based upon assumptions of economic 
growth. We might finally have to confront the problem of redistribu-
tion, facing the fact that the privileged who have been advantaged by 
public policy in the past should not necessarily continue to be 
advantaged by the distribution of government resources. In fact, in 
order to make significant progress toward equality, if we really take 
that seriously as a social goal, we may have to take some public 
goods away from those segments of the population who have enjoyed 
undue advantage in the past.
Prior to turning the program over to an interview of the panelists, Dr. Galvin summed up the Opening Session by quoting from a Coulter lecture at the 1981 Meeting of the American Congress of Rehabilitation Medicine when Norman Acton said, "...that any philosophy, any strategy, and indeed any organization claiming to be concerned with the total problem of disability must accept that the area of responsibility is a closely knit continuum of prevention, rehabilitation, and social action." Interpreting social action to include governmental and corporate policies and programs, Dr. Galvin concluded that the concerns of rehabilitation are interwoven like the threads of a fabric.

Dr. Collignon then asked Mr. Acton to describe his reaction to a report which is perhaps the most comprehensive crossnational study on the economics of rehabilitation and was published by the Rehabilitation International. Mr. Acton pointed out that the report, of which Jack Noble and Monroe Berkowitz were the primary architects, was extremely complex. Nevertheless, Acton believes that the single most important fact to come from the report was that a very broad group of people from all parts of the world, socialist and capitalist countries alike, agreed that whether rehabilitation is present or not, there is a tremendous cost to society due to disability, and, secondly, that when effective vocational and other rehabilitation programs are present, their costs are cheaper than the costs when rehabilitation is not present.

Referring to Paul Comes and Harlan Hahn's suggestion that rehabilitation services may simply end up redistributing employment and displacing other workers, Collignon asked Acton to what extent the benefit payoff of rehabilitation is achieved simply by the loss of work by nondisabled workers in the economy. Mr. Acton stated that there is a tendency to invest more and more money on programs that provide dependence and less and less money on those that promote independence for disabled people and that this concern was expressed in several of the conclusions made by the group in the report.

Dr. Hahn took issue with the concept of rehabilitation as simply a "displacement" program. He reiterated his premise that nondisabled workers have had an unnatural advantage for a significant period of time. Rather than thinking of it as displacement, he argued that we should think of it in terms of progress toward the goal of equality. He further suggested that equality means that situations must be adapted to the needs of individuals rather than requiring individuals to adapt to existing situations.
Dr. Cornes pointed out that some economists would argue that programs to increase the employability of the disabled are a reasonably respectable step to take in a time of recession in order to ensure that those people who are displaced from the labor market are not kept permanently displaced. But he added that there is also a value in preparing for an economic upturn by developing adequate and effective rehabilitation policies and programs.

Dr. Collignon queried about the political problems and loss of political support that might occur if rehabilitation is viewed as principally the redistribution of jobs from one group of the labor force to the disabled.

Dr. Hahn commented about the mixed attitudes that are reflected in our political process. On the one hand the benefits provided to support people with disabilities are greater than those provided to people in virtually any other public policy category. While elected officials do not want to be identified as voting against the interests of people with disabilities, society is reluctant to acknowledge that needs of disabled people have not been fully met. The problems are passed further along from the legislative level and delegated to the administrative level. As a result, policies are never actually implemented that have been verbally endorsed by elected leaders. Hahn believes that in order to build an effective constituency for disabled persons, we will have to look beyond political grounds and economic issues. In his view, we will have to look at constitutional and legal principles and try to reconcile the kind of treatment that has been given this segment of the population with those basic principles.

Dr. Collignon noted that U.S. data indicate that roughly three out of four working age adults who have some kind of impairment are in the labor force. Most of these persons have received no special vocational rehabilitation services. He states that we are really trying to assert the rights of that minority within the minority—the disabled who have not found their place in the work force. Finally, he questions whether our efforts will erode some of the positive attitudes that industry and the general public have at this time for the disabled group as a whole.

Dr. Hahn pointed out that this achievement of positive attitudes is based on a rather faulty premise, one that assumes we are going to achieve the desired result (attitudes) through persuasion or voluntary action. Historically, he notes, the record indicates that this has never happened, and there is no indication that it ever will happen. Rather, that we know from social science data that people change their attitudes when they change their behavior. When laws and policies require people to act in certain ways, by and large they do. Consequently, they adjust and accommodate to those requirements, and social problems are ameliorated as a result. For these reasons, Dr. Hahn suggests that a quota system offers a much more
viable approach to the problem of unemployment among people with disabilities than do its alternatives.

Dr. Galvin said that many economists who have observed the structural and cyclical changes in the labor market have observed that these changes have pushed the disabled further from the hiring door and recommend that the priority of our public policy should be on those people who are further forward on the labor cue. Consequently, they argue that vocational rehabilitation programs should place less emphasis on the severely disabled and opt for a policy that puts more emphasis upon disabled individuals who have a higher probability of employment.

Reacting to this statement, Dr. Hahn said the emphasis of public policies is dependent upon how much importance policy makers attach to fundamental values, like freedom and equality. In other words, if we believe that people ought to be given equal treatment under the law then priorities that grant the greatest benefits to those who have been deprived most in the past, those with the most severe disabilities, are fundamentally consistent with the values on which the nation is based. Dr. Hahn suggests that there are significant reasons based upon the values to which our society supposedly subscribes to give benefits and to make changes for people with severe disabilities. In his view, any other approach seems contrary to those basic social values.

Taking another viewpoint, Mr. Comes noted that there is a more fundamental question concerning the point at which this kind of reasoning should stop. He used sheltered work as an example of subsized (dependent) employment that is, nevertheless, potentially effective for the severely disabled. He views the crux of the matter as the relationship between our attitudes towards work, our attitudes towards welfare, and the extent to which we see the one tied to the other. Mr. Comes believes the decision rehabilitation professionals have to make is a balancing of efficiency against our commitment to principles like integration and equality and other moral choices.

Mr. Acton stated a concern about recent policy decisions to concentrate on the severely disabled because in doing so, he feels we may create yet another category of discrimination within categories of discrimination. And, that when we see rehabilitation actually being applied in practice, we would see that services are not being divided in terms of severity, but in terms of many other considerations. He believes that such policies tend to lead us to generalize too much about people rather than lead us to design programs that address what each person needs.

Turning the group's attention to another topic, Dr. Galvin asked Ms. Belau to further describe the corporate culture at Control Data Corporation. Referring to Control Data's policy of absolute return to work for all of its employees, he asked Ms. Belau to describe the
company's experiences with that policy, and to address whether or not Control Data realized economic benefits as a result of that policy.

Ms. Belau said she believed the corporate culture of any company is probably the single most important factor that contributes to the success of the employment of an individual with a disability. She explained that a corporate culture that promotes diversity imparts a sense of acceptance and promotes respect for individual contributions regardless of whether or not the individuals who make those contributions happen to be handicapped or able-bodied.

The corporate leaders at Control Data felt there should be a strong company policy supporting return to work, a written policy that is available and familiar to all employees. There should also be commitment to that policy, not just from the top but also from everyone in the organization who is responsible for hiring, working with, and managing those individuals. She added that it is to the company's benefit to retain individuals who have been with the company, who have gathered expertise, who are familiar with the company, and who know their jobs. It is also to the benefit of those individuals, because they are returning to a work environment they know and to people they respect. There is also a cost savings involved. She pointed out that early intervention and policies that bring help immediately and that follow through with effective actions make substantial contributions in eliminating the cost of long-term disability, and added that most Control Data employees who experience either an illness or an injury make use of this return-to-work option.

Dr. Galvin asked Ms. Belau whether, in her opinion, an employee assistance program could serve as a vehicle for providing disability management and rehabilitation services. Ms. Belau said that the suitability of that vehicle depends upon the design of the program. In the case of Control Data, she explained that the employee assistance program and disability management services are two separate programs. Nevertheless, she stated that if one were designed in that way, it certainly could build a rehabilitation system that includes counseling and referral to specific rehabilitation programs.

Turning to another topic, Dr. Galvin said that the National Council on the Handicapped has noted three major problems in working with employers. One is the lack of communication between disabled persons and rehabilitation counselors and employers. The second is what can be called the "dump them and run" phenomenon in which there are no follow-up or post-employment services provided. And the third is that when employers do have a need for an employee, they frequently cannot readily find a disabled individual who is qualified for the job. Dr. Galvin asked Ms. Belau if Control Data had experienced those three situations.
She explained that Control Data does have people within the company who were previously employed as professionals within the rehabilitation community. Consequently, their communication is very good with the rehabilitation community and finding qualified rehabilitation professionals is not an issue. These employees also maintain excellent communications with CDC employees who are disabled.

Dr. Collignon asked Ms. Belau if Control Data has had major problems with disincentives within the company. She responded there were; in fact, some disincentive problems with the Social Security programs for supplemental and disability benefits, especially to their Homeworkers program. They are particularly concerned with the provisions that cut off benefits when people earn a certain amount of money.

Dr. Collignon asked Mr. Cornes for his opinion concerning the extent of the disincentives problem in England. He specifically wanted to know if the level of income replacement benefits and health benefits make it very unattractive for a worker to make use of rehabilitation or other services. Mr. Cornes responded that he knew of no research that looks at disincentive problems from the point of view of people refusing rehabilitation services in preference to continuing to receive an income. In fact, he commented about his surprise over the studies they have undertaken of people going through employment rehabilitation programs, as to the number of people who are prepared to accept jobs that pay far less than they would be entitled to with the invalidity benefit systems, and how committed people are to resecuring for themselves a place in the labor market. Consequently, he believes disincentives are not an enormously difficult problem for most clients.

Dr. Collignon said that one of the arguments that has been raised several times concerns the effectiveness of a quota system. He asked Mr. Cornes if, in his opinion, the quota system has worked in England, and why there was a low tendency for disabled persons to actually register as disabled (thereby coming under quota system provisions).

Mr. Cornes replied that in one sense the quota system works, because then everybody is conscious of a duty to people with disabilities in the labor market. However, he added that in another sense, it does not work, because it is inoperable. Industry cannot possibly attain the quota that legislation insists they reach, primarily because there are simply not enough people actually registered as disabled. Mr. Cornes said the number of registered disabled people would only allow a compliance level of 1.9 percent, although the legal requirement is 3 percent.

Responding to the same question, Dr. Hahn said that many Englishmen believe there is no incentive to register in Great Britain,
particularly as long as the system doesn't work. He argued that it makes little sense to register when one knows it will not result in a job. Rather, if the quota system were designed administratively so that it could work, he thinks people might register, if registration was necessary.

Dr. Collignon referred to the need for a redirection of thought concerning rehabilitation programs, and asked Mr. Comes and Dr. Hahn what specific requirements they would put into national policy or place on corporations to help the disabled adapt to the changing economy.

Mr. Comes responded that he sees the changing economy as a problem affecting all people, and the responsibility for thinking through the implications of change belongs to us all. He suggests that we ought to be taking stock of the real requirements for work in society, and that we be much more conscious about how fair our policies are in their operation. He sees a fundamental problem as being one of attitudes and the need to encourage as wide a cross-section of people as possible to consider some of the basic issues of bias and discrimination. He believes these negative attitudes still exist despite the best efforts of vocational rehabilitation services over the years.

Dr. Hahn underscored Professor Comes' premise—that the problem of coping with a changing economy is a responsibility of the entire society, and that this is a responsibility that we need to think through much more deeply than we have previously. Although we have been reluctant to call it discrimination in the past, he feels we need to recognize that unemployment among people with disabilities is fundamentally a problem of job discrimination. Dr. Hahn believes we need to attack the problem in a similar way as we have attacked discrimination in other areas, and that these efforts be coupled with efforts to design an environment that is conducive to the needs and interests of people with disabilities.

Continuing, Mr. Acton said that it is also very important to provide education and training for disabled people who need it.

Ms. Belau added that the issues of affordability and accessibility to technology for many people, including people with disabilities, is a real one. She reminded us that we are talking about a changing work environment that is moving toward a more technological society. She believes all workers need to reevaluate their work in terms of the effects of automation, and that people with disabilities, in particular, should become familiar with technology and learn how to cope with it and use it, because technology is going to be a part of the work environment. She added that it was important that the corporate world make such opportunities available to disabled people to be sure that there is no discrimination in access to some of the newer technologies.
Dr. Collignon raised the point that future predictions indicate that jobs in the service industry may predominate. Since service jobs require a great deal of interaction and because discriminatory attitudes do exist, he wondered whether disabled people may fare less well in services than they did in manufacturing. He added that strong cognitive skills are required for many jobs in the technology and service industries, which leaves some segments of the disabled population at a continuing disadvantage. Dr. Collignon asked Ms. Belau how she would respond to these statements, and whether or note she believes there really is a growth possibility for jobs in the service industry for all disabled people.

Ms. Belau said she believed there would be increased opportunities because of a substantial restructuring of jobs in the job market during the next 20-25 years. She thinks there will be new opportunities because of technology that we cannot even identify today. However, it is important, she pointed out, that disabled people as well as their counselors and teachers familiarize themselves with technology; that they have access to information, have access to training, be able to communicate with one another, and be able to function in a society that is rapidly changing.

Dr. Galvin asked the panelists two additional questions. First, are there specific lines of social science or policy research that they think should be developed? Secondly, with respect to academic training, did they have suggestions for what should be included in rehabilitation curricula?

Dr. Comes believes that our approach to vocational rehabilitation, although appropriate at one time, is currently too narrow given the wider range of options that ought to be considered in our planning for the future. Vocational rehabilitation will involve a level of policy analysis and policy development that will include a much wider range of professions and specialists who have not previously thought about rehabilitation. Therefore, he would like to see a much more multiprofessional approach and a much firmer commitment to policy studies as a subject in its own right. He pointed out that just a few months ago a leading rehabilitation journal published a list of recipients who received federal research and training funding. After reviewing the list, Mr. Comes added, one can see that funding is heavily loaded towards clinical service and the evaluation of existing service provisions. He argued that we need equivalent kinds of investments on the wider social issues of disability and handicaps. He would like to see a better balance in the resources that are given to these various options, including a better provision for policy studies.

Agreeing with Mr. Comes, Dr. Hahn added that not only diverse professionals can contribute to these questions, but also the people for whom these policies are developed. We must include the experiences and capabilities of disabled people as well. He added that he is currently involved at his university in developing a
curriculum focusing on the study of disability in society. The curriculum looks at the experience of people with disabilities as a potential and valuable resource in the design of policy and focuses on legal and policy questions that can be adapted to that particular experience and that perspective. In his own entry into this field, he explained, the thing that left him very nonplussed was that while those in charge were talking about the issues from a variety of disciplinary perspectives, everything seemed to be represented except the interests, needs, perspectives, and values of people with disabilities themselves. Dr. Hahn believes this perspective can become the core of a curriculum that can be of great value to people entering a wide range of fields involving disability.

Turning to the definitional issue he raised earlier, Dr. Hahn said that the concept of disability fundamentally signifies the superficiality of physical values in society. He argues that the principal thing which differentiates people with disabilities from the nondisabled segment of the population is that they have physical characteristics that are different. He thinks far too much importance is attached to those differences. The fact that disabled people are here, have survived and are part of the society, is in his view, a commentary on the undue importance that has been attached to those particular characteristics by the remainder of the population.

Mr. Acton concluded that one of the central issues, and one where we have a lot of opinion but very little hard fact, is the actual measures that need to be taken in order to change both attitudes and behavior. Mr. Acton suggests that since disabled persons are increasingly coming out into society, having more experience in mingling with the population in general, it would be an ideal time to try and capture what views are as a result of this experience. From these views, rehabilitation professionals can determine what exact measures need to be taken to change attitudes and behavior, and further the integration of disabled persons as full participants in society.

In summarizing his impressions of the Opening Session, Dr. Collignon said that things are not clear cut concerning how the changing economy is going to end up affecting disabled people. He reminded us that one used to argue that the Southeastern portion of the United States was making a big mistake picking up all the manufacturing employment from the Midwest and from the Northeast, because the South was not a growth sector. However, it still proved a way of generating an extensive amount of Southern employment and a whole new economic base. While there may still be a role in manufacturing for the disabled, Dr. Collignon believes there is also a very important role in the services industry that we have yet to explore for the disabled. He believes that technology will be a significant portion of opportunities in that sector.
Dr. Collignon then cited the familiar question as to how much we are willing to spend in order to maintain rights. He believes it is clear that one of the great constraints we have has been the cost of the various kinds of rehabilitation policies, and he thinks we must come to grips with that reality. This includes the importance of analyzing whether we are merely substituting one person's employment for another or whether we are trying to develop real work and make real social production gains. He believes it is very hard to sell a redistributive policy, at least in the United States.

In addition, Dr. Collignon noted that there are different groups of disabled persons for whom different policies may be appropriate. There are those who are already employed for whom early intervention and return to work may prevent work disability in the event of accident or chronic illness. And there are also those who have never gotten into the work setting and who therefore require a different set of policies. Lastly, he added that we need to identify corporate strategies that can help implement these rehabilitation-oriented policies and hopefully make them effective.

Summarizing his impressions of the Opening Session, Dr. Galvin was significantly impressed with the complexity of these problems—the interaction between political science, economics, disincentives, the social security system, labor market trends, and how all of these impact upon individuals who are disabled. He thinks this interaction is not well understood and hence not well planned. This constitutes the arena for rehabilitation policy analysis.

Dr. Galvin cited a comparative study of rehabilitation trends in Great Britain and the United States in which author William Gellman noted several interwoven issues taking place at the same time. According to Galvin, the study showed that we have a faltering international economy that is limiting our funding resources and, therefore, resulting in fewer funds being available for social programs. At the same time, we have a high rate of inflation that is causing operating costs to go up. So, we are caught in the squeeze between not having the kind of appropriations or allocations that we have become familiar with in the past, and simultaneously rising operating costs. And lastly, in most of the industrialized countries, we are entering a post-industrial era with an occupational structure that restricts employment opportunities for everyone.

As a last point, Dr. Galvin said that early rehabilitation measures applied at the place of work can certainly contribute to prevention. By that he means not only the prevention of a deteriorating health condition, but the prevention or the forestalling of the eventual application for social security, disability benefits, and rehabilitation services from the public sector. That is one area where the corporate world can respond reasonably in its own self-interest and in the social interest as well.
SESSION I

EMPLOYER INITIATIVES—POLICY APPROACHES
SESSION I: EMPLOYER INITIATIVES—POLICY APPROACHES

Moderator: Kenneth Mitchell
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Dr. Ken Mitchell is the founder and director of the International Center for Industry, Labor, and Rehabilitation, a consulting firm for disability management programs. Dr. Mitchell received his doctoral degree in from Pennsylvania State University. He was formerly director of rehabilitation for the Ohio Industrial Commission. He has also served as a rehabilitation counselor educator where he directed the Arthritis Management Project with Burlington Industries and as a Fellow with the World Rehabilitation Fund.

This session will be devoted to employer initiatives, examining innovative programs that provide rehabilitation services, prevention services, and disability management services in the corporate workplace. These programs have been fostered by policy decisions and policy innovations showing great foresight.

What are the factors that make these programs so unique? Some of these initiatives represent far-reaching changes in our views regarding rehabilitation of the injured worker. In New Zealand, for example, the policies and implications of the country's workers' compensation system were completely revised by changing into an accident compensation system. Ohio's injured worker rehabilitation program has committed more than 200 million dollars towards developing new facilities and resources specifically for this group of disabled individuals.

Policy decisions by employers and government create the framework and set boundaries that determine eventual rehabilitation programs. These policies determine the type of benefit plans and negotiated agreements that are in effect and whether rehabilitation is mandatory or voluntary. They also determine who pays for rehabilitation, who receives rehabilitation, and at what particular time these services are provided. The concept of rehabilitation intervention is embodied in policies that are established by corporations, by unions, and by state, federal and provincial governments. In this session, we are discussing those policy decisions that have had an impact on the development of programs and the appropriation of resources for the rehabilitation of disabled employees.
A REVIEW OF U.S. CORPORATE-SPONSORED PROGRAMS
FOR ACCOMMODATION AND EARLY INTERVENTION

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This presentation is based on a range of research findings and actual experiences with industry. Its purpose is two-fold—to identify approaches that have been working in the United States with regard to generating jobs for the handicapped and to suggest a continuum of government policies which involve industry and have indicated signs of success.

A year ago, Berkeley Planning Associates completed a large study for the U.S. Department of Labor. This study, now available in two volumes from the Department of Labor, is one of the first large scale surveys to look at industry practices on the accommodation of the disabled under various regulations of the federal government. The survey included 2,000 federal contractors which collectively employ 512,000 workers, including 19,200 handicapped individuals. The study surveyed the nature of actual accommodation practices among these firms. Aside from the initial, comprehensive survey, there were numerous telephone interviews and additional follow-up interviews with 85 of the firms that reported successful accommodation experiences. And lastly, we conducted in-depth field studies of ten specific corporations, including IBM and DuPont.

This study, which remains one of the very few U.S. studies on industrial practices, concluded that accommodation is "no big deal to the average American employer." Fifty-one percent of all the accommodations reported involved no cost to employers, while 81 percent involved costs of less than $500 per worker accommodated. Only seven percent of all accommodations involved costs greater than $2,000. Cost was not viewed by the employers in the survey as being a factor deterring accommodation, nor were the attitudes of co-workers or customers.

The study goes on to specifically investigate the kinds of accommodations received by different types of workers and points out the wide range of accommodations that exist. Practices that have worked with employers and guidelines that could assist both
government agencies and firms in trying to facilitate accommodation are identified. Findings support the importance of the following factors for positive industrial practice: (1) the fundamental importance of the commitment of top management, (2) the need to establish a system to track what happens to a disabled worker upon entry, and (3) the creation of reserve funds for rare cases in which an expensive adaptation or the purchase of special equipment is required, so that funds allocated for routine line operation expenses need not be reallocated for this purpose. An additional finding of fundamental importance is the principle of asking the disabled worker about the accommodations that are needed. Too often, firms undertake accommodations that the workers themselves maintain were not required and could have been done much more cheaply if the affected individual's help was solicited prior to making the accommodation.

The study focused on larger corporations, those with more than 500 employees. Its central findings provide vital information on current practices, as well as identifying areas for further research. First, findings indicate that accommodations were most often provided for workers who became ill or injured while already in the employment of the firm. In other words, accommodations are much more common for the worker who is already inside the plant and part of its corporate culture than it is for the newly hired worker. We have yet to fully determine the accommodation needs for persons seeking employment for the first time, and these may be quite different than the experience of disabled persons already within the firm's employment.

Secondly, most of these firms had large personnel offices, including an industrial engineer available in the plant and capable of assisting in the adaptation of particular work settings. Most of the firms surveyed tended to disregard the cost of management/personnel time in their estimates of accommodation costs, since these were seen as part of the routine maintenance budgets of their corporations. The firms considered costs to be those expenses paid out-of-pocket and beyond a normal budget appropriation. Consequently, a similar study involving smaller firms might produce a very different result. This may be an important caveat to our survey findings, since researchers have determined that a significant proportion of the new jobs created in the U.S. economy appear to be within smaller firms--those with less than 500 employees. While a recent study of smaller firms indicates that accommodation was not difficult when it was attempted, these firms did cite management time as a major constraint. Within a small firm, management time is a much more precious resource, even though it does not translate easily into overall dollar cost. Further research and experimentation is required to understand what might be needed within smaller firms to encourage accommodation.
A third finding indicates that while accommodations are most often used to help the disabled person sustain normal productivity levels compared to other workers, they are not used to help the disabled individual achieve promotion within the firm. Thus, while accommodation is an employment maintenance policy, it is not used as a vehicle to upgrade the position of disabled employees within the workplace. This is another issue that may warrant further investigation.

A fourth problem identified in this study is the small percentage of disabled employees who have identified themselves as disabled in order to qualify for various federal programs and benefits. Most firms believe there are easily twice the number of disabled employees as those that have self-identified themselves. In fact, even within the President's Committee on Employment of the Handicapped, an organization which employs several hundred people and promotes the greatest awareness among the disabled about their rights and benefits, only 10 to 15 percent of the handicapped employees have identified themselves in order to become eligible for these benefits. The factors that prevent self-identification need to be investigated. We do not know whether it is the sense that there are no real gains via the implementation of these regulatory protections, whether identification is considered a stigma, or whether there is a general belief that identification prevents opportunities for the disabled to get ahead within the firm.

Finally, the study reported that relatively few of the firms practiced early intervention; most firms delay intervention until an employee actually becomes disabled and seeks assistance. These practices persist even though we know that risk management has become central in preventing work disability as a result of a chronic illness, a deteriorating condition, or an accident.

Regarding the question of early intervention, some studies within the health policy field have examined specific illnesses, particularly rheumatoid arthritis and total hip replacement which account for about 33 percent of the increase in major surgical costs under Medicare and MediCal over the last two decades. One of the striking findings from long-term, follow-up studies with these clients and with experimental controls is that the amount of time they were able to sustain employment up to the time of surgery was most predictive of whether or not the employee returned to work. The longer the work relationship is maintained prior to medical intervention, the sooner the worker attempts to get back to work, and the greater the probability that total work disability will be prevented regardless of what the health condition may be. Another characteristic that helps predict return to work, which is sometimes referred to as "worker centrality," is the extent of the worker's control over the pace and hours of work while sustaining overall production expectations of the firm. The worker, therefore, has some ability to control the day-to-day work pace in achieving those expectations.
When that occurs, the ability to sustain work ties remains, and the individual is often able to reduce the chance of disability.

These findings suggest that indeed there is a major role for risk management within many firms and that firms should look more closely at early intervention. For example, firms could have the medical staff or the insurer anticipate when an employee has the possibility of a deteriorating condition that might lead to work loss, so that the firm can intervene early with that worker to try to modify the job, the hours and other relevant factors. Likewise, when an individual is on sick leave, supervisors or personnel staff should stay in contact with the individual, creating peer group pressure that will help sustain and reinforce the individual in wanting to return to work. There are successful experiments, for example, in redistributing employee bonuses and unused sick-leave time to create much broader incentives among the staff, encouraging employees to return to work after sickness.

To date, there have, surprisingly, not been any real benefit/cost studies regarding early intervention. The data from such studies is going to be important if firms as a whole are going to change their behavior. To quote David Evert of Control Data Corporation, "If you want to change a firm's behavior, you should appeal to one of at least three things: money, the fear of legislation, and corporate ego." Personally, I believe the appeal to financial interests is a very effective device for trying to change the behavior of many firms. Most of the risk management firms that have been surveyed usually report that preventing one case from becoming a long-term disability results in savings of roughly $10,000 a year. This is roughly the cost of a risk management intervention as many of the firms have budgeted it. We have yet to determine how many of the cases that might prompt an early intervention would in fact result in a long-term disability claim; an important piece of information that one might find from retrospective analysis of the claims files or employee cases.

Another interesting policy that has taken off in the U.S. is the attempt to deal with what is often called transitional employment. This usually involves an intermediary organization who sells an employer on the placement of individuals within either a service or a manufacturing site and then provides an on-the-site supervisor or team to augment the firm's support of these disabled individuals. A comparison group study by Tufts University has reported a great deal of success from this approach, particularly with the mentally retarded. In addition, various federal studies have reported fair success using this approach with AFDC recipients (welfare mothers), and several states have also begun moving in the direction of adopting this strategy on a statewide basis. This approach represents a very different way of providing employment assistance. Why does it seem to be working? First, it recognizes that entry level supervision tends to be minimal or poor in most of our larger
organizations. What the intermediary service organizations are doing is providing an alternative supplementary form of entry level supervision to help make the employment of workers with special needs successful. Secondly, the approach generates a form of peer group pressure to sustain those workers in their efforts. Contrary to typical management within larger corporations, these supervisors are strict, both driving the employee and helping him/her adapt quickly to the demands of the work place. Finally, because they have to sell employers on creating the slots, these service workers really are performing a placement function, a function that is often inadequately handled by most of our public service programs. Therefore, transitional employment appears to be a positive solution, although it must be remembered that it works primarily for those who do not need major skill training in order to take a job.

There have been several other approaches in the U.S. One has been Projects with Industry (PWI), which is a highly promising program and should be expanded. PWI basically involves the employers working with organizations in the designing, training and placement of disabled employees. There is, however, an Achilles heel in the current program. While the program likes to claim that the cost of placement is between $800 and $1,000 per year per individual, it totally omits the training costs which are not paid for with government funds. Nevertheless, the training designed by PWI is excellent, and the federal government should support these costs since industry-based designs are often superior and more innovative than many of the public manpower programs.

Within this context, there is still a major role for sheltered employment. We need to improve these workshops and facilities throughout the country—including their marketing and management skills—in order to meet the needs of people who cannot succeed through these mainstreamed orientations.

The last major policy area to highlight is the issue of job generation. Recently, Berkeley Planning Associates has been working under the auspices of the San Francisco Foundation, one of the five largest foundations in the U.S., to examine new ways to implement community economic development, a very big theme in the current U.S. situation. We managed to link community economic development with a focus on disability.

An example of a current project is a new manufacturing plant that does not require government subsidy and employs 135 disadvantaged people who will earn wages out of the company's profits (50 will be paid below minimum wage). The project also subsidizes an extensive number of training programs and separate sheltered work programs. It is mainstream industry competing in mainstream industry. One of the strategies for this operation is to use manufacturing jobs, rather than service jobs, since one can alter the
structure more effectively for a specific client's needs. Secondly, we chose an industry that was essentially involved in substituting its product for imports, thereby avoiding the outcries from other industries with which it might have been competing and from the strong unions within our state. The idea of focusing and developing manufacturing enclaves that involve import substitution is not unique and similar patterns can be found in Japan, Poland and elsewhere. However, it does suggest a major new strategy for job creation that involves both community economic development and the generation of a tax base that can be linked to the economically disadvantaged.

These examples represent, if you will, a full range of policies under experimentation. All of these assume that private industry, with government assistance, remains the major vehicle to effectively deal with the employment needs of the disabled population. In addition, all of these policies represent major shifts from the traditional vocational rehabilitation model. Nevertheless, there still remains a major role for vocational rehabilitation, perhaps most importantly in providing the means for initial training, the linkage to industry via placement, assistance to small firms, and the implementation of job accommodation and design. In addition, there is also a major role for the development of comprehensive health policies. One of the conclusions from these studies is that health policies, in some ways, are more important than employment policies within the disability field. Health policies are the key to the disincentives that workers confront. They are also a key to the early intervention that will prevent disability. With that, we have a new agenda before us.
A DISABILITY MANAGEMENT PROGRAM FOR EMPLOYEES: THE FEDERAL GOVERNMENT AS EMPLOYER

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Each year, a significant number of Federal employees become, to some degree, nonproductive in their assigned positions due to physical and/or mental impairments. Such impairments are often short-term, but for a significant number of affected employees their impairment is of a long-term or permanent nature. While most impaired employees are not "totally disabled," many do find it difficult or impossible to perform at acceptable levels in their current positions.

Alarmed by the large number of federal workers granted disability retirement, the U.S. Office of Personnel Management (OPM) initiated action in 1980 to address the problem. As a result of this action, two major changes were made in OPM's policies and regulations. The first reform was regulatory in nature, establishing a requirement that a direct link between a physical or mental impairment and job performance deficiencies be demonstrated before disability retirement determination. Previously, the mere confirmation of the existence of an impairment was sufficient justification for the granting of disability retirement. The second major change required that the employee be considered for any vacant position at the same grade and pay within reasonable commuting distance for which he or she qualified before disability entered the picture. In the past, reassignments were not considered, and disability retirement decisions were based exclusively upon ability to continue to perform essential components of one's present, established position.
These changes to control the escalating costs of disability retirement were imposed upon a system that had been using the disability route as a means of moving "problem" workers out of the federal workforce. OPM staff noted that while one organizational component of OPM was working to encourage agencies to employ severely handicapped people under selective placement programs (resulting in new federal workers who had impairments but were productive in jobs), other parts of OPM were acting on claims to retire workers with less impairment than many of the new workers. This reality raised the question of how federal supervisors and managers should be trained and assisted in helping employees remain productive once disability problems began to influence work productivity. The solution proposed was to organize a model program of disability management at the workplace.

This was the basis of OPM's request in early 1982 to the National Institute of Handicapped Research (NIHR) to enter into a cooperative interagency agreement to research and establish a model disability management program. NIHR was approached because it has a broad authority to study, demonstrate, and disseminate new methods of rehabilitation and intervention strategies to assist disabled persons and employers. Moreover, NIHR's authority included responsibility for administering the Interagency Committee on Handicapped Research and thus was mandated to encourage cooperative efforts within the federal government. In the Spring of 1982, NIHR was very excited about becoming directly involved in such an important topic.

The Social Security Administration (SSA) was approached because its headquarters in Baltimore, Maryland had a large enough workforce to serve as a field site. In addition, the management of SSA had expressed its willingness to identify and act upon the problem and also had a direct service staff, the Personnel Counseling Branch (PCB), to work on operational details.

The resulting agreement between OPM, SSA, and NIHR was operationalized by Mr. Sheldon Yuspeh of OPM who is responsible for administration of certain aspects of the selective placement program and is now associated with disability retirement administration, Mr. Thomas Pugh of SSA, senior staff member of PCB, and Dr. Richard Melia of NIHR, senior program officer with responsibilities for projects in the area of vocational rehabilitation.

Progress to Date

Work on the preparation phase of the "Alternatives to Disability Retirement" project, as the effort came to be titled, was completed in the Fall of 1983 and is described in the final Phase One Report prepared by Lawrence Johnson and Associates, Inc. During the first phase, the following activities were completed:
1. A Detailed Work Plan was prepared for completing nine major subtasks in a compact six-month period. The plan required the specific identification of materials and the access to records that would be provided by SSA, the analysis of techniques to be used, and most importantly, the formal and informal process of consultation and communication to establish trust and credibility of the "outsider" analysts with the SSA staff.

2. Recommendations for an evaluation system were prepared in the form of a 29-page analysis of entry measures, service delivery measures, exit measures, and cost-benefit measures for the system (typical research elements such as control and treatment groups, measurement elements, data sources and reliability, and procedural validity were involved in this task).

3. A report on analysis of available data and a recommended system for identifying impaired employees was prepared.

4. A case flow system was devised that, for the first time within the large SSA personnel system, mapped all alternatives, established desired sequences and checkpoints, and linked these to the proposed measures and data elements. (The system also included the new requirements to consider job reassignment and modification.)

5. A case findings summary form was designed.

6. A resource manual with summary profiles of rehabilitation and health care providers in the Baltimore area was designed both for the purpose of directly assisting the new SSA system and to serve as a model for use by other agencies.

7. A training manual was prepared for use within SSA during the implementation of the project, as well as for potential use by other agencies with appropriate adaptations.

**Current Status and Implications**

The project is now awaiting final management and labor approval to move to the implementation, or Phase Two, which cannot be accomplished until significant changes are made to the existing SSA Labor-Management Agreement. Details relating to potential reassignment of workers from one area of SSA to another must be negotiated. Plans must be revised for the role of the PCB and its use of external service providers. The proposed tracking and data system must be implemented within the context of overall demands for SSA use of data processing systems for internal use and for sending out transfer payments.
Of course, such delays are anticipated. It is very challenging and difficult work to design and implement a disability management program within a complex organization. It may be all the more challenging to do so within the overall context of federal personnel regulations.

However, there are already many positive results to report. NIHR has benefited from the opportunity to learn a great deal about disability management as a result of direct experience. It has helped NIHR realize the value of efforts currently under way in such programs as The Menninger Foundation Research and Training Center on Preventing Disability Dependence and the work of Dr. Sheila Akabas at the Industrial Social Welfare Center. The joint OPM/SSA/NIHR project led to direct action by NIHR to hold a seminar in Washington, D.C. in the Spring of 1983, covering the topic of "Disability at the Workplace: Applying Rehabilitation to Management." In addition, NIHR staff have been very excited about published articles and related efforts to draw attention to the topic of disability management. Examples include a section on disability management in the new NIHR Long-Range Plan (to be issued shortly), discussions by NIHR staff with the Department of Labor to highlight aspects of public and private research on disability management within the Labor-Management Administration, and Dr. Donald Galvin's article providing an overview of the topic in the University Center for International Rehabilitation Interconnector in the Fall of 1983.

The NIHR staff believes that the joint OPM/SSA/NIHR effort happened at just the right time and that it is a major contribution to a rapidly growing field. The staff hopes to evaluate this effort further, to report on it in more detail, and to participate in an implementation of the project which is scheduled to start in the near future.

This presentation was prepared based upon official progress reports and completed documents prepared under the interagency agreement executed in June 1982 between the U.S. Office of Personnel Management, Social Security Administration and the National Institute of Handicapped Research. Work in conjunction with the interagency agreement was performed by Lawrence Johnson & Associates, Inc., Washington, D.C., under contract No. OPM-12-83 with OPM. The summaries and conclusions presented in this abstract of the project work are interpretations of the above cited work by NIHR staff who have participated in the project on a continuing basis. These views do not represent the official approved view of work under the interagency agreement or performance terms of the contract by the respective agencies.
THE AFL-CIO AS A PARTNER IN EMPLOYMENT FOR DISABLED PEOPLE

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This presentation provides an overview of what the labor movement is doing—often in close cooperation with business and vocational rehabilitation—to move handicapped and disabled workers into the mainstream of economic life. The AFL-CIO Human Resources Development Institute (HRDI) was formed more than 15 years ago as the labor federation's employment and training arm. HRDI's continuing mission is to coordinate and extend labor involvement in programs for jobless and low-income Americans.

Over the years, the Institute has served two primary functions. It has provided direct services to youth, Native Americans, veterans, and others with special barriers to employment, including handicapped and disabled persons, and it has supplied technical assistance to facilitate broad labor participation in employment and training. In the past two years, we have been engaged in a nationwide program providing both immediate assistance and longer range reemployment services to workers displaced by company closings and cutbacks. As a result of our efforts, a number of these reemployment programs reserve enrollment opportunities for displaced workers who are disabled.

With implementation of the Job Training Partnership Act, HRDI is concentrating on a nationwide effort to help organized labor contribute its special capabilities to the new employment and training system. Working closely with labor organizations, HRDI's field representatives are helping to develop labor-involved programs providing retraining, job search assistance, and other services for low-income and displaced workers. These services are in addition to the special employment program HRDI provides for handicapped and disabled persons.

The AFL-CIO is a federation of 96 national and international unions with more than 13.5 million members. It has affiliated labor bodies in every state, and local central bodies in 740 communities. The labor federation's policy is set by a national convention held every two years and at more frequent meetings of its Executive...
Council which is comprised of leaders of many of the major AFL-CIO unions.

Right now, let us lay to rest the all-too-commonly held impression that the American labor movement is narrowly and exclusively concerned with the economic interests of union members. Of course, organized labor is deeply concerned about the wages and working conditions—and indeed the jobs—of its members. But the notion that these are labor's sole concerns is clearly a myth.

Labor has long been a pacesetter in bringing about needed social change. HRDI operates under a convention mandate and implements federation policy related to employment and training issues. The fact that the AFL-CIO endorses our efforts on behalf of jobless and low-income Americans is one indication of the broad concerns of the labor movement. Another is its long recognition of the particular employment needs of disabled persons and its active participation in activities to open up opportunities for them.

At its 13th Constitutional Convention in 1979, the AFL-CIO adopted a policy statement giving substance to its concerns about the plight of disabled workers. In this statement, the labor federation asserted that its goal is "a job for every American who is able and willing to work," and this, according to the AFL-CIO, "must include millions of handicapped individuals who are capable of work despite their mental or physical disabilities."

Labor is firmly committed to the idea suggested by the overall topic of this symposium that equity for the disabled makes good economic sense. We are well aware of the economic costs—in lost output and needed support payments—of excluding many handicapped and disabled workers from employment. We also recognize that progress towards labor's goal of full employment is a necessary condition to opening up enough job opportunities for these workers. Our nation needs to create more jobs—good jobs—and until we do, we will have trouble putting the handicapped and disabled to work.

Besides its concern about the economic losses that our nation suffers when it excludes many disabled workers from employment, the labor movement is deeply distressed about the resulting personal hardship. The AFL-CIO's 1979 policy statement goes on to say that "wage earners suffer the direct effect of the disability, and their families suffer the consequences." To help overcome this problem, the AFL-CIO urged its affiliated unions to take four critically important steps to increase employment opportunities for the handicapped workers. These are:

1. Include changes in collective bargaining agreements to protect disabled union members still qualified for their jobs from being denied continued employment.
2. Support efforts to carry out the intent of Section 503 of the Rehabilitation Act.

3. Support efforts to eliminate architectural barriers.

4. Participate in programs to rehabilitate and employ disabled workers.

The AFL-CIO also advocates a strong labor role in overcoming what it has been termed "a greater handicap than any physical or mental disability—the handicap of prejudice." In a policy statement on the employment of the disabled, the federation's Executive Council stressed that:

It is incumbent upon the trade union movement and representatives of management to provide leadership in breaking down the prejudice against handicapped individuals that denies them the employment essential to improving their lives...Clearly, the task of achieving equality for handicapped workers will require the efforts of all Americans, and we in the AFL-CIO pledge our efforts to achieve that goal.

How is this labor policy implemented? Let me start by describing some of the more visible national efforts. Labor is very actively involved in the work of the President's Committee on Employment of the Handicapped. The group's Labor Subcommittee is chaired by Joyce Miller, vice president of the Amalgamated Clothing and Textile Workers Union, HRDI trustee, and member of the AFL-CIO Executive Council. HRDI's connection with the subcommittee has led to a number of joint efforts on behalf of handicapped and disabled workers. The most recent effort was a joint conference in Houston in February 1984, that brought together about a hundred representatives of labor, business, and vocational rehabilitation to find common ground for increased cooperation in moving handicapped workers into the mainstream of economic life.

Another national organization that fosters labor-management cooperation on jobs for the disabled is the Industry-Labor Council initiated at the 1977 White House Conference on the Handicapped. From its inception, the council has been co-chaired by Charles Pillard, president of the International Brotherhood of Electrical Workers and member of both the AFL-CIO Executive Council and the HRDI Board.

As for labor's rehabilitation programs, perhaps the most prominent is our own Handicapped Placement Program. Since 1977, this program has been supported by a grant from the Department of Education's Projects With Industry. Nationally, it provides technical services and advocacy throughout the labor movement to help unions and others get involved in providing appropriate services for
disabled workers. We also work to strengthen linkages among labor, business, and rehabilitation professionals by assisting with state and local partnership efforts.

In addition, we operate four local demonstration placement projects in concert with state AFL-CIO federations, local labor councils, unions, and state vocational rehabilitation agencies. Currently, these projects are being conducted in St. Paul, St. Louis, Baltimore, and Houston. In our seven years of operation, we have developed nearly 8,000 jobs and placed more than 2,700 disabled persons in competitive employment. Our efforts span all occupational areas, all disabilities, and both the union and non-union sectors of the economy.

The following represent some other labor-initiated programs:

- The International Association of Machinists' Disabled Workers Program. Initiated in 1981 with HRDI assistance, the IAM program currently operates in nine cities.

- Two handicapped placement administered by state AFL-CIO's—one in Kentucky, funded under the Job Training Partnership Act, and the other in Nevada, supported by the Projects With Industry program. Both were developed with HRDI assistance.

- The AFL-CIO Community Services program. Community Services representatives in most cities and many local areas pull together local resources to provide needed assistance for jobless and disabled workers.

These programs are only a few of the many ways in which labor works to fulfill its commitment to disabled persons.

Let me conclude by reviewing some of the talents and resources that labor brings to its rehabilitation efforts. The worksite and job expertise of unions is a valuable resource in efforts to accommodate and employ disabled workers. Using its broad network of associations with community agencies and groups, labor can help employers recruit qualified disabled job applicants. Labor can also work closely with management through joint committees that analyze recruitment and screening procedures to make certain that discriminatory practices and standards unrelated to job performance are eliminated.

In the area of job modifications, unions can work with employers to identify easy, low-cost modifications that not only accommodate the disabled but also assure a freer and safer flow of people into and within a workplace.
Labor expertise in the area of employee benefits can help allay employers' concerns about the cost of insurance coverage when they hire handicapped workers. Often employers with limited experience in employing the disabled fear an increase in such costs; even though studies consistently show either no effect or a positive effect on increased insurance costs, because handicapped workers have an average or better than average safety record. At the same time, labor is also working toward the enactment of second injury laws in all states to lessen the insurance liability on employers who hire people with disabilities.

And finally, on the preventive side of the liability issue, labor's efforts to eliminate hazardous working conditions and set up labor-management occupational safety and health committees can serve to limit the number of disabling worksite injuries.

Labor can also play a leading role in another area—the modification of the all-too-common negative attitudes about disabled workers. At the workplace, union shop stewards are critically important in promoting unguarded acceptance of these workers. In a broader setting, labor is at the forefront of efforts to promote public support of handicapped rights. Through union educational programs, through information products such as labor newspapers, through labor-sponsored conferences and wide-ranging community activities, labor has done much to foster public awareness of the needs and abilities of the millions of handicapped persons in this country.
Mr. Juhani Karjula is a researcher for the Rehabilitation Foundation in Helsinki, Finland. He has a master's degree from the University of Turku. Mr. Karjula's research interests include client motivation, back disorders, and early rehabilitation in the workplace.

The number of disability pensions in Finland during the last few decades has increased rapidly and varies between seven and eight percent of the working age population. Work disability is often a result of a gradual or recurrent deteriorative process which slowly degenerates towards disability. In a Finnish study (Gould, 1981), it was found that the symptoms of an illness and the first symptoms of the lowering of the working capacity are identifiable many years before the certification of work disability.

We may suppose that an intensive intervention at an early phase of this deterioration process could prevent the employee's exclusion from the labor market and permanent disability. However, comprehensive rehabilitation (i.e., combined management of a person's somatic, mental, social and work-related problems) is not easily financed before an employee is eligible for a disability pension. As a result, there is often much delay between the first symptoms of disability, the subjective need for rehabilitation, and the initiation of rehabilitation activity.

This state of affairs sometimes causes significant disadvantages to the possibilities of rehabilitation. During the early phases of the degenerative process, the person is often worried about his/her health and is highly motivated for rehabilitation resources. Later on, after the mentally and physically strenuous and energy-consuming disability process, the person cannot see positive perspectives in rehabilitation and is often no longer motivated to work.

Another problem concerns job placement. In Western industrialized countries, the placement opportunities of disabled people have been seriously limited due to rising long-term unemployment. Consequently, more emphasis should be placed on helping the disabled employee to remain in his present job. If this is not possible, the placement of the rehabilitatee after an otherwise successful rehabilitation process may prove to be impossible.

On this basis, the Rehabilitation Foundation negotiated a plan to develop and test an early rehabilitation program at two authori-
ties in the City of Helsinki from 1978 through 1981. Starting in 1981, a similar program was begun in three state institutes, based on the experiences of the Helsinki City employee program.

The Helsinki rehabilitation program for state employees was prepared by an expert committee appointed by the Ministry of Finance. The committee estimated that the number of state employees in need of early rehabilitative measures varies from five to 15 percent of all state employees. One fact indicating this need was that the number of disability pensions granted yearly to state employees exceeded the corresponding number of age-based pensions. The growing number of disability pensions together with the relatively high amount of sick-leaves indicated that sufficient efforts to maintain the employees' working capacity had not been implemented. The committee believed that the state, as the employer, was obligated to take action in this area.

It was further believed that early rehabilitation would reduce the costs of disability pensions. Early rehabilitation would also result in more effective utilization of the employees' working capacity by decreasing the amount of sick-leave taken and increasing performance levels in daily tasks. At the same time, the committee stated that these efforts were sufficiently justified by humanitarian grounds alone; that is, in providing better opportunities for employees to maintain independence in both their social relations and participation in work life.

**Occupational Health Care, Labor Protection, and Personnel Administration**

In order to initiate early rehabilitation activities in workplaces, we must first find answers to several essential questions. These are:

1. How do we find those employees in need of rehabilitative measures early enough so that there is sufficient time to find and consider possible measures?

2. What kind of services are needed, and how can they be implemented?

3. How do we organize the practical management of the program, what kind of expertise is needed in the workplace, and what kinds of expertise are available from outside the workplace?

4. How do we organize counseling and guidance services during the rehabilitation process?

5. How do we finance these rehabilitation measures?
According to Finnish legislation, there are two organizations in Finnish workplaces which have functions closely related to the functions of early rehabilitation. These are the occupational health care and labor protection organizations, both of which are usually a part of the personnel company's administration department.

Based on the Occupational Health Care Act, the task of occupational health care is to eliminate the occupational hazards and negative effects of the job and the work environment on a person's state of health. The main functions of this organization are:

1. To conduct a workplace survey aimed at finding health risks in the work environment and in the work process.
2. To identify information and guidance concerning these risks.
3. To provide for medical examinations, especially for those whose work includes health risks.
4. To provide follow-up services to monitor a disabled person's state of health and referral to treatment and rehabilitation when needed.

Thus, the activity of occupational health care is aimed at controlling the effects of occupational hazards and at following-up those employees certified as disabled. Although not compulsory, occupational health care may also include medical treatment, and 60 percent of employer expenses are compensated by the National Sickness Insurance Scheme.

The labor protection organization aims to protect an employee's health, safety, and well-being by preventing accidents and eliminating occupational hazards through the planning and modification of work procedures and equipment. Labor protection is based on employee participation. The organization consists of delegates and deputies of safety and health, elected by the employees, and usually a part-time supervisor appointed by the employer. Larger places of employment have a more professional staff whose members specialize in different branches of labor protection. A labor protection committee, which includes representatives of both the employer and the employees, controls and monitors the labor protection activity in the workplace. Personnel administration, for instance, is responsible for intake, placement, reassignment, and training and retraining. These are measures which are often needed in early rehabilitation activity.

The combined management of the employee's different problems at work, which may have somatic, physical, or social grounds, is not included in the normal functions of these organizations. While occupational health care offers a good basis for rehabilitation...
activity, its main interests are in primary prevention and finding (by medical means) the occupational hazards in the workplace. They do not include an individualized comprehensive approach to employees' problems which is needed in rehabilitation.

Programs of Early Rehabilitation in the Workplace

The previously mentioned early rehabilitation program in Helsinki involved the city's Port Authority and Water Works departments, with a total of 1,350 employees. The first program was completed in 1981 and, in spite of relatively good results, was not undertaken by other authorities within the city. The present program, based on the Helsinki experiences, currently includes the employees from three state institutions—the University of Helsinki, the Customs Administration, and a local unit of the Post and Tele Establishment—covering 10,000 out of the total of 250,000 state employees in Finland. The outcome of the program will be evaluated by the State Treasury in cooperation with the Rehabilitation Foundation. (The general scheme of the evaluative study is presented in Figure 1.) On the basis of this evaluation, the possibility of extending the activity to cover all state employees will be considered.

Figure 1. The general scheme of the evaluative study on the outcome of early rehabilitation activity.

The planning of the state employee program was completed by a working group consisting of members from the Ministry of Finance, the State Treasury, and the trade unions of state employees and civil servants. As proposed by the working group, a grant for the early
rehabilitation program was included in the national budget to cover the costs of program management and the rehabilitation measures not financed by other means. The program is supervised by the Ministry of Finance, in collaboration with the trade unions. In practice, rehabilitation activity in the local units is planned and coordinated by the State Treasury. In addition, a rehabilitation organization has been established in all local units.

Rehabilitation Organization

The rehabilitation organization in the local units basically consists of three operational units—a rehabilitation team, contact persons, and a controlling unit. (See Figure 2). In the Helsinki employee program, however, the expertise of the rehabilitation team was secured by using rehabilitation personnel from the Rehabilitation Foundation; whereas in the state employee program, the aim is to achieve the needed expertise by comprehensive training of employees at the institutions. Within the organization of the state employee program, the rehabilitation team is formed with a core group and collaborative experts. The core group consists of a physician, a nurse from the occupational health care unit, and a rehabilitation secretary who is selected from the members of the labor protection body or the shop stewards. The core group identifies the client's program and, together with the client, determines what specific measures can be taken to relieve the problem. The rehabilitation secretary is normally responsible for the practical management and financing of the rehabilitation process, as well as providing guidance to the client.

When changes in the work conditions or reassignments are under consideration, the core group is supplemented by collaborative experts (the personnel chief, the labor protection chief, other labor protection specialists, delegates for safety and health, and the shop stewards of the labor unions). The opinion of the rehabilitatee's foreman or supervisor is always needed before finally deciding on appropriate measures to be taken.

The network of contact persons consists of delegates for safety and health, members of the labor protection bodies and the shop stewards. Their task is mainly providing information on early rehabilitation activity.

The controlling unit outlines the general operational principles on the basis of instructions from the State Treasury and follows the progress of rehabilitation activity. The unit consists of representatives of the employer, the employees and occupational health care.

Client Selection

In both programs, the major referral method is self-determination, and this method is encouraged by information and
support given by the contact person. Since motivational factors influence active participation in, and hence the outcome of, rehabilitation, this method of self-initiated referral is viewed as most appropriate for client selection. In the Helsinki employee project, a supplementary referral method was used and was based on the length and number of sick leaves of a particular employee.

Figure 2. Organization for early rehabilitation and the main functions.
Services and Financing

Rehabilitation may include any services that are aimed at restoring or improving an employee’s working capacity by either developing the individual's own resources or by modifying the work or the work environment. Health education, medical care, and vocational measures are often implemented simultaneously. Rehabilitation and health care services outside the workplace can also be utilized.

Many of the medical measures are provided by the public health care system. The costs of medical rehabilitation are often partly subsidized as the normal practice of the Social Insurance Institution in accordance with the National Sickness Insurance Scheme or the National Pensions Act. Group rehabilitation training is usually organized in the places of employment, and the costs are included in the financing of the program. Most of the work-related measures are implemented as a part of labor protection or replacement activities in the places of employment, without extra financial support. Some of them can also be provided as a part of the rehabilitation activity supervised by the Ministry of Labor.

In the state employee program, all the costs that are not covered by any other means are financed by the earlier rehabilitation grant, so that the costs are totally subsidized to the employee. Physiotherapy, inpatient medical rehabilitation, and compensation for salary loss during rehabilitation have been the most common reasons for this form of financing.

Findings

During the first two years of the state employee program, about 500 (out of the 10,000 employees) applied for rehabilitation, and reactions to the program have been positive in the local units. For the members of the rehabilitation teams, the program has been a new kind of activity, and the training necessary to handle these new tasks has continued throughout the program.

In the Helsinki employee program, where the referral phase lasted nearly two years, 14 percent of the employees of the Water Works and the Port Authority applied for rehabilitation. Medical and health education measures were recommended to nearly all the applicants. Group rehabilitation training, mainly aimed at teaching and motivating self-treatment, was the most common of these measures. Groups were arranged for back and neck problems, as well as stress management and relaxation. With almost half of the clients, recommendations included follow-up of the client's state of health and working capacity in order to assess the need for additional measures. Physiotherapy and further examinations and treatment were recommended to more than 20 percent of the applicants. Recommendations regarding comprehensive outside services, such
as an extensive rehabilitation examination at a rehabilitation institute and psychotherapy, were also given to the applicants when needed. Vocational or work-related services were recommended to nearly half of the applicants. Job reassignments were recommended to 21 percent, job modifications to 14 percent and ergonomic improvements to 21 percent of the applicants.

The realization of vocational or work-related services has been the most difficult part of the activity. A follow-up study conducted two and one-half years after initiation of the city employee program showed that 48 percent of the work-related recommendations had been accomplished and that ergonomic improvements had been realized slightly more often than job assignments and job modifications.

Job reassignment usually involved a lengthy consultation with the rehabilitatee and frequently required considerable time waiting for a suitable vacancy. The many problems connected with the realization of job reassignments included:

1. The difficulties in finding suitable vacancies, especially for unskilled employees.
2. The foremen's unwillingness, due to high production demands, to recruit an employee with a lowered working capacity.
3. The salary losses resulting from new assignments.
4. The higher age of retirement in the new vacancy.
5. The lower status in the new vacancy and the limited possibilities for career development.
6. The employee's strong occupational identity and emotional attachment to his/her present work unit.

To decrease the problems and uneasy feelings often connected with reassignments, it has proven useful to implement them on a trial basis first. This gives the employee an opportunity to adapt to the new situation gradually, and if the placement turns out to be unsuccessful, an opportunity to return to his or her previous job. In some cases, a successful reassignment has been guaranteed by compensating a salary loss resulting from the reassignment, either by a partial pension or by maintaining the former salary despite changes in the work. And lastly, the positive attitude and social support given by the employee's foremen and coemployees is of utmost importance in the implementation of work-related measures.

As we move forward in the further development of early rehabilitation in the workplace, there are several questions that have
risen from our projects that still require definitive answers. First, how should the practical management of such programs be organized? Second, how are these activities to be financed in a continuing basis? Third, how can employees in need of measures be identified early enough for intervention to be effective? Fourth, how is the need for various measures to be assessed and how shall they be realized? Fifth, how should the counseling and guidance function be organized? And sixth, how can we make the general atmosphere in the workplace positive towards this activity? Development of workplace programs can benefit from similar research and demonstration projects in which alternative answers to such questions can be researched and refined.

References


IMPACT OF EMPLOYEE ASSISTANCE AND RISK MANAGEMENT ON DISABILITY COSTS

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Dr. Edward Hester is the director of the Research and Training Center for The Menninger Foundation. Dr. Hester received his doctoral degree in industrial psychology and psychometrics at Loyola University in Chicago. During his tenure at Goodwill Industries, he invented the first computer-assisted vocational evaluation system.

A Research and Training (R&T) Center for vocational rehabilitation has been established at The Menninger Foundation to improve rehabilitation services for the severely disabled, particularly those who are or are likely to become SSDI recipients. The R & T Center, funded in part by the National Institute of Handicapped Research, works very closely with state rehabilitation agencies, the national Projects With Industry network, Emporia State University, and university programs that include the Rehabilitation Engineering Center of Wichita State University and the University of Kansas.

Unemployment and underemployment are major problems for a majority of handicapped adults in this nation. Based on 1980 data, the Bureau of the Census reports that 35.6 million Americans, nearly one in every six people, have a physical and/or mental disability that makes normal living and working activities difficult. There are more than 13 million disabled people between the ages of 16 and 64. Even more striking is the fact that of those who have the good fortune to reach the current official retirement age, 25 percent will be disabled.

The goal of the Center is to explore, develop and disseminate a unified body of knowledge which enhances the prevention or eliminates disability dependence among those handicapped individuals who are capable of gainful employment.

Project methodology centers around four core areas. These are:

1. Prevention—the Center is investigating ways to prevent disability dependence through programs that employers, insurance organizations, and health systems can use to reduce the incidence of employment termination for medical reasons.
2. **Intervention**—the Center is exploring early rehabilitation intervention strategies. The sooner a person becomes involved in some type of rehabilitation program following injury, the more likely it is the disabled person will return to the work force. Consequently, the Center is working closely with state vocational rehabilitation agencies, insurance agencies, and other rehabilitation professionals to determine the most effective and practical methods of early intervention.

3. **Worksite Modification**—since accommodations can be crucial to the successful employment of disabled persons, vocational technology is beginning to develop new techniques for adapting work stations, modifying equipment, and improving access to worksites for disabled persons. The Center is attempting to increase the use of these modifications in the nation's businesses.

4. **Training**—the Center will act as a catalyst to improve policies and practices for rehabilitation. This will be accomplished by producing seminars for national policy makers, industrial and union leaders, vocational rehabilitation administrators, insurance executives, and rehabilitation professionals. The Center will also provide new curriculum components to undergraduate and graduate training facilities.

Prior to developing specific projects in each core area, the Center conceptually examined the disability process to determine the relationship among the various key elements. This conceptual plan provided the framework for the individual core areas and helped to identify prevention and intervention projects that will optimize the effect of the programs.

The resulting model (see Figure 1) presents a preliminary analysis of the process by which a person moves through disability to either economic independence or dependence. This model considers the worker who is employed at the time of disability. Variations of this model would consider the two other important conditions; namely, the worker who is unemployed at the time of injury or illness and the entrepreneur.

In the past, researchers and program evaluators have tended to study disabled people as a group unless they were studying a specific disability classification. In our model, we are most concerned with how the worker becomes disabled, tracing the problems encountered along the six alternative routes shown in the model.

Sometime after the onset of the disability, a vocational decision will be made by the individual, the physician, and/or the company. The person may return to work at his/her previous job, either with or without worksite modification, or the person may be reassigned to a job which is more suited to the person's residual
Figure 1. Conceptual model of disability process for individuals who are employed at time of disability.
abilities. While this latter alternative seems ideal, there are often reasons why it cannot, or is not, being done, such as the size of the company, the type of industry, or the fact that there are no openings in appropriate jobs. When there are appropriate jobs, the company's policies or its union agreement can sometimes prevent reassignment to other jobs.

The proof and ultimate utility of a conceptual model is whether it can be subjected to the rigors of mathematics. If the model is correct, the correct output data will be generated when known input data is entered. That is, if we know the numbers of persons becoming disabled during a specific year and various other relevant variables, we should be able to closely estimate the number of people who will become economically dependent. If the resulting estimates are significantly incorrect, we would know that our model is in error. If this happens, we would have to study the model further to determine how it can be improved in order to more closely approximate reality. After modifications, the data can again be applied to the model. If the results are still not acceptable, the process has to be repeated. This conceptual model, called WORKNET, is being constructed by Dr. Alex Levis of the Massachusetts Institute of Technology.

In order to obtain the necessary data to study the flow of a person into, through, and out of the disability support and rehabilitation system, it was decided that we should try to obtain data as complete as possible from two states. The state vocational rehabilitation directors in Kansas and Illinois have agreed to cooperate in this research effort.

During the past decade, the private sector has experimented with numerous health care programs designed to curtail absenteeism, reduce accidents, increase productivity, stabilize insurance costs, and prevent the loss of trained personnel due to medical disability. Although many of these corporate and union disability prevention programs began as alcohol and drug abuse services, the majority have expanded to include many levels of "wellness" programming that seek to "shift" from payment for illness and injury to programs designed for disease prevention.

Primary prevention requires a long-term outlook which has not been the forte of American business. However, the popularization of the Japanese approach to business by Ouchi in Theory Z has resulted in some major American industries taking a long-term approach to profits as documented in Naisbitt in Megatrends.

The Menninger Foundation has designed and is operating a prevention service for corporations, unions, and government employees. The Menninger Employee Assistance Program (EAP) is used by both large and small organizations for employees with problems that affect job performance. In the case of employees at
risk of medical termination, EAP allows the employer, treatment team, and other parties to design prevention strategies for resolving work-related problems. Our research project, P004-Employee Assistance Programs, will examine the utility of this and other EAP programs to determine the extent to which they can control disability-related turnovers.

Secondary prevention programs are those which begin when the person becomes disabled and continue until the person either retains his/her employment or becomes unemployed.

Rehabilitation practitioners and policy analysts agree that secondary prevention can improve work attitudes expedite positive rehabilitation outcomes and improve the efficiency of the entire rehabilitation system. The focus of the Center's prevention research will be the identification of successful models in the public and private sector and the subsequent adaptation of these disability dependency prevention models to demonstrate their relevance to the SSDI population. The basic question examined in this area will be to determine the strategies which will produce a positive vocational outcome for a predictable SSDI population and, thus, reduce dependence on disability benefits. For instance, P001-Project Retain involves the initiation of rehabilitation counseling and services as soon as possible after the onset of disability. A demonstration program is being developed in Chicago by The Menninger Foundation and the Office of Economic Development at City Colleges of Chicago. These rehabilitation services are being offered to injured or seriously ill employees of selected companies.

As Dr. Galvin has pointed out, some major corporations are attempting to reduce their costs of disability by establishing their own rehabilitation programs. In P003-Return to Work Programs, we are investigating the effectiveness and replicability of these programs.
Dr. Sheila Akabas is a professor and director of the Industrial Social Welfare Center at Columbia University School of Social Work. Dr. Akabas has authored general texts relating to mental health in the workplace. Last year, as a Fellow for the World Rehabilitation Fund, she examined corporate rehabilitation programs in England and Canada.

Ten years ago, we at the Industrial Social Welfare Center of Columbia University School of Social Work were talking about the role of prevention in rehabilitation and were informed that prevention is not rehabilitation. I am glad to see that rehabilitation has moved to the point where it incorporates prevention, because I feel sure that prevention will help increase our successful outcomes.

As rehabilitation professionals know, rehabilitation has changed a great deal in the recent past. Instead of large "warehouses" for mentally retarded and mentally ill people, we now have community support programs. Instead of barriers to be faced by physically disabled persons, we have curb cuts and buses with lifts. When the Michigan State University Provost talked about MSU as being a place where all kinds of people come to study, I was reminded that education was one of the things that disabled people have been deprived of for so long, and it is good to see those barriers come down as well.

This panel has exemplified the team approach to rehabilitation, since it is composed of representatives of the various sectors of the work world. Too often, parties that are important to the rehabilitation process are left outside the rehabilitation process, barred by stereotypes of how we believe they might behave rather than included in a problem-solving effort. This panel clearly suggests that rehabilitation has developed a true partnership with trade unions, management, government, private and public agencies and disabled persons themselves. This is the first step to assuring a systematic approach to rehabilitation.

Another important issue raised by the panel is the training of rehabilitation professionals. If we are to achieve early rehabilitation, we may have to accept some new ideas such as offering rehabilitation before the condition is stabilized or promoting individual self-interest. It seems all right to tell students that in the
long run it may not matter whether or not a corporation hires a
disabled person simply because it wants to protect itself against
charges of discrimination. Once the disabled worker has a foot in
the door, job tenure will become a matter of performance, regard-
less of the original reason why the disabled worker was hired in the
first place.

Over the years, I have seen many myths and stereotypes
exploded. Dr. Collignon's report has certainly given us pause to
reconsider the myth that accommodation may be a very expensive
proposition. I would now like to offer information that might
explode yet another myth—the one that stereotypes multinational
corporations as inhuman and dangerous giants. I gained this
information after having visited many corporate representatives in
both England and Canada as part of a World Rehabilitation Fund
fellowship.

Corporations have cultures, and within that culture, behavior
is defined as desirable or undesirable. In many of the sites I
visited, it was clear that managers have received accolades for
effective employment of disabled persons and that just as often
these accomplishments have been written up in corporate publica-
tions or discussed at international corporate meetings. This
message of approval is understood quickly in such cultures. Under-
standably, managers throughout the multinational corporation move
to duplicate behavior that has been perceived as exemplary. In
addition, managers are often transferred from country to country.
Under these circumstances, the multinational corporation becomes
the carrier of a culture devoted to rehabilitation and
employment of persons with disabilities. The corporation becomes
our ally rather than a stereotyped enemy.

One final thought before I conclude. Several members of the
panel have discussed the changing nature of disability. It may be
that with new technology which can remediate certain disabilities
and with broad-based safety efforts which may help prevent the
occurrence of some disability, we will see a reduction in the number
of people with certain preventable disabilities. As people live longer,
however, we know that they are likely to become disabled from long-
standing, chronic conditions. Rehabilitation will also face new
challenges to help those who are already at the workplace and are
developing disabilities that require rehabilitation and/or accommoda-
tion on the job. As that happens, we will have an increasing need
for the varied programs described here—particularly early rehabilita-
tion at the workplace—in order to achieve equal opportunity for
all, including disabled persons.
SESSION II

EMPLOYER INITIATIVES--POLICY IMPLEMENTATION
SESSION II: EMPLOYER INITIATIVES—POLICY IMPLEMENTATION

Moderator: David Evert
Control Data Corporation
Minneapolis, Minnesota

David Evert is currently marketing manager of the disability services division for Control Data Business Advisors. His education was in business administration at Creighton University. Mr. Evert has worked in claims and risk management disability benefits, human resource and disability management for many years and is a frequent lecturer and writer on these topics.

A couple of years ago, the manager of disability and affirmative action for a major retailer in this country reported an important finding from a research study conducted by the company. They had looked at all of the people who had gone on disability during the previous year and compared them with all of the people who had been sought and employed as disabled persons. The study indicated that no individual who had gone on disability could be objectively shown to have nearly as much physical, mental or emotional disability as any of the people who had been sought and hired. This astounding piece of research provided the motivation to make a significant policy change within the organization. This is the fundamental point that we must consider—in many instances, one side of the house is doing a great deal of positive work, while the other is wasting human resources and losing income out of the back door.

This session basically focuses on what can be done to maintain human resources. The difficulty that we face is summed up in the question: How do you sell this kind of proactive activity to employers and get them to take action? This session gives us the opportunity to learn about successful models in operation, including several programs that are currently being implemented around the world, so that we can translate these ideas into benefit statements to employers and move them to take positive action.
Dr. David Jones is the group chief medical advisor for Pilkington Brothers, P.L.C., a glass manufacturing company in Merseyside, England. Dr. Jones received his medical degrees from the University of Liverpool. He also has a diploma in industrial health and is a member of the faculty of Occupational Medicine, Royal College of Physicians in England. Dr. Jones was formerly the medical adviser of Hawker Siddelly Aviation Ltd. (now British Aerospace Corporation).

Pilkington, a multinational company based in the United Kingdom, is currently the world's largest producer of flat glass and the other glass-related products. The company's rehabilitation program is based in the Merseyside area where the workforce now numbers approximately 9,000.

The rehabilitation service was started in 1947 to provide immediate, on-the-spot treatment, including operative surgery and physical therapy for the high number of severe injuries due to the hazardous nature of glass production at the time. For many years the service was confined to the treatment and rehabilitation of accidents and injuries at work. With the advent of safer glass production processes, the scope of the service was widened to its present focus which covers most aspects of accident and illness.

The current aims and overriding principles of the service are to reduce time away from work due to illness or accident and to avoid, where possible, placement of unnecessary work restrictions upon individuals. A previous, overprotective policy of "light" duties has had to be seriously reevaluated in light of reduced staffing levels and to maintain the principle of flexibility in the types of job an individual may perform.

The staff at the group centre includes physicians and a full complement of nursing and paramedical professionals, including a radiographer and a physiotherapist. In addition, each factory unit has a self-contained medical center staffed by registered nurses trained in occupational health. For employees who suffer illness rather than injury, the primary medical care is supplied by their own family physician, as is the practice in the U.K. However, the group medical service is aware of such cases and works closely with family physicians. It also offers rehabilitation services when appropriate, including counselling, investigation, advice on job suitability and liaison with other works departments.
Physical Therapy

All employees are able to benefit from the company's physical therapy service. The aim is to provide therapy in the course of the working day and thus reduce unnecessary absence and traveling time for hospital visits. Patients are referred by several means. The most common referral procedure is by direct approach from an occupational health nurse in cooperation with a doctor, typically following an accident. In addition, local family physicians and hospital specialists in the neighboring areas are aware of the service and can refer directly to it. One new approach is currently being tried; whenever an employee is absent from work due to an orthopedic-related illness, they are automatically seen by a physical therapist upon their return to work. The therapist can thus either provide treatment if indicated or, more often, provide useful advice in regard to the prevention of further disability. An example of this process might be an employee with a history of frequent absences due to chronic back strain. The various reasons for this can be elucidated, advice given in regard to the handling of loads and so forth, and, in liaison with management, alterations may be made to the work site.

All patients undergoing physical therapy are reviewed regularly in conjunction with a doctor, and where necessary, discussions can take place with departmental management to facilitate an employee's rapid return to work. Initially, job modification may be required, and this may be specified precisely in conjunction with work site visits. As a result of the close liaison between patient, therapist, doctor, and departmental manager, other related problems may come to light, such as socioeconomic factors, psychological problems and stress-related illnesses.

The department is busy. According to the latest figures available for 1982-83, the physical therapy service had 344 newly registered patients over a 12-month period. While the length of individual therapy varies, it was seldom less than four to six weeks. In more complex cases, such as multiple nerve lesions or severe hand injuries, the therapy can extend beyond one year. A special example of physical therapy relating to employees who have suffered a myocardial infarction is detailed below.

Transitional Workshop

For those employees who are ambulant but unable because of a temporary illness or disability to attend their normal workplace, a transitional workshop is utilized where these employees may perform useful jobs at a level appropriate to their disability, under the guidance of trained staff and physiotherapists. This form of rehabilitation workshop, as its name implies, is intended either to overcome the gap between being totally incapacitated of all work and being fully fit for normal work or to provide permanent alternative
work where this is deemed necessary. The workshop is open to all Merseyside-based employees and can take up to about 30 employees at any time. The average stay varies from about four weeks up to several months, depending upon the particular medical circumstances. For most employees, the workshop pay rate is based upon an average of their preaccident illness level. Admission to and discharge from the transitional workshop is at the discretion of the physician in charge in cooperation with the rehabilitation staff.

The economics of such a facility has recently been brought into question. Currently, it registers a loss of approximately 30,000 pounds ($43,000) per annum, despite producing a larger number of goods for sale both within and outside the organization. The economic problem is related to the use of simple hand or foot operated machines which are designed for rehabilitation of injuries rather than speedy production. As a result of this loss-making situation, which is not due to lack of orders, alternatives are being considered. One alternative is to alter the workshop to become a skills assessment center, whereby those disabled by injury or illness may have their work capability formally analyzed so that suitable job modification may be made in light of the rehabilitation team's report. Another economic factor influencing the success of the workshop has resulted from legislative changes in the benefit structure. In recent years, there has been noticed reluctance on the part of the employees to enter the workshop. State welfare benefits often favor the employee who stays at home and tends to penalize those who come to work. A recent change in the U.K. State Sickness Benefit Scheme whereby employers are now responsible for the first eight weeks of sickness benefit has not helped, as those who are declared sick officially gain other welfare benefits and tax assistance from the State. At present, there has been no middle way between being off work and being fully employed.

**On-Site Job Modification**

With the recent demand made upon employers by the economic recession, undermanning and job flexibility has provided a difficult challenge to those employing the disabled. There are an increasing number of employees who are thrown out of work because of minor disability and the implication of this on the long-term disabled is serious. It is one of the roles of the rehabilitation team to encourage employers to accept disabled persons and to assist in altering the work site to accommodate these individuals. Statistics have always shown that long-term disabled people have good work performance records and often better sickness-related absence records than their fully fit counterpart. Although the U.K. has a quota scheme for the employment of the disabled, the key to improving the hiring practices of the disabled is an effective liaison between management and health professionals. In addition, organizations have a responsibility to current employees who may become disabled.
Myocardial Infarction Rehabilitation Program

Pilkington is the only U.K. industry to provide a comprehensive rehabilitation scheme for employees who have had a myocardial infarction, despite the fact that the U.K. is second only to Finland in the world league table for this disease. Charts taken from our own records in the mid-1970’s indicate the scale of absence and disability from this single cause.

Table 1
Mean Length of Absence Due to Infarcts by Age Group (1975-1976)

<table>
<thead>
<tr>
<th>Age</th>
<th>Weeks absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-35</td>
<td>0</td>
</tr>
<tr>
<td>36-40</td>
<td>18</td>
</tr>
<tr>
<td>41-45</td>
<td>32</td>
</tr>
<tr>
<td>46-50</td>
<td>29</td>
</tr>
<tr>
<td>51-55</td>
<td>26</td>
</tr>
<tr>
<td>56-60</td>
<td>22</td>
</tr>
<tr>
<td>61-65</td>
<td>17</td>
</tr>
</tbody>
</table>

Note. The data were derived from Cowley Hill Works (n=38) and Triplex Glass Works (n=15). The incidence of cases per 1,000 employees was 5.93 and 4.76 respectively.

The Pilkington program aim is three-fold: to produce a rapid and effective return to normal preillness employment, to rapidly establish and arrange appropriate therapy for those in whom cardiological complications occur, and to produce an alternate lifestyle in both a physical and psychological sense to attempt to reduce the reinfarction rate. The Pilkington Scheme has the advantage of simplicity, cheapness, and effectiveness. The results to date suggest that the off-work time for the majority of these patients has been considerably reduced. The scheme is so devised that almost any organization with access to medical and physiotherapy facilities could organize and run a program with a minimum of disruption to the normal working routine. The scheme is based to some extent on similar schemes run by cardiology centers in the U.S. and to a lesser extent in the U.K.

Listed are an ideal timescale or events for an employee suffering from myocardial infarction. It should be noted that our rehabilitation program aims are to start at about six to eight weeks post-infarct up until the return to work is scheduled, usually at about the tenth week.
Figure 1. Time scale and intervention for rehabilitation of post myocardial infarction employee.

The components of the policy assessment process for post coronary rehabilitation proceed as follows:

1. Type/characteristics of patient
2. Obtain clinical information
3. Conduct physical examination
4. Perform exercise electrocardiography
5. Explain program
6. Make final assessment
7. Discuss with therapist
8. Begin program

Based on the assessment results, the intervention proceeds accordingly. An ideal timescale program procedures are presented below.
Week 1
- Introduction to therapist and other participants
- Explain pulse rates control procedure
- 4-5 one hour sessions of simple exercise
- Discussions about risk factors and home exercise advice

Week 2
- As per Week 1
- Conduct medical assessment at end of Week 1

Weeks 3-4
- Increasing activity, use of equipment for timed periods and pulse rate control
- Further counseling on individual basis
- Conduct second medical assessment at end of Week 4

Week 5-8
- Increasing activity, longer timed periods, longer sessions
- Conduct third medical assessment at end of Week 7

Weeks 9-12
- As per previous 4 weeks
- Overall evaluation by physician and therapist at end of Week 12

Week 13+
- Continue, reducing attendance level to 1-2 times per week for up to 3 further months of needed.
- Medical reviews as required

Summary

To summarize, the Pilkington schemes are designed to provide on-site, immediate rehabilitation for a wide variety of accidents and illnesses to ensure that subsequent disability, whether permanent or temporary, is handled efficiently from the outset and with a minimum of time away from work. For many employees, rehabilitation can and does take place during the normal working day and the time away from work for treatment is thus reduced substantially.

Similar schemes also apply to the assessment and employment of new disabled employees, with whom a very close liaison is maintained between representatives of medical, welfare, personnel and on-site line management to ensure maximum utilization of the available skills of the disabled worker.
A TRANSITIONAL WORK CENTER AT THE WORKPLACE

Ken Wright
Herman Miller Corporation
Zeeland, Michigan

Mr. Ken Wright is the manager of the Transitional Work Center Services for the Herman Miller Corporation in Zeeland, Michigan. Mr. Wright is responsible for ergonomics and work station modification for Restricted employees in a program that emphasizes counseling and personal involvement with the employees.

Our company is a newcomer to rehabilitation, so let me begin by telling you how our transitional work center evolved. The Herman Miller Corporation is an international company that manufactures office systems. We are proud to be listed among the top 100 companies in the United States to work for, and part of that recognition has come from our involvement in the transitional work center. About two years ago, we noticed that we had a significant proportion of our employees home with work-related medical restrictions. Our company has a unique pay system that is part of our Scanlon Plan of management. What this meant to the company was that we were paying these people full pay to be at home. The predominant age range of employees at Herman Miller is roughly 20-45 years of age. So when we have one of our young people injured or ill, especially those with a major injury or illness, we have a long haul ahead for the company. Our CEO decided that we needed an effective way to keep these people in the work force. We had no idea how to start or what should constitute a rehabilitation program in a company our size.

Let me share with you a formal description of our program as it has developed. Injury and disability are words that no one likes to hear since they bring problems not solved by the body's healing process. Depression and a loss of self-confidence and self-esteem can result from a lingering injury or disability. Our Transitional Work Center is designed to help employees facing these problems by providing a program that helps injured or disabled employees come back to work. They can work shorter hours or at a less strenuous job, or both, until they are physically able to return to their regular positions. And while the employees work their way back, they maintain or regain their self-esteem and self-confidence.

The Transitional Work Center is both a place and a program. The center is centrally located on Herman Miller's main site with easy access by elevator. It is a clean, bright place where employees can work while recovering their health. It's off-the-beaten-track location gives employees a private place where dis-
abilities are not viewed as unusual and is close to the employee health service and the insurance claims office, both services regularly used by injured or disabled employees.

Employees report their injuries or disabilities to their supervisors. Then, the health service, working directly with the employees or through their personal physicians, establishes work restrictions. If the work restrictions are severe, the health service refers employees to the Transitional Work Center. The supervisor of the center counsels the employees and places them in working positions consistent with the restrictions determined by the health service. Whether the position is in the offices, an existing production department, or in the Transitional Work Center itself, the employee receives daily personal attention from the center supervisor who keeps close contact to see how the job assignment works out. In addition, the health of the employees is monitored by the health service to make sure their recovery is not hindered by the tasks performed. While employees are working through the Transitional Work Center, they maintain contact with their home departments by attending department meetings and by receiving all department memos or mailings. That makes returning to regular jobs easier.

The Transitional Work Center benefits the company as well as the employees who work there. The company pays compensation whether or not employees come back to work after an injury or disability. But if an employee can return to work, even on a part-time basis, the company receives some value for its workers' compensation dollars. Since Herman Miller's premiums for disability insurance are based on the company's use of the funds, the fewer dollars employees collect in disability pay, the lower the cost to the company. That the Transitional Work Center is needed and has been well-received was clearly shown during its first year of operation. Employees were assigned to the Center for an average of about three weeks each which represented a benefit savings of an estimated $150,000 to the company.

But the role of the Transitional Work Center is broader than just placing employees suffering from injuries or disabilities. We counsel supervisors on the placement of less severely disabled employees within their own department, and we work with manufacturing, engineering, and production employees to redesign work situations that produce injuries.

Finally, let me tell you something about my role and experience with this project to date. Like all employees at Herman Miller, I started on the floor, despite six years of college education. In the process of working my way through the system, I think the biggest asset that I gained was from my work with the ergonomic and the univation teams. This is a standard-setting group that requires knowledge of all the floor functions, all the products made and all the part members. This has helped me with the rehabilitation process since my duties now include ergonomics and job modifications.
At this time, we have an average of 50 people involved in the Transitional Work Center weekly, from a possible pool of about 800 people (in Western Michigan). I work with 40-50 people on a daily basis. The individuals who report directly to me fall into two categories—people restricted to light duty whose average turn around to full duty takes about three weeks and people with permanent restrictions whose return to work, if it is an occupational injury, could take up to two years. In the case of a nonoccupational injury, such as a car accident, we will work with these individuals from 12 to 18 months, using the state rehabilitation agency and other appropriate agencies as resources.

Our main focus at Herman Miller is human resources. As a Scanlon company, we have a participative management philosophy. This means that employees have the right to challenge others in the company on a decision that is made. On the other hand, we also have a responsibility to all employees, when they are hurt as well as when they are able-bodied, and we take that challenge seriously. In slightly less than two years of operation, we have involved 253 people in the Transitional Work Center and have yet to lose one candidate. By that I mean they have successfully gone through the rehabilitation process and have either returned to work, found alternate jobs, or are in the process of finding them.

Our experience tells us that it is extremely important to "talk" with the employee to make this program succeed. Much of my time is spent counseling workers, especially those who have been off work for a long time. Personal attention, demonstration of caring, and support of a positive mental attitude can make the difference in whether or not an employee gets back to work. We encourage restricted workers to learn new jobs in which they have an interest, and to learn another aspect of the company. These experiences are entered in their personnel file to help them when they apply for another job within the company. In addition, restricted workers receive full wages while at the Center, regardless of the type of job or number of hours. For persons with light duty restrictions, we maintain a list of jobs that are matched with certain restrictions and advise supervisors on the appropriate job for the temporarily disabled worker. This allows the employee to remain in the home department, if at all possible.

To date we have realized benefits in terms of employee morale for those going through the program and in terms of substantial savings in employee salaries. The savings are based on wages that would have been paid to replacement workers. Further savings include eventual reductions in Worker's Compensation premiums and potential savings in medical insurance costs.

Tangible benefits aside, our company operates with a long-term goal of commitment to employees. The Transitional Work Center has helped us demonstrate this goal.
AN ASSESSMENT SYSTEM THAT MATCHES ABILITIES WITH JOB REQUIREMENTS TO FACILITATE REINTEGRATION OF DISABLED PEOPLE INTO EMPLOYMENT

Erich Mittelsten Scheid
ERTOMIS Foundation
Federal Republic of Germany

Dr. Erich Mittelsten Scheid is the chairman of the Advisory Board, Vorwerk & Co. He formerly served as a member of the Advisory Board for Deutsche Bank and as chairman of the Board of Trustees, University of Wuppertal. In 1973, Dr. Mittelsten Scheid founded the ERTOMIS Foundation, for the promotion of activities in the field of rehabilitation, and is chairman of this organization.

The main difficulty for disabled people after their release from rehabilitation is the search for gainful employment in jobs appropriate to their residual abilities. One of the predominant reasons for this problem is the habit of hospitals and rehabilitation treatment centers to give to the disabled person documentation of his/her deficits, instead of documentation of his/her residual abilities. An employer receiving an application for employment from a disabled person should know what kind of a job the applicant could reasonably take so that he/she would be neither underdemanded nor overdemanded.

The selection of such a job from the large variety of jobs available in business and industry would require means whereby both the abilities of the applicant and the requirements of the job could be appropriately assessed, and these assessments compared. This comparison should enable a decision on the qualification of the applicant for the job. That decision should be made by a specialized expert who has had an opportunity to observe the applicant over a longer period of time both at work and as a person. An appropriate system would demand one set of criteria able to assess both the individual abilities of the disabled person and the requirements called for in the job under consideration. Such a set of criteria should, according to Dr. William Frey, be confined by the most basic or key-functions of man.

The ERTOMIS Foundation of Germany, stimulated by Prof. Dr. K.A. Jochhelm, has developed such a set of criteria in accordance with the principles of the World Health Organization as described in the International Classification of Impairments, Disabilities and Handicap (ICIDH) (WHO, 1980). The ICIDH defines and classifies in great detail a comprehensive set of terms, including physical and mental impairments, disabilities (as a result of the impairments), and handicaps for the individual (resulting from such impairments and disabilities).
ERTOMIS approached the task of selecting a set of criteria from a slightly different point of view. Separate working groups for medical, psychological, and ergonomic research, each from its professional point of view, defined a set of basic functions and behaviors, relevant to disabled people (abilities) and required for jobs to be performed in business and industry (requirements). The medical set of criteria has been modified so as to coincide to a great extent with the World Health Organization's ICIDH classification of disabilities. These have been extended to include some impairment criteria and some criteria related to daily living. These criteria have subsequently been integrated into one set of 63 criteria applicable to all kinds of disabilities and to all kinds of jobs.

The integrated set of 63 criteria (elemental functions) is subdivided into seven groups:

**Group 1:** Functions of the upper and lower limbs, trunk, and head mobility, and ability to coordinate movements such as finger, hand, lower arm, right and left leg, etc.

**Group 2:** Basic postures and movements such as standing, walking, carrying, etc.

**Group 3:** Functions of sense organs such as seeing, hearing, touching, etc.

**Group 4:** Psychologically-based personal behavior such as motivation, attention, learning ability, vision, creativity, etc.

**Group 5:** Communication functions such as speaking, writing, etc.

**Group 6:** Tolerance of environmental factors such as light, climate, liquids, toxic gases, etc.

**Group 7:** Other abilities, such as leadership.

Each criterion has been carefully defined in a manner understandable by both scientists and practitioners in business and industry. (A complete set of the criteria and their definitions is provided in Appendix I).

Each criterion is to be carefully assessed and rated in one of four grades both for the Abilities Profile (APr) and for the Requirements Profile (RPr) (See Table 1).
Table 1
Grading Categories for Rating Functional Abilities and Work Requirements

<table>
<thead>
<tr>
<th>Grade</th>
<th>Abilities Profile (APr)</th>
<th>Requirements Profile (RPr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No disability, normal ability available</td>
<td>Normal, full ability required</td>
</tr>
<tr>
<td>1</td>
<td>Slight disability, slightly reduced ability available</td>
<td>Slightly reduced ability required</td>
</tr>
<tr>
<td>2</td>
<td>Seriously disabled, seriously reduced ability available</td>
<td>Seriously reduced ability required</td>
</tr>
<tr>
<td>3</td>
<td>No ability available</td>
<td>No ability required</td>
</tr>
</tbody>
</table>

Most of the gradings have to be assessed since they cannot be measured. Assessment requires thorough training and agreement on the concepts of "normal," "full," "slight," "serious," and so forth, and it would be desirable to arrive at an international coordination of such concepts. Previous test runs have shown that practitioners in industry learn reliable assessment techniques fairly easily.

The assessment for the APr should be made upon release from the rehabilitation center by medical, psychological and vocational-educational experts who have had an opportunity to observe the disabled person over a longer period of time at work and as a person. In case of transfer from one job to another, this assessment should be made by the industrial physician or psychologist, if available, or by well-trained foremen, supervisors, department heads, and others who have had an opportunity to observe the person to be assessed over a long period of time.

The results of the professional assessments must be integrated by joint action of the experts on each of the 63 criteria. The results of these decisions are then entered onto the ERTOMIS employment sheets as follows:

- The Abilities Profile form is printed on a transparent sheet. The Requirements Profile form is printed on a white sheet of paper.
The gradings for each criteria are to be entered in the space beside the criteria on each answer sheet.

Ability ratings are indicated with a cross (X). The requirement ratings are indicated with a circle (O).

As mentioned above, a decision on whether to hire a disabled person for a job requires that the abilities of a disabled person applying for a job be compared with the requirements of the jobs to be filled. That comparison is effected by laying the APr over the RPr. Since the APr is printed on a transparent sheet, one will see both profiles simultaneously and thereby can easily decide which condition applies. The result can show that:

1. The applicant is overqualified for the job - could be hired if wage income would be sufficient. In this case, X appears to the left of the O; meaning that ability is superior to requirement ("underdemanded").

2. The applicant is well qualified for the job and could be hired. In this case, X covers the O; meaning that ability is equal to requirement ("optimum demand").

3. The applicant is underqualified for the job and could not be hired. In this case, X is to the right of O; meaning that ability is inferior to requirement ("overdemanded").

In many cases slight deficits of no more than one grade will appear, and such cases should be reconsidered by the industrial physician. He should decide whether or not the job is nevertheless suitable for the disabled applicant.

This system was initially tested in rehabilitation centers, in sheltered workshops, and in a variety of industries and businesses. Further research is currently underway. Test runs in a sheltered workshop for psychiatric cases produced 40 APr of psychiatric cases and 40 RPr of the jobs they were working on. Six cases out of the 40 showed clearly during the comparison of APr and RPr that the persons were seriously overdemanded. Cathemnestic analysis showed that these six people quit their jobs since the test had been made due to being seriously overdemanded.

Since an international coordination of the concepts and methodology of this system is so vital, it is hoped that an international exchange of experience is initiated to further the development of the system.

HOW TO DEVELOP A SYSTEM TO ADAPT WORK SITES

Gerd Elmfeldt
Assessment and Rehabilitation Institute
Sweden

Dr. Gerd Elmfeldt is the Director of the Vocational Assessment Institute in Goteborg, Sweden. Dr. Elmfeldt's research has addressed the vocational behavior and work performance. She is the author of Descriptions of Clients in Vocational Rehabilitation and Prediction of Work Capacity and a co-author of Adapting Work Sites for People with Disabilities, published by The World Rehabilitation Fund.

There are, in every country, a very large number of situations in which work sites need to be adapted. These include:

- People with disabilities about to enter employment
- People who are employed and have become disabled
- Employees who are at risk of disability if work sites are not adapted.

These situations are ubiquitous and universal. Even in a small country like Sweden, there are many situations demanding the adaptation of work sites. There is a law in Sweden necessitating the report of all occupational injuries. Of these reported injuries, 60 percent are caused by unilateral motions and strenuous work positions.

But who has the knowledge to adapt work sites? There may be some experts in a country who know the technological aspects of how to adapt work sites, but they are often experts in specific types of adaptations. Although it is not possible for them to discover all work sites requiring adaptation, they can help in adapting the sites when the obstacles are assessed. How can this problem be solved?

In Sweden, we have tried to develop a system to fit "work site adaptation glasses" on a large number of people at many levels and not only on experts. That is to say, we are developing a system that can make people all over the country recognize that a solution is possible, that they can discover and assess obstacles in the working environment, and know where to turn to get the work site adapted.

Background

Sweden, like many other countries in the industrial world, is technologically advanced. We have eight million inhabitants and
about four million Swedes are gainfully employed. Our goal is to give everyone an opportunity to gain access to a position in the Swedish labor market system. The following illustration (Figure 1) shows a simplification of the major avenues for entering or leaving the labor market.

Figure 1. Major avenues for disabled people entering and leaving the Swedish labor market

In conjunction with the U.N. International Year of the Disabled, the Swedish Institute for the Handicapped collaborated with the author to gather information about adapting work sites for people with disabilities. The Swedish Institute for the Handicapped works with investigations, research and development, testing, education and information about technical aids, housing and environmental planning for people with various kinds of disabilities. The Institute is financed by the government and the Federation of Swedish County Councils.

The information we gathered was disseminated, in book form, all over Sweden. The book, Adapting Work Sites for People with Disabilities: Ideas from Sweden, was subsequently translated into English in order to spread these ideas beyond Sweden. The design of the English version and distribution in the USA has been carried out in cooperation with the World Rehabilitation Fund.

The following presentation illustrates some of the most important parts of the book, describes how the work is progressing and indicates what we expect from the future.
Swedish Policy Concerning the Disabled

The government has formulated a political goal concerning the disabled. Essentially, it states that the Swedish policy goal concerning the disabled must be to make society accessible for all, to provide disabled persons with the opportunity of participating in the social community and to live in a manner, as far as possible, equivalent to others.

During the 1960's and 1970's, new laws and ordinances were established with the intention of improving conditions within the work force, and these included conditions for disabled persons. Significant legislation affecting the adaptation of work sites is presented in the book, and a few examples are:

- **The Working Environment Act (AML)** states that work situations should be adapted to the individual's condition both physically and psychologically. The primary responsibility for the work environment lies with the employer who shall see to it that safety activities are pursued jointly by employers and employees.

- **The Building By-Laws** deal with the accessibility and utility of buildings for persons with functional disabilities.

- **The Act on Security of Employment (LAS)** contains the regulations concerning reasons for legal termination of employment. Legitimate grounds for termination may occur based on shortage of work but may not, as a rule, be based on illnesses, reduced working capacity or other similar factors.

**Book of Ideas**

Anyone in Sweden who previously wished to adapt a work site very often had to begin from scratch because there was not an accessible system from which ideas could be acquired. To overcome this difficulty, we initiated a project that required that we write to a large number of employers for ideas that we could describe as a part of our book of ideas. This method was impractical, however, since we had to do a lot of detective work just to be able to get an acceptable number of adequately described adaptations that would prove usable as guidelines. Nevertheless, the research was worthwhile, since we found many good ideas. We finally succeeded in providing descriptions of adapted work sites, as well as descriptions of some technical work aids (a directory of suppliers of technical aids in Sweden is included) and special modifications at work sites. In Swedish Requirements for the Work Environment—Work Site Accessibility, we also presented the requirements for the mobility-disabled, visually-disabled, and hearing-disabled, and gave some general requirements for work place accessibility in Sweden.
We had to spend considerable time developing a system for these descriptions. We wanted the book to be a useful resource, one which readers could use to resolve a specific problem; i.e., what to do for the visually-impaired or what to do when you need reading aids or writing aids. As there are significant differences between people with similar disabilities, we chose to develop a system which described everything with the obstacles accessed as a starting point.

The technical equipment described in the book of ideas has not been evaluated with regard to safety or function. In application, consideration must be given to applicable safety provisions. We hope that the description of work aids and special modifications might stimulate the imagination and provide inspiration to those who shape and influence the working environment.

Where to Turn for Assistance in Sweden

A person with a functional disability might require aids to independently manage the activities of daily living, work, home or education. The Medical Care Trustees in Sweden are responsible for the major portion of activities connected with aids for daily living. The Regional Employment Board, via the Employment Service, is responsible for the costs and administration of the occupational technical aids required at the work site or within the work environment and not suppliable by the employer. Figure 2 shows

![Diagram of various forms of assistance in Sweden](image-url)
where one can obtain various forms of assistance in Sweden. One can also see from this outline how necessary it must be to teach as many people as possible to wear "work site adaptation glasses."

**How to Follow Up the System Developed**

If we wish to teach as many people as possible how to adapt work sites, we require systems where they can learn to recognize the obstacles, as well as recognize that there is a solution. They also need to learn where to turn for advice and help from the experts. In this learning process, a fundamental principle is always to use the same technique in describing the jobs and the obstacles in the jobs. We describe in the book six steps in adapting work sites:

- **Step 1:** Assess Job
- **Step 2:** Assess Obstacles
- **Step 3:** Research Solutions
- **Step 4:** Devise Action Plan
- **Step 5:** Implement Plan
- **Step 6:** Evaluate Results

This way of thinking is basic to the system of adapting work sites. In Step 1, the technical, physical and psychological requirements of the work tasks must be examined. Together with the employee, an assessment of work requirements should be made in outline format. Employees often have accurate knowledge regarding the work situation and ideas how to change their work and work environment.

In Step 2, the functional disabilities must be described, by specifying how they represent obstacles in employment. It is important to describe the situation in very concrete terms, primarily so recommendations for prescriptive measures can be made.

Next, it is necessary to examine each obstacle and determine what solutions are available. There will almost always be some kind of solution, and many people can initiate the adaptability of work sites. The more people who wear "worksite adaptation glasses," the better the system can be made to function. All we need to find the solution is to utilize available knowledge and turn to experts for help and advice.

**Direction for Action**

Four important components are basic to building a system of adapting work sites. They are:

- common documentation
- guidance material
- an educational program
- a bank of possible solutions and experts
Sweden is currently constructing a system of common documentation, so that everyone who adapts a work site documents that adaptation in the same way. Why is it important to have a common documentation procedure? We think it is of great importance for the following reasons:

- Documentation can, and must, be used as a guide in developing the techniques of adapting work sites.
- In describing the adaptation completely and systematically, documentation will allow for the evaluation of what is implemented.
- With documentation, the adaptation can easily be reproduced by other people.
- With documentation, other people can acquire ideas on how to adapt, on where to purchase technical aids, and on where to find experts.
- And, finally, documentation makes it possible to computerize the data.

The principle of common documentation requires the development of guidance materials which can be used by everyone engaged in adapting work places, and these materials must be clear enough so that people in general have no difficulty utilizing the information. In order for the system to function, an educational program is also needed for those who initiate the adaptation of work sites. Many individuals must be taught to wear "work site adaptation glasses."

Moreover, it is essential to have a complete inventory that indicates where an interested individual can find professional expertise, the right technical aids, and examples of possible solutions.

In conclusion, we would like a great many people to wear "work site adaptation glasses" in order to assess work site obstacles, believe that solutions are possible, and know where to turn to take the next step in adaptation of work sites. For this to be possible, common documentation, guidance materials, an educational program, and a bank of possible solutions and experts are needed. We have just begun to address these needs in Sweden, and there is still much more to be done. We hope we will find others who have the same interest so that future collaboration can take place.
Dr. William Gellman is director of the Council of Rehabilitation Affiliates, and has been a research fellow with the World Rehabilitation Fund where he studied the impact of sustained recession upon British job placement policies and programs for disabled people. He is a former educator of rehabilitation professionals and has published extensively in the areas of vocational adjustment and evaluation of disabled people.

This session deals with policy implementation and is directly related to the previous session concerning policy alternatives. What we are touching upon is how to implement two goals--equity and economics. There are three aspects which must be considered in our deliberations. The first is the socioeconomy within which the policy implementation takes place. The more rigorous the socioeconomy is, the more difficult it is for firms to take risks and the less able we are to follow the dictates of equity. The second aspect is the process of reintegration into the work force as compared with the concepts of rehabilitation. The third aspect concerns comments and questions for the future direction of these, let us say, experiments. In listening to these presentations, it occurred to me that all of these programs are in process. They represent stages in the development of new methods and techniques that all of us will be using at a later period.

The socioeconomy, the social climate within which firms operate, disabled workers live, and rehabilitationists and others provide help, is at present a very rigorous world where the social climate is unfavorable and negative towards human services, welfare and the disabled. Part of this is due to the fact that our costs are rising, and we live in a world in which inflation, which will persist for the remainder of the decade, is endemic. Another factor is the rapid change in the labor market.

Furthermore, as the composition of the labor pool is changing, there is a loss of unskilled and semiskilled jobs, with polarization between the so-called competent and those who are less educated or less capable of participating in the economy. We know that middle management is eroding, that service jobs are increasing and that the service pool represents a deskill of semiskilled labor. In Michigan, the unemployed auto worker who gets a job at McDonald's has suffered a drastic loss in both status and pay. The implication of these problems is that employers will be under
greater pressure and that there will be greater demand in terms of costs and benefits. Dr. Jones' discussion of the transitional workshop showed the effect of a negative economy and a low benefit/cost ratio. On the other hand, Ken Wright's project showed the reverse. These differences are in part due to the criteria used and the world and cultures in which they live.

Another implication is that skills training requirements will be higher than they have been in the past. We know that disabled people represent a marginal or minority group that is less educated, has more health problems, and a lower income. Consequently, the disabled are among the most disadvantaged of the disadvantaged groups. A further implication is that there will be more intense competition among the lower level groups for a smaller number of jobs. Over the last 17 years in England, for example, two million unskilled and semiskilled jobs vanished, a process also occurring in the United States.

If, in fact, we face a more rigorous economy, what do we see in the future? So far, our discussions have dealt in part with both primary and secondary prevention. The movement toward disability management, for example, is one attempt at primary prevention. However, the models that we have examined in this session begin primarily at the point of disablement.

There are two points here that strike me as important. First is the point made by Dr. Mittelsten Scheid that many disabled people are working as "nondisabled" in "normal" occupations at regular salaries. Many of these people do not declare themselves disabled, and this reality is clearly shown in the low registration of disabled persons in England for the quota. In rehabilitation, then, we are actually dealing with only a small segment of the disabled group, perhaps those that function at the low level of the labor market. The result is that the second stage in the process, after primary and secondary prevention, involves coping. All of the presentations in this session showed one factor which we should examine more carefully; that is, the work environment, the corporate culture or the sociopsychological aspect of rehabilitation. These models have shown the importance of a caring attitude and the psychological and social climate in which a disabled person functions. This is important because the person who becomes disabled returns as a slightly different person to a slightly new environment in which he is perceived as different and he/she in turn, perceives the stresses and problems of work as different.

The concept of stress after disability requires our attention. Value terms--such as hope, despair and a sense of being stigmatized--can be regarded as attributes society applies to the disabled. Consequently, when a company's corporate goal is the return to work for employees who become disabled, hope automatically exists because gain is possible. Therefore, we ought to begin to examine
those variables which help to make the achievement of these successful programs possible. A further point to consider is that an adjustment process requires not only professional help but human help as well. Mr. Wright pointed to the importance of the supervisor in maintaining the disabled worker's relationship with the old work environment, and the disabled worker in the transitional shop is also continuing as a member of his/her work group which represents a process of coping.

Another step in rehabilitation is that of vocational evaluation. Dr. Mittelsten Scheid pointed to the development of a common language which brings together job requirements and worker abilities and leaves disability labels aside as judgments of suitability for work. He also mentioned that he wanted human beings to make this judgment and to do so on an individual basis. Dr. Elmfeldt made the same point. Their comments reiterated the importance of having the participation of the disabled person in the process, as well as the necessary involvement of ordinary people who constitute the social milieu in which disabled people live and work. Vocational evaluation has two components; one is the ability pattern which Dr. Mittelsten Scheid mentioned, and the other is the vocational pattern of psychological attributes of the individual which enabled him/her to function productively. Likewise, there are two methods of assessment; first are the diagnostic strategies, and second is the human approach, seeing the person in relationship to the job. Thus, we see both aspects in the methods of Dr. Mittelsten Scheid and Mr. Wright. The process begins with the human being and continues by modifying the job to fit the human being, as evidenced in the work reported by Dr. Elmfeldt. What we have seen here is a recognition that disablement is a process that is not only reversible but is part and parcel of the process of the continuing vocational development in the growth of the individual. Work personalities are affected by disability and can change again as conditions are modified.

The alternative to the early intervention practices outlined in these presentations is to accept the resulting increase in the disablement process. The essential elements of these effective practices are intervention at an early stage, the use of a sociopsychological climate of work, and the use of the actual work environment to counteract stigma and to provide hope. Rehabilitation in these models takes place in a real work environment in which the disabled person is viewed by the company and the supervisor as being part of the total society. Another essential aspect of this process is that the disabled person remains a member of his or her work group, rather than being ostracized or turned out, as it were, from the shelter of the work environment.

A second set of issues deals with the criteria of success. We use two now; the level of employment of a disabled person at a similar, lower, or higher job classification and the cost/benefit of
the return to work at an opportune time. However, there is a third criterion to consider, and that is the vocational adjustment of the disabled person. To what extent does he/she resume or build his/her work personality and find personal satisfaction and growth in his/her work? We must also examine the failures in this human process to learn what happens to the disabled person who cannot adjust to the work environment or who cannot meet productive standards. And, we must anticipate still another question: What happens to these programs if the recession continues, or profits diminish and create economic pressures as described by Dr. Jones? Lastly, we must determine the implications of these projects for smaller firms—which lack the expertise and resources of larger corporations.

There are three conclusions to offer from this session. The first is that we need more proactive efforts by government and rehabilitation. The example of Sweden points to the social forces and influences that can be marshalled to affect rehabilitation. That would include, despite current political philosophy, governmental cost sharing in the course of the reintegrative process. For every one company such as Herman Miller that can take on this burden, there are another eight companies which cannot do it alone. The experience of Pilkington Brothers should point this out. Second, further interaction and collaboration are needed among employers, trade unions, rehabilitation agencies, and disabled persons to accomplish these programs. Third, we must view these programs as pilot projects; research and demonstration projects in the Lewinian sense of action research that attempt to improve what is being done.

Lastly, let us turn to theory and remember the importance of developing an integrated practice theory for the rehabilitative and reintegration processes. This approach would combine three action research strands. The first one would deal with employer initiatives including the sociopsychological work environment and the use of work factors to speed up the rehabilitation process. The second would address the supported work initiative of the Office of Special Education and Rehabilitation Services which recognizes the impact of the transition to work. The third would address the concept of vocational development and adjustment, recognizing that the disabled person is not only involved in a disablement process but that this occurs within a larger developmental process in which his/her potentialities can develop.
SESSION III
GOVERNMENT INITIATIVES
SESSION III: GOVERNMENT INITIATIVES

Moderator: Robert McConnell
Michigan Rehabilitation Services

Mr. Robert McConnell is executive assistant of Inter-agency Services for Michigan Rehabilitation Services, Department of Education. He has a master's degree in guidance and counseling from Wayne State University, and is a doctoral candidate at Western Michigan University. Mr. McConnell has published in the area of rehabilitation and administration. From 1974 through 1984, Mr. McConnell was a supervisor in the Program Development Section, and is presently chairperson of the Future Client Service Technology Committee for MRS.

Within the context of economics and equity, we have examined rehabilitation policies, programs, and models. With the objective of achieving the integration of handicapped individuals into the work force, we began with a look at the broad, controversial, and, in many cases, conflicting economic and social issues affecting the employment of disabled persons. The following papers examine roles that governments pay, and might appropriately play, in the important area of employment and manpower policy. Governments can, for example, fund rehabilitation programs and services. Governments can enact legislation for civil rights, affirmative action programs, and quota systems as well as enforce legislation. Governments can choose to directly employ, or subsidize the employment of handicapped individuals. Governments can provide special incentives for private sector employment initiatives. Unfortunately, governments also can sometimes enact pieces of legislation and develop policies that are in direct contradiction with one another.

Before reviewing the following papers, we should keep in mind several questions. First, is there a singular most effective role for government, or must a variety of complementary approaches and strategies be used to facilitate rehabilitation goals? How well does a given practice meet the test of economic soundness, equity, and comprehensive manpower policy? Who benefits, what is the distribution of those benefits, who pays, and who are the recipients? To what extent is disability employment policy viewed in the larger context of a broader manpower policy? What is the social and political context—and the implied value system—in which a given policy model operates?

In the end, it will be the social and political environment that determines the effectiveness of policy formulation, its implementation in practice, and ultimately, as evidenced in evaluation.
EMPLOYMENT IN THE CONTEXT OF DISABILITY POLICY

John H. Noble, Jr.
Department of Mental Health and Mental Retardation
Commonwealth of Virginia

Dr. John Noble is the assistant commissioner for Policy and Resource Development in the Department of Mental Health and Mental Retardation, Commonwealth of Virginia. He is a graduate of the University of Uppsala in history and political science. Dr. Noble was formerly the director of policy research and analysis for social services and human development in the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education and Welfare. Prior to that, he served as a staff coordinator for the former secretary of HEW.¹

On the basis of discussions I had in early 1977 with scholars, ministry officials, trade unionists, and politicians in several Northwestern European countries and documentation relating to the rapid growth of disability expenditures and the factors thought to influence it, I reached several conclusions (Noble, 1979). First, slow economic growth, structural change in the industrial and labor markets, and inflation were seen as reducing job opportunities for the handicapped. In turn, this depressed the postservice earnings of individual rehabilitants, both limiting the stabilizing effects of rehabilitation on labor market turnover and increasing the available time for unpaid work in the home and elsewhere. Second, unequal intergovernmental cost-sharing in the provision of benefits and services seemed likely to lead to intergovernmental cost-shifting tactics and conflicts. The consequent inefficient allocation of scarce rehabilitation resources could only impede optimal restoration of handicapped persons to gainful employment. Third, high rates of inflation appeared to drive up the immediate costs of providing rehabilitation services and simultaneously to raise the opportunity costs of spending for rehabilitation.

I argued that the net effect of these reduced benefits and increased costs was an overall reduction in the benefit/cost ratio that results from government spending for rehabilitation and threatened public support for the entire enterprise. My conclusions were based on the opinions of well-placed informants and admittedly fragmentary objective evidence. But they seemed warranted when the available evidence was viewed within a conceptual framework that combined 14 policy and politico-economic variables thought to influence the benefits and costs of rehabilitation.

¹ The views expressed are solely the author's and should not be construed as representing the official views or policies of the Virginia Department of Mental Health and Mental Retardation.
Within this conceptual framework, post-service earnings of rehabilitants were seen as being depressed by: the high wage replacement of disability cash benefits, lenient disability criteria, a high level of labor market discrimination against the handicapped, weak antidiscrimination laws, generally weak demand for labor, presumptive entitlement to and centralized disbursement of disability cash benefits, a strong prevailing income redistribution ideology, unequal intergovernmental cost-sharing, high labor force ejection due to structural changes in the industrial and labor markets, and the general aging of the work force. Only a strong work ethic and timely delivery of rehabilitation services appeared to promote increased postservice earnings of rehabilitants. Table 1 sets forth the expected relationship between the 14 postulated policy and politico-economic variables and the social benefits of rehabilitation.

Table 1

Expected Relationships (Positive or Negative) Between Fourteen Postulated Policy and Politico-Economic Variables and the Social Benefits of Rehabilitation

<table>
<thead>
<tr>
<th>Value of Variable</th>
<th>Increased Individual Earnings</th>
<th>Increased Homemaker Services</th>
<th>Increased Unpaid Work with Life</th>
<th>Increased Family Member Earnings</th>
<th>Decreased Medical, Nursing, and Custodial Costs</th>
<th>Decreased Labor Market Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High wage replacement</td>
<td>-</td>
<td>*</td>
<td>-</td>
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<td>2. Lenient disability criteria</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Strong work ethic</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Timely services</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. High discrimination against disabled</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Weak antidiscrimination policies</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>7. Weak labor demand</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Centralized disbursement of benefits</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Presumptive entitlement</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. Strong income redistribution ideology</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Unequal intergovernmental cost-sharing</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. High labor force ejection</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Aging work force with high labor force effects</td>
<td>-</td>
<td>*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. High displacement effects</td>
<td>-</td>
<td>*</td>
<td>-</td>
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</tr>
</tbody>
</table>

Note: * indicates the conditional nature of the relationship: lenient criteria and low wage replacement appear likely to increase (+) family member earnings, while lenient criteria and high wage replacement would likely reduce incentive (-) for gainful employment by both the handicapped and other family members.

Today, I would like to review the employment of handicapped persons within the context of disability policies, including spending and tax policies which make special provision for the handicapped. The conceptual framework for the analysis will
remain the same as the one that I used for my review of disability policies in several Northwestern European countries in 1977. The focus will be on the United States primarily but, where available, reference will be made to what seems to be happening in other countries.

**Legislation and the Budgetary Response**

It is important to distinguish between statutory and de facto public policy. What is written in law or regulations may not accurately reflect actual practice. In the United States, we have ample statutory authority for assisting handicapped persons to obtain gainful employment and, if they cannot work, to provide sufficient cash, in-kind and service benefits to sustain a very modest standard of living. The situation is the same in most countries. The political process requires politicians to promise more than they can induce the tax-paying public to support.

Clearly, economic conditions and the willingness of the tax-paying public to sustain the costs determine the degree to which public policy can be implemented. Compared to Denmark and Sweden, the United States pays far less in social security and income taxes to support the public enterprise. The American economy is the 17th most heavily taxed in the Western world, paying 31 percent of all wealth to federal, state, and local taxes. In Sweden, 51 percent of the value of all goods and services goes to taxes. Denmark is close behind (OECD, 1983). The contrast in spending to achieve a normalizing environment for the handicapped between the United States, Denmark, and Sweden reflects primarily differing cultural values, not great differences in underlying economic conditions and the ability to pay.

A recent study conducted by the Socialforskningsinstitutet in Copenhagen (Pruzen & Spohr, 1982) describes a society in which the central objective is "to normalize the handicap's conditions." Extensive assistance is offered to mentally handicapped persons. Seventy-nine percent of the families with mentally handicapped children receive payments for "necessary additional expenses;" 87 percent of mentally handicapped persons, 18 years and older, are paid a disability pension; and 33 percent of the disability pensioners receive an additional allowance for a personal attendant or other form of personal assistance. Yet even these arrangements do not satisfy all desires. According to the study, "generally speaking, the parents are satisfied with the content of existing arrangement for mentally handicapped children, but many still express wishes and the need for a greater range and flexibility of services."

Looked at from the Danish perspective, the United States is still extremely backward in its practice of normalization and, in general, not very generous toward handicapped persons and their families. Yet, the United States has made great strides in the past
10 years to meet the needs and to secure the rights of handicapped persons. Witness passage of Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, the Developmental Disabilities Assistance and Bill of Rights Act, and the Education for All Handicapped Children Act (P.L. 94-142). Federal, state, and local budgets have expanded to fund the entitlements and programs created by these landmark pieces of legislation, but the budgetary response of taxpayers has fallen considerably short of satisfying fast-growing consumer and service-provider expectations.

**Employment Policy During Economic Recession**

In the face of a downturn in economic activity, employers seek ways of cutting costs while maintaining or increasing productivity. This should impel employers to place high value on the healthiest and most productive members of the work force. Grossman (1972a, 1972b) theorizes that the stock of health capital yields "healthy days," which are valued for both consumption and production purposes. All other things being equal, the healthier worker should appear more valuable to an employer feeling the pinch of economic recession.

Berkowitz, Fenn & Lambrinos (1983) point out Grossman's oversimplification of the productive utility of "healthy days," as measured by the dichotomy "sick vs. nonsick." Health is a multidimensional concept. They argue the existence of a "pathological diversity of health conditions in terms of the severity of their effects on both consumption and productive activity" and thus for "the importance of the wage rate in relation to the employment of the impaired people," (p. 140). In their view, the loss of health capital may lead to lower wages by reducing the individual's productivity or by the "discriminatory" actions of employers, caused by the belief that the productivity of the impaired worker is lower than it actually is, or by prejudice toward certain kinds of impairments (e.g., mental illness). They conclude on the basis of an empirical analysis of the 1972 Social Security Administration Survey of Disabled and Nondisabled Adults: "The debilitating affect of poor health on earnings and labor supply is simply not a matter of a decrease in healthy days, but the lessened ability to produce at the job due to limitations in mental and physical fitness" (p. 145).

Levitan and Taggart (1977) arrive at essentially the same conclusion on the basis of labor queue theory. Labor queue theory postulates that the employability ranking of workers is a function of their productive capabilities and attractiveness to employers based on objective standards or on biases. Workers at the end of the queue are "much more likely to be jobless, much more likely to drop out of the labor force, and much less likely to find well-paying jobs" (p. 96). Levitan and Taggart assert that employers prefer nondisabled workers, even if disadvantaged, to the disabled. They predict that as
economic conditions deteriorate and create slack labor markets handicapped persons will be most affected--proportionate to the severity of their handicapping condition. They also predict slack labor markets will reduce the overall benefit/cost ratio of rehabilitation services and will change the relative payoff from serving different types of handicapped people.

On the basis of labor queue theory and their sense of what can be accomplished in face of the overwhelming influence of the prevailing level of economic activity on job prospects for the handicapped, Levitan and Taggart recommend adoption of vocational rehabilitation policies "more in line with general manpower policies," i.e., deemphasizing service strategies aimed at increasing employability, giving greater attention to job creation and work experience efforts, and placing greater priority on services to the less severely rather than the more severely handicapped. Taking a pessimistic view of what can be accomplished by tinkering with the system, they counsel: "Patience and compassion may be better policy than an aggressive effort to reform the disability system, to expand rehabilitation efforts, or to 'get tough' with applicants" (p. 110).

De Facto Employment Policy and the Handicapped

What, in fact, has the United States been doing about the employment of the handicapped over the past several years? What has been the experience in other countries?

Gellman (1983) compares changes in the U.S. and British vocational rehabilitation systems from 1979 to 1983, a period of economic dislocation and high unemployment in both countries. He sees the value of jobs for the handicapped in the competitive labor market being undercut by the combination of labor market trends, changing rehabilitation program objectives, and the unwillingness of rehabilitation professionals to deal with the resultant "rehabilitation crisis" (p. 3). In his view, both the U.S. and British vocational rehabilitation systems must "confront the need to adapt to the consequence of long-term downward socioeconomic trends,...insufficient funding to meet the needs of disabled persons,...a sustained rise in costs, and...poor employment prospects for handicapped individuals" (p. 5).

Gellman views general unemployment and the particular difficulties handicapped persons are experiencing in the United States and Britain as largely caused by the profound and unmitigated changes that are taking place in the labor market during the post-industrial era. Growth in white-collar and service occupations which require higher skill training or specialized knowledge, with fewer jobs for people with minimal occupational skills, and an increasing population of disadvantaged job seekers are the roots of the problem. Handicapped and other disadvantaged people are competing for a declining
pool of jobs for which they can qualify. Simultaneously, the rate of budget growth for vocational rehabilitation services has failed to keep up with inflation, which for Gellman signifies a negative public attitude toward vocational rehabilitation.

The situation in Britain appears substantially worse than in the United States. According to Gellman, 13 percent of the entire British labor force was unemployed during the first quarter of 1983, and involved more workers (3.4 million) than at the peak of the 1930 depression! The loss of goods-producing jobs for which handicapped workers typically qualify exceeds the growth in job openings in the service, distributive, technological, and professional sectors—the majority of which require knowledge and skills beyond the reach of most unemployed handicapped workers.

There seems to be a loss of public support for vocational rehabilitation. The quota system, which requires employers with 20 or more employees to maintain at least three percent of registered disabled people in their workforce, is not being enforced (Gellman, 1983). The number of firms satisfying the quota has dropped from 17,045 in 1979 to 13,648 in 1982, a 20 percent decline. Moreover, the British Employer Relations Program has not been able to increase job openings for handicapped workers, and employers resist placement-related special rehabilitation schemes.

In 1982, the British Employment Service issued a report recommending reduced priority for placement of handicapped people (Gellman, 1983). Consistent with this policy, it has revised its approach to serving the handicapped by: (1) integrating the disabled within its general placement program for able-bodied job seekers, (2) offering less intensive services, (3) requiring disabled people to assume greater responsibility for locating and securing employment, and (4) attempting by education to change employer attitudes toward hiring the handicapped. According to Gellman, all of these cost-cutting measures tend to decrease the intensity of individualized services and to detract from individualized job location and placement efforts. Modification of the workplace and equipment to accommodate individual disabled workers continues to receive low priority and funding. In summary, the British Employment Service, within the constraints of its budget, seems to be devoting its energies to assisting disabled persons to adapt to the existing job market rather than attempting to gain concrete concessions from employers.

Gellman's analysis suggests that the following policy and politico-economic factors are becoming more influential in determining the outcomes of rehabilitation. Employer discrimination against the handicapped accompanied by a weakening of anti-discrimination laws increasingly curtails post-service job prospects and earnings. Higher labor force ejection of less capable workers during periods of economic recession amidst on-going changes in the
composition of industrial and labor markets increases the size of the pool of unemployed disadvantaged and disabled workers who must compete for employment, further reducing post-service job prospects and earnings.

Turning now to the United States, the work disincentive effects of disability cash benefit programs offset the potency of rehabilitation and employment policies that would put handicapped people back to work. Prior to the passage of the 1980 Disability Amendments to the Social Security Act, the disincentives for disabled Supplemental Security Income (SSI) recipients to return to work were often substantial. The SSI program is a means-tested income transfer program that serves the poorest and least able of the disabled population—persons who lack sufficient prior work experience to qualify for Social Security Disability Insurance (SSDI) coverage. The program applies a very stringent test of disability; namely, the inability to work in a job anywhere in the U.S. economy paying a substantial gainful activity (SGA) wage of $300 per month by reason of "any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months" (Social Security Act, Sec. 223(d)(1)).

Then as now, the procedure for determining the amount of the payable monthly SSI benefit is to disregard the first $20 of income from any source, and to disregard the next $65 of income if it is obtained from earnings. Thereafter, benefits are reduced by $1 for every $2 of earnings. After an SSI recipient begins to work, he or she is placed on a nine-month trial work period. If the recipient is gainfully employed and earning more than $300 per month at the end of the trial work period, SSI payments are terminated.

Let us consider two cases based on the benefit levels prevailing in 1984 but using the benefit determination rules which existed prior to passage of the 1980 Disability Amendments. The first case involves an SSI recipient who accepts a job paying $250 per month, and the second relates to an SSI recipient who accepts a job paying $350 per month. At the end of the trial work period, the higher paid worker would lose the entire $314 SSI payment and end up with a net increase in gross income of only $36 ($350-$314). The worker making $250, on the other hand, would still receive an SSI payment of about $314 ($314 - ($250 - $85)/2) and end up with a gross income of $482 ($232 + $250). The lower earning recipient would actually end up with $132 ($482 - $350) more than the higher earning recipient.

Clearly, any rational SSI recipient would choose the job paying the lesser wage, if at all possible. If only the higher paying job were available and its terms could not be altered, it is doubtful that the recipient would feel the job was worth taking.
Under the extended benefits provisions (Sections 1619 (a) and (b) of the 1980 Disability Amendments, the U.S. Congress tried to remove the work disincentives by initiating a three-year demonstration program which would continue cash payments and Medicaid health care coverage to working SSI recipients whose earnings were below the Federal break-even point of $714 per month. The recipient making $350, for example, would continue to receive an SSI payment of about $182 and enjoy a gross income of about $532. This amount would seem to provide a reasonable incentive to work, unless taxes and work and medical expenses consumed too large a portion of the $216 income increase over the $314 SSI benefit.

Unfortunately, the three-year extended benefits demonstration was scheduled to cease at the end of 1983, and the U.S. Congress has not yet passed legislation to continue the program. As of this moment, individuals who become eligible for SSI benefits after December 31, 1983 will be subject to the provisions of the old law: A job paying $350 per month at the end of the nine-month trial work period yields a net income improvement of $36 over the monthly SSI payment of $314 for a single individual, as noted above. Taking the $350 per month job leads to the loss of both cash benefits and Medicaid health care coverage. The Congress eventually extended the three-year demonstration program when it passed the Social Security Disability Amendments of 1984.

Instead of fully implementing the extended benefits program, the Reagan Administration focused its attention on another provision (Section 221(i)) of the 1980 Disability Amendments, requiring periodic review at least once every three years to determine the continuing eligibility of persons who have qualified for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) benefits. The manner in which this provision of the 1980 Disability Amendments has been implemented is a matter of record. The case of Gordon D. of Eugene, Oregon, a childhood polio victim diagnosed as a paranoid schizophrenic, while extreme in consequences, epitomizes the impact of these reviews. After the Social Security Administration dropped him from the disability rolls and denied his appeal, he wrote to his family:

I no longer have any income whatsoever and there is no way I can work...I have no life any more...I can't afford to eat...I don't even feel like a man any more.


On a different plane, the Omnibus Budget Reconciliation Act of 1981 radically altered the financing of rehabilitation services for SSDI and SSI beneficiaries. Instead of paying for services
regardless of outcome, the new law permits reimbursement of state rehabilitation agencies only if the client is sustained in employment paying the substantial gainful activity wage of $300 per month for a continuous period of nine months.

The new method of financing rehabilitation was devised to overcome the perceived indifference of the old method to rehabilitating the maximum number of disabled SSDI and SSI beneficiaries into significant productive activity. By establishing a system of performance reimbursement, it was believed that rehabilitation outcomes would be improved at the least cost to the federal government. Through December 30, 1983, the Social Security Administration had approved only 325 claims for reimbursement from 30 of the 79 state rehabilitation agencies throughout the United States, ranging from $86,000 to less than $2.00 (SSA, 1984). The total dollar amount of reimbursements claimed under the new reimbursement method is miniscule compared to what was claimed under the old. State rehabilitation agencies had been receiving from the Social Security Administration an average of $150 million annually to service SSDI and SSI beneficiaries (U.S. Department of Education, 1984).

Since the Omnibus Budget Reconciliation Act of 1981 was enacted, there has been a substantial drop in the investment by state rehabilitation agencies in SSI recipients, partly because of the change to a system of performance reimbursement and partly because of the general erosion since the mid-1970's of federal and state vocational rehabilitation budgets purchasing power. Budget increases in the federal-state vocational rehabilitation program have not been keeping pace with inflation for some time now, and have caused a decline in the total number of cases served by state rehabilitation agencies. During the five year period from FY 1975 to FY 1979, for example, the number of cases served by state rehabilitation agencies declined by 0.71 percent for each percentage point reduction in 1975 constant dollar purchasing power (Noble, 1981). Erosion of the purchasing power of the vocational rehabilitation dollar continues. More recently, the FY 1983 federal appropriation of $943.9 million for the federal-state vocational rehabilitation program had a value of $715.268 million in 1979 constant dollars.

Reduced spending for vocational rehabilitation (due to the erosion of inflation and the change in the financing method) interacts with the steep work disincentives of the disability income transfer programs. Reduced spending means fewer handicapped people can be served, and the work disincentive of the high wage replacement value of available income transfer payments translates into aborted job placements. The interaction of these two factors appear to deprive handicapped persons of normalized living opportunities, forcing them to make choices that would be abhorrent to rational people. Without adequate training, how can they compete
for jobs that increasingly demand higher skills? And forced to depend on welfare without employment, how can they live a normal life with opportunities to better themselves by individual effort? This, then, is the de facto handicapped employment policy in the United States—a forced choice that is unacceptable to the rational person.

Choosing the Rationale that Fits the Times

There is much that can be done to improve the employment prospects of handicapped people. But the rationale for doing so lies in considerations of both equity and cost/benefits. Neither rationale by itself is sufficient. In my view, there is need to aggressively seek out employers who can offer suitable nonsubsidized work and to do whatever is necessary at the job site to assure sustained employment. Despite the great difficulty involved in rehabilitating severely handicapped persons, significant progress has been made in fashioning rehabilitation techniques and strategies to enable such persons to achieve total or partial self-support through gainful employment. Finding and investing in cost-effective methods of preparing and placing severely handicapped persons in nonsubsidized and subsidized jobs paying a living wage deserves high priority in the national agenda.

We should consciously look for interventions that go beyond the traditional rehabilitation model of providing vocational training and other services with referral to perspective employers after the client is considered ready. In my opinion, the policies which the British Employment Service recently adopted are precisely the wrong way to go.

Beyond this, we should aim at nonsubsidized work outside of the traditional sheltered workshop wherever possible. Sheltered workshops seldom prepare the disabled person for work in the real world, offer minimal wages and benefits, foster the community perception that disabled people are minimally productive, and themselves depend on heavy subsidies to survive. Where sheltered work is the only alternative, subsidies should be provided to improve the productivity of the sheltered work force through capital investments in modern equipment, production training, and effective marketing techniques. Actual work on contracts produces income—not day care and simulated work.

The Targeted Jobs Tax Credit is proving its worth as a valuable adjunct to the structured training and supported work model (Hill & Wehman, 1983). It provides to employers up to $4,500 in tax credits over two years for each eligible worker. If the U.S. Congress extends the program, it will continue to provide a financial incentive to hesitant employers who might not otherwise hire a severely handicapped person.
Consideration should be given to modifying the conditions of performance reimbursement under the Omnibus Budget Reconciliation Act of 1981 so as to give state rehabilitation agencies greater incentive to serve disabled SSI recipients. Under the Act, payment for services will not be made until the SSI recipient has remained on a job paying the monthly substantial gainful employment (SGA) wage of $300 for nine months. The hiatus between the time resources are expended and the time reimbursement is made causes budget problems for state rehabilitation agencies. Reimbursement for services should be made, either at the time that placement is made in a job paying the SGA wage or after two-month's follow-up, with an additional allowance for postplacement or supported work services. There is accumulating evidence of the value of the structured training and supported work approach to placing and maintaining severely disabled people in nontsubsidized employment paying significant wages (Hill & Wehman, 1983).

Last, if the substantial work disincentives of the SSI program are to be removed, the U.S. Congress must extend the provisions of the 1980 Disability Amendments which provide extended cash and health care benefits for disabled SSI recipients who accept work paying more than the SGA wage and exhaust their nine-month trial work period.

When all the policy and politico-economic factors that influence the outcomes of rehabilitation are considered together, it becomes apparent that improving the employment opportunities for handicapped persons requires calculated manipulation of a broad spectrum of public policies. In the final analysis, many of the factors are beyond the control of the legislative process. Nonetheless, a humane and productive society must continue to try.

REFERENCES


Professor Kurt-Alphons Jochheim is a psychiatrist and chairman of the German Society for Rehabilitation of the Disabled, and Head of the Rehabilitation Center, Cologne University, Federal Republic of Germany. He is an advisor to the German government and to the European Commission on rehabilitation research and organization. He is also presently the chairman of the Medical Commission of Rehabilitation International.

Immediately after the First World War, the German government issued a decree and shortly thereafter passed a law (1920) to foster the vocational integration of severely disabled veterans. This law was valid until the end of the Second World War (1945). A new federal law was issued in 1953 under the same assumption that those who had suffered under military service, as well as victims of work connected accidents and of national socialist persecution, should receive effective assistance to identify an adapted working place and find gainful employment there.

Persons eligible for these benefits were those classified as having a so-called reduction of earning capacity of at least 50 percent due to a severe disability, as determined by a medical evaluation which considered the impairment and consequent functional limitations. The primary focus of this legislation required that the administration of federal and state governments offer 10 percent of the total jobs available to severely disabled people, and all nongovernmental enterprises were required to hire six percent of their employees out of the pool of severely disabled people.

An important step was taken in 1974 which opened the benefits for all similar disabled persons without any reference to the origin of disability. This intervention, emphasizing finality and not causality of the disability, has considerably increased the number of applicants to be counted and employed under the 6 percent quota system.

Since our unemployment rate has reached 10 percent of the labor force, severely disabled persons are suffering under the limitation of vacancies in industry, commerce and administration. With 2.4 million unemployed, 6 percent equals approximately 140,000 unemployed individuals who are disabled.

Special programs of the Federal Employment Service, mainly in the form of paid, on-the-job training programs, have been fairly successful. Currently, statistical analysis regarding
fulfillment of the quota system shows that nearly 6 percent of all employees are listed under the severely disabled law. There are, however, a considerable number of industrial and commerce firms which prefer to pay the monthly fee of 100DM (about $30) rather than hire a disabled employee. They may also, in accordance with the law, give one-third of their fee in the form of contracts awarded to sheltered workshops to maintain the productivity of sheltered employment. The most recent report (October 1982) compares private industry and public administration in fulfilling the quota system (Table 1), provides a summary of the quota rates that have been achieved in the various sectors of employment (Table 2), and provides the proportion of employers, by industry type, who have not participated in the quota system and have preferred to pay the fee rather than hire disabled persons (Table 3).

Table 1

A Comparison of Private and Public Employees by Geographic Region in Fulfilling Quota System Goals

<table>
<thead>
<tr>
<th>Geographic Region</th>
<th>Hiring quotas achieved by public and private employers in 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
</tr>
<tr>
<td>Schleswig-Holstein-Hamburg</td>
<td>4.7</td>
</tr>
<tr>
<td>Niedersachsen-Bremen</td>
<td>5.5</td>
</tr>
<tr>
<td>Nordrhein-Westfalen</td>
<td>7.3</td>
</tr>
<tr>
<td>Hessen</td>
<td>4.7</td>
</tr>
<tr>
<td>Rheinland-Pfalz-Saarland</td>
<td>5.4</td>
</tr>
<tr>
<td>Baden-Wurttemberg</td>
<td>4.8</td>
</tr>
<tr>
<td>Nordbayern</td>
<td>5.0</td>
</tr>
<tr>
<td>Sudbayern</td>
<td>4.5</td>
</tr>
<tr>
<td>Berlin (West)</td>
<td>5.2</td>
</tr>
<tr>
<td>Bundesgebiet</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Table 2

Quota Rates Achieved by Type of Industry and Commerce

<table>
<thead>
<tr>
<th>Type of Industry and business</th>
<th>Quota achieved %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming, Forestry and Fishing</td>
<td>3.9</td>
</tr>
<tr>
<td>Mining, Energy production and Water Supply</td>
<td>11.0</td>
</tr>
<tr>
<td>Industry and Craftsmanship</td>
<td>6.3</td>
</tr>
<tr>
<td>Building Industry</td>
<td>3.5</td>
</tr>
<tr>
<td>Commerce</td>
<td>4.2</td>
</tr>
<tr>
<td>Traffic and Communication Systems</td>
<td>5.4</td>
</tr>
<tr>
<td>Banking and Insurance</td>
<td>4.8</td>
</tr>
<tr>
<td>Other Service Branches</td>
<td>4.9</td>
</tr>
<tr>
<td>Private Households and Non-profit Organizations</td>
<td>6.3</td>
</tr>
<tr>
<td>Public Administration and Social Insurance</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Table 3

Proportion of Employers Not Participating in Quota Systems

<table>
<thead>
<tr>
<th>Type of Employer</th>
<th>All employers (N)</th>
<th>Employers not participating (no severely disabled employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming, Forestry and Fishing</td>
<td>1,370</td>
<td>532</td>
</tr>
<tr>
<td>Mining, Energy production and Water</td>
<td>651</td>
<td>72</td>
</tr>
<tr>
<td>Industry and Craftsmanship</td>
<td>49,823</td>
<td>12,813</td>
</tr>
<tr>
<td>Building Industry</td>
<td>19,597</td>
<td>7,815</td>
</tr>
<tr>
<td>Commerce</td>
<td>21,754</td>
<td>6,963</td>
</tr>
<tr>
<td>Traffic and Communication Systems</td>
<td>4,656</td>
<td>1,761</td>
</tr>
<tr>
<td>Banking and Insurance</td>
<td>3,485</td>
<td>919</td>
</tr>
<tr>
<td>Other Service Branches</td>
<td>17,153</td>
<td>5,528</td>
</tr>
<tr>
<td>Private Households and Non-profit</td>
<td>2,913</td>
<td>529</td>
</tr>
<tr>
<td>Public Administration and Social</td>
<td>4,112</td>
<td>281</td>
</tr>
<tr>
<td>Total</td>
<td>123,838</td>
<td>37,300</td>
</tr>
</tbody>
</table>

In recent years, there has been substantial criticism of the legislation affecting the severely disabled. The most widely distributed argument is the lack of correspondence between the impairment assessed under the term "reduction of work capacity" and the socially relevant handicap of the person. It is certainly true that many so-called severely disabled employees are earning their living in just about the same way as their nondisabled companions, and this is certainly acceptable if the job placement corresponds with the disability. This argument, however, has brought up the question of whether the umbrella of the legislation has been too widely expanded, resulting in benefits for those with a collection of rather minor disabilities; thus, reducing the effective use of the law. This criticism has resulted in the preparation of an amendment to the disability laws in Germany which will require that some of the benefits—e.g., free transportation and use of the transportation system—be more carefully administered with better correspondence to individual needs. Additional benefits attached to this amendment include provisions against discharge from the working place, an additional annual vacation period of six days, special aids.
to secure the continuation of adequate working conditions, and accessible housing and transportation. Furthermore, severely disabled citizens may use benefits for traffic fees, for tax reduction, for reduction of taxes and insurance on motor-cars and also for the reduction of fees on television, radio and telephone.

The legislation seems to be effective for many people with rather limited chances of becoming vocationally reintegrated. This fact has created quite a discussion because the legislation has certainly improved the work security of those already employed. But, at the same time, it has decreased the chances for those who are attempting to enter the labor market and who are the labeled "severely disabled." Consequently, in order to avoid possible employer rejection, we will not use the label "severely disabled" for applicants with invisible disabilities. As noted in Table 3, while some industries, including public administration, manage to avoid their quota obligations, others don't have any difficulty employing even more than the six percent required.

From the practical point of view, it is fairly easy to keep an employee on the job, even if an accident or a severe chronic disease changes the conditions under which the work has been carried out in the past. In these cases, our experience tells us that our workers and administration will try to find an adequate placement for the co-worker, if possible, and will also count that person in the quota of the firm. On the other side, however, if an unknown severely disabled applicant wants to enter the labor market and has, for instance, an incomplete school education and no prior connections with the factory, employers hesitate to offer a job due to the fact that discharge is more difficult than with nondisabled applicant. In response, the present government has attempted to reduce these drawbacks by changing the probation period so that there is sufficient time to prove the suitability of the applicant for the working place.

One of the most debated parts of the legislation is the classification itself. A fundamental change is unlikely because of traditional patterns which are not easily changed. The present classification is based on medical reports, including lung, heart, circulation, gastroenteral tracts, kidney and bladder functions. A great deal of emphasis is put on the function of upper and lower limbs, as well as the vertebral column, and last, but not least, on sensory organs, intellectual capacity and behavior. Not only the loss of function, but also the danger of relapses and complications are included in the classification. For example, an operatively removed cancer will enable the patient to use the benefits of the severely disabled law for a period of five years. Details are published in a volume edited by the Ministry of Labor and Social Affairs, last edition printed in 1983. There are good reasons for looking more extensively to the disability and handicap, rather than at the impairment, to provide a better base for classifying severely
disabled persons than the present system initiated following World War I.

In general, we might sum up that our quota system was very successful during the period when the working force and labor market were well balanced. Since the upward trend of unemployment, however, it has become much more difficult to vocationally integrate severely disabled persons, primarily because of the difficulties employers have experienced in removing disabled workers who prove to be nonproductive. Since the quota of six percent has been nearly reached, the present amendment aims at a more strict handling of the assessment, in accordance with newly issued medical guidelines and at reduction of attractive benefits, if these benefits do not directly correspond with the individual needs of the disabled person.

References


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In 1976, the fundamental law concerning the employment of physically disabled persons in Japan, entitled Physically Handicapped Persons' Employment Promotion Law, was drastically revised. The objective of the revised law is "to ensure the security of employment of physically handicapped persons, by fixing the responsibility of employers with respect to the employment of physically handicapped persons and endeavoring to adjust economic burdens resulting from the employment of physically handicapped persons through the levy system for the employment of physically handicapped persons." As a result of this revised law, the levy system was introduced for the first time in Japan.

The revised law was unanimously adopted by the National Diet, which reflected the fact that there existed a broad consensus among the Japanese general public, including employers, concerning the introduction of the levy system to promote the employment of physically disabled people. This consensus existed even though the expansion of the labor market was not expected, due to the recession caused by the oil shock in 1973.

Between 1977 and 1983, there were 67,653 physically disabled persons who were newly employed by private enterprises that had at least 67 full-time employees. Since 40,567 physically disabled employees were retired from these enterprises during the same period, the net increase of physically disabled employees employed during this time period was 27,086.

Out of the newly-employed physically disabled employees, almost two-thirds were employed by enterprises with more than 1,000 full-time employees. As a result, the employment ratio of disabled employees in these large-size corporations increased from .8 percent in 1977 to 1.1 percent in 1983. This increased ratio was more than twice as large as that of the total enterprises under the quota law.
Trends of the Levy and Grant System

While the levy is imposed only on those enterprises with over 300 full-time employees, a grant is provided to any size enterprise as long as it meets specific qualifications. In addition, the target population of these grants includes mentally retarded persons as well as physically handicapped persons.

As was expected, the total amount of the levy collected from enterprises which did not achieve their quota decreased with the rise in the rate of employment of physically disabled persons. This is revealed in Table 1.

Table 1

Trends in the Levies Collected and Grants Provided in Japan during Fiscal Years 1977-1983

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Total amount of the levy collected (million yen)</th>
<th>Total amount of the grant provided (million yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977a</td>
<td>9,594</td>
<td>---</td>
</tr>
<tr>
<td>1977</td>
<td>18,814</td>
<td>1,332</td>
</tr>
<tr>
<td>1978</td>
<td>18,066</td>
<td>4,105</td>
</tr>
<tr>
<td>1979</td>
<td>18,066</td>
<td>18,040</td>
</tr>
<tr>
<td>1980</td>
<td>17,256</td>
<td>25,815</td>
</tr>
<tr>
<td>1981</td>
<td>16,512</td>
<td>22,877</td>
</tr>
<tr>
<td>1982</td>
<td>15,431</td>
<td>---</td>
</tr>
<tr>
<td>1983b</td>
<td>18,885</td>
<td>---</td>
</tr>
</tbody>
</table>

a As the revised law was enacted in the middle of FY1977, only half a year amount of the levy was collected.

b The levy was increased from 30,000 yen per person per month to 40,000 yen.

In addition to the levy system, the revised law includes two important grant programs to encourage the employment of disabled people. The first is a special monthly grant provided to those employers who began employing severely disabled persons between April 1, 1979 and March 31, 1982. Those employers were eligible for a grant of 100,000 yen per month (about $448) for a period of two years to meet the expenses of administration and management services necessary for severely disabled employees. More than 20,000 severely physically disabled persons were employed in private enterprises, a majority of which were small enterprises with less than 66 full-time employees.

A second grant was established to assist employers in setting up a special enterprise where more than 10 disabled persons would
be employed along with nondisabled employees. At this point about 200 such enterprises have been established. The average number of employees is about 40, of which 24 are nondisabled workers and 16 are disabled. A total of more than 3,000 disabled persons have been employed by these companies; nearly half of them are mentally retarded workers. Obviously, these special enterprises have played a very important role in providing employment opportunities to severely disabled persons, including mentally retarded persons who find it difficult to be employed in ordinary enterprises.

The Role of the National Association for Employment of the Handicapped

The promotion and stabilization of employment for disabled people is not possible merely through administrative measures, however. It is particularly essential that the employer who employs a disabled person should tackle voluntarily any and all problems with an accurate perception and understanding of disabled people. For this purpose, it seemed prudent to establish an organization that could educate and assist potential employers of disabled persons. Therefore, the National Association for Employment of the Handicapped was organized according to the Revised Physically Handicapped Persons' Employment Promotion Law. Working closely with the Ministry of Labor, it has developed various activities that promote the employment of the disabled.

The main work of the Association includes assistance, various forms of educational and instructional programs, research into the vocational development of disabled people, the collection of levies, the providing of grants and subsidies, and public relations activities using the mass media.

The Japanese government has recently undertaken an administrative reform, to rationalize its organizations and their functions. As a part of the reform, the administration and operation of the levy and grant system was solely entrusted to the Association on April 1, 1985.

Further Tasks of Employment of Disabled People in Japan

The Japanese population has been undergoing a very rapid aging process, compared with other industrialized countries. The aged population, 65 years old and over, comprised 9.3 percent of the total population in 1981, will increase to 15.6 percent in 2000, and to 21.1 percent in 2025. According to a survey (Ministry of Health and Welfare, 1980), the proportion of aged, physically disabled people (65 years old and over) in the total population was 41.8 percent. The prevalence of physical disability among the aging population in Japan is increasing at a faster rate than that of the total population. Aging of the physically disabled population has caused the percentage of gainfully employed physically disabled people to
drop sharply from 44.1 percent in 1970 to 32.3 percent in 1980; while the general population showed a lesser decline, from 68.8 percent in 1970 to 64.4 percent in 1980.

The retirement age at many of the private firms in Japan has customarily been 55 years of age. Taking into account the rapid aging of the population, the Japanese government has been giving administrative guidance to private firms to extend their employees' retirement age to 60 years old. Consequently, by retaining older employees, such efforts also expand employment opportunities for physically disabled people and help meet their quota, thus fulfilling their social responsibilities.

According to the Ministry of Labor, as of March 1983 there were about 37,700 physically disabled job seekers who registered with the public employment security offices. About half of them were 50 years old and over, and approximately 30 percent of them were categorized as severely disabled persons.

The employment policy of Japanese enterprises, especially large-size enterprises, has been to recruit young people who are newly graduated from schools, colleges or universities, and to encourage them to stay in the same enterprises until their retirement age. This kind of lifetime employment has been a core of the traditional Japanese employment practices.

Because of these combined policies, young physically disabled persons with less severe disabilities have a much better chance at being employed in large-size enterprises than do their non-disabled counterparts due to the quota system. On the other hand, it is extremely difficult for anyone of middle age or over, whether he or she is disabled or not to be newly employed in those enterprises on a full-time basis. However, private firms cannot achieve their quota unless they seriously try to recruit hard-to-employ physically disabled people, since they constitute the majority of job seekers of the public employment security offices.

In order to assist large-size firms to meet their quota, as well as to promote the employment of severely disabled people, the following measures have been taken;

1. to encourage large-size firms to establish special factories or offices, as joint projects with local governments, where severely disabled people are placed alongside non-disabled workers.

2. to encourage large-size firms, in cooperation with vocational rehabilitation centers, to establish PWI-type training programs (currently under the jurisdiction of the Ministry of Health and Welfare) to promote the employment of severely disabled people.
In addition to the employment measures under the levy and grant systems, various other kinds of employment assistance programs have been provided to both employers and disabled people. The Japanese government is now considering a revision of the Physically Handicapped Persons Employment Promotion Law to include mentally retarded people in the quota system in the near future. Nevertheless, it is unrealistic to assume that all of the employment problems of Japan's disabled population will be solved through these employment measures alone.

At present we have around 1,400 sheltered workshops and work activity centers throughout Japan, where various kinds of work-oriented services have been offered to more than 35,000 severely disabled clients. However, we still need many more community-based facilities to fulfill the vocational needs of the hard-to-employ disabled population.

Like other countries, Japan has been suffering from huge fiscal deficits in recent years, and government officials have been trying very hard to reduce the national budget, including social security expenses. Therefore, in order to make the most of our limited financial resources, we now have to introduce cost-effective concepts, even into the rehabilitation and social welfare fields where such concepts have not been typical.
In this presentation, I am going to concentrate on the affirmative action program that is mandated in the Rehabilitation Act of 1973. First, however, I must provide a backdrop for my comments by giving you a summary of what took place in the 1960's and 1970's, a great period for the handicapped in the United States. During these years, major legislation was adopted, including: the Architectural Barriers Act of 1968, the Urban Mass Transportation Act amended in 1970, the Rehabilitation Act of 1973, the Developmental Disabilities Assistance and Bill of Rights in 1975, the Education of All Handicapped Children Act of 1975, the Congressional Rehabilitation and Developmental Disabilities Assistance Amendments of 1978, and the Civil Rights of Institutionalized Persons Act of 1980. There were many, many more, but these are the major milestones.

We now look ahead to the 1980's. As a part of an effective enforcement program in which an arm of the federal government is attempting to regulate the employment of the handicapped, I must raise a precautionary flag. Because of the specter of huge government deficits, disability-related programs in the next few years will continue to face budget cuts at the federal level. Accompanying these cuts will be further efforts to limit advocacy by disabled persons through federal regulations. The 1980's will be a time when more qualified disabled persons will assert their rights to participate in society, particularly in regard to employment and housing. Disabled people will be testing rights supposedly guaranteed in both federal and state laws. Those laws are already there, and hopefully they will be effectively implemented.

With this picture of the 1980's, we are going to have to rely on what I refer to as the human factor, if we are going to see real progress. The Affirmative Action Program, if I may summarize it,
needs the help of individuals rather than the muscle of the federal government. I think we are terribly weak in terms of enforcement. We do not have the personnel, the ability, or the support to achieve these aims. Laws are fine in terms of being statutes on the books for those contractors and businesses who want to cooperate. However, what we really need to make affirmative action actually work is widespread understanding and support on the part of management. This support is still the key to success; the human factor is the key to the future.

I may be a traitor to the cause by saying that I think we also need to take a new look at the advocacy area to establish a new understanding among the able-bodied in place of more traditional views. Handicapped people have learned to cope with their problems, but able-bodied people have not learned to relate to the handicapped. We need to return to the human factor, working with people who understand what this is all about.

Rather than understanding the laws and statutes from the perspective of their chronological development, it is possible to summarize current law as reflecting three distinct social attitudes. The first considers handicapped persons as being incompetent to take care of their own needs and/or incapable of full participation in life's activities. The second is the view that handicapped people are capable of limited participation in some of life's activities. The corollary of these perspectives is a limited definition of public and private responsibility to handicapped people. The third is the perspective that handicapped people are capable of full participation in some or all of life's activities, and that a democratic society has a responsibility to establish and maintain an environment supportive of this position.

Perhaps the most difficult barrier to disabled persons is one they cannot control. It is the battle to gain support and the understanding of the majority of Americans who are not handicapped. This battle for support is essential. The integration of handicapped persons requires additional expenditures by government, public and private institutions, and individuals. It requires a recognition that the full development of democracy and equal opportunity includes handicapped people, not in their own ghetto but in the mainstream. The battle for understanding requires nonhandicapped individuals to look within themselves and to understand their own feelings about disability and handicap. Pity and fear contribute to an attitude which rather than looking forward to fulfilling human potential and hope, focuses on limitations with the consequence that people with handicaps are viewed as having restricted opportunities. The handicapped person lives with the reality of his or her handicap and expects nonhandicapped people to understand the need of each human to fulfill the unique potential he or she possesses. Discrimination against a disabled person occurs, in part, because of the ignorance of people concerning the capacity of
disabled people to be employed successfully and, in part, because of
the incapacity of people to confront the disability of others. I put
the shoe, as you probably have gathered, on the able-bodied. I think
it belongs there.

At first, the civil rights movement of the 1950's and 1960's
didn't specifically apply to disabled people. Later, the movement
took on a new direction to address the civil rights of all minorities,
including women and the handicapped. There was recognition
concerning the stigma of disability and society's subsequent
tendency to consider handicapped people as inferior. This recogni-
tion grew into a national awareness that no minority group should be
stereotyped. Sections 503 and 504 of the Rehabilitation Act of 1973
called for individual accommodations, and this grew into the
beginning of political power within the disability movement.
Coalitions of disabled people were formed, and they became skilled
at the political process. The Rehabilitation Act of 1973 with its
nation-shaking Sections 501, 503 and 504, as well as a few dozen
d lines of type that were later added to the law, were adopted without
public hearings because the disability coalitions had created enough
of an impact to prompt Congress to act. Section 501 addresses
federal employment of handicapped people, Section 503 addresses
employers who have a contract to provide goods and services for the
U.S. government of $2,500 or more, and Section 504 concerns
accessibility to all agencies and programs which are recipients of
federal financial assistance. For the first time employers could no
longer exclude qualified, disabled people. A new, "reasonable
accommodation" concept had been introduced to the lexicon of
employment.

Let me say one word about the process of dealing with the legal
enforcement of employment for the handicapped. One of our
problems stems from the broad label of disability and the lack of
precision in determining who truly constitutes those protected by
law. Are those with minor or even temporary disabilities to be
considered in the same way as those with severe disabilities? What
happens when the disabled person lacks proper preparation for the
job and is thereby excluded? Over the past ten years in my work at
the Department of Labor, I have dealt with an average of 4,000
complaints per year from the handicapped community. We have
found roughly 40 percent of these in favor of the complaint or
violation. Although the expected rate of violations in the work place
universe seems considerable, it must be pointed out that 4,000
complaints out of a total population of 36 million disabled people in
the United States is clearly just a drop in the bucket. At present, we
have 800 people to process these complaints, to investigate the
situation, and to reach agreements with federal contractors. So we
have just skimmed the surface.

We do have compliance reviews for 10 percent of our
federal contractors. Compliance reviews are like Internal Revenue
audits where we go in and check to see what is being done. But 10 percent of 215 or 225 thousand federal contractors possessing $81 billion in contracts from the federal government and employing millions and millions of workers is certainly only a small accomplishment. Our compliance reviews have actually covered the employment of 3.5 million out of some 60 million employees.

Despite these small gains, we have disproved various myths and bugaboos that have been given by employers, specifically that expectations regarding increases in insurance rates, accommodation costs, and second injuries have not materialized. We must continue to replace negative attitudes through actual experiences in employing disabled persons. Likewise, in order to further these efforts, disabled persons must participate by coordinating and communicating in order to accomplish their necessary goals in the 1980's and beyond.
Choosing a career is difficult, especially in today's economic climate. And the career choice for someone who has experienced the trauma of a disabling accident is even further compounded. At the Ontario Workers’ Compensation Board, vocational rehabilitation services are provided to assist injured workers in returning to employment. While in Canada there are a number of public and private programs to assist disabled persons, our mandate at the Ontario Board is limited to persons injured at work.

Since 1924, vocational rehabilitation has been an integral component of the compensation scheme in Ontario. While this 60-year history has afforded the opportunity to develop and refine our services, there is still undeniably more to be learned and more that could be done. In this regard, our participation in this symposium affords a unique opportunity to share our "service strategies" with fellow professionals in the field, and to benefit from the experience and knowledge gained in other jurisdictions.

Mandate

In Canada, workers' compensation falls within the purview of provincial jurisdiction. As such, each of our 11 provinces has its own legislation and agency ("board" or "commission") under which it provides services for those injured in the workplace. While there may be subtle differences in application from province to province, the general philosophy and functions are comparable.

The Workers' Compensation Board in Ontario operates under the formal provincial legislation of the Workers' Compensation Act. A collective liability format is used to fund the Board's operations, whereby employers remit an annual assessment based on gross payroll. Compensation payments are made to Ontario workers who are disabled by work-related accidents or diseases and prevented from earning full wages. For those permanently disabled by accidents on the job, lifetime pensions are awarded. Medical
services and treatment are monitored by the Board and paid in full. In addition, the Board financially supports nine provincial safety associations whose objectives are the prevention of industrial accidents and disease through safety education.

In addition providing for vocational rehabilitation services, the Act's language is sufficiently broad to enable the Board to offer a wide range of specific programs and services which are examined more fully below. Today, services are provided province-wide, from the Board's head office in Toronto, its hospital and rehabilitation center in Downsview, Ontario (a Toronto suburb), and from a number of area and regional offices.

Objectives

There are three primary objectives that underlie the vocational rehabilitation program at the Ontario Board:

1. To facilitate the return of industrially-injured persons to employment and independent living in the community;

2. To provide specialized resource/consultative services to expedite the injured worker's return to employment; and

3. To actively pursue and secure employment opportunities for injured workers.

Administration

Within the Vocational Rehabilitation Division, there are four operative sections:

1. Vocational Counseling Branch--primary service delivery function.

2. Rehabilitation Resources Branch--provision of consultative and support services to the primary activity.

3. Employment Services--procurement of employment opportunities for injured workers and specialized placement services, including employment trend forecasts and ergonomic analyses of workplace.

4. Policy and Review Services--review of adverse decisions; policy research and development.

Fundamental Principles

The Workers' Compensation Board rehabilitation philosophy is based on the "total person" concept. Our ultimate goal is the job for the person. In this sense, abilities are stressed and become the
focal point for service, not disabilities. Dr. Mittelsten Schield referred to this notion in his presentation: we must be more conscious of what the person can do, not so much what they cannot do.

Over 150 rehabilitation counselors are employed by the Vocational Rehabilitation Division across Ontario. These are the key people in making the entire process work. In addition to providing a direct counseling service to injured workers, the counselor's community presence enables him/her to play an important coordinating role in helping the client receive other local social services that may not be provided by the Board. The role of the counselor as "case manager" is somewhat unique, in that the counselor is the only helping professional who is present from the initial treatment stages to successful job placement.

The vocational rehabilitation process is very clearly goal-oriented, the goal being successful job placement. As with any other form of goal-directed behavior, the likelihood of achieving a successful outcome is greatly enhanced when a well-thought-out plan has been developed prior to initiating actions. It is essential that the injured worker participate fully in the development of his/her individual rehabilitation plan. This participation ensures a degree of commitment to the process, an exceedingly important element in successfully achieving the goal. In fact, it is this joint development of a rehabilitation plan that, for me, is one of the most critical components in the entire process.

Eligibility

Recommendations and requests for vocational rehabilitation service come from a variety of sources: the Board's Claims Services and Medical Services divisions, the Appeals division, self-referrals by injured workers, and from other interested parties, including elected representatives, advocacy groups and family members.

When apprised of an individual's situation, the situation is investigated in order to evaluate the worker's need for service and to determine whether or not he or she is eligible. Generally speaking, eligibility is assessed in three broad categories:

1. The injured worker who has a compensable (work-related) disabling condition and cannot return to the usual pre-accident occupation.

2. The worker in a work environment where there is a risk of an industrial disease who is advised to consider alternative employment (i.e., "preventative rehabilitation" for such conditions as asbestosis, silicosis, and other similar industrial diseases).
3. The injured worker who may suffer a recurrence or aggravation of disability if preaccident duties are resumed (e.g., skin diseases such as dermatitis).

Service Delivery Model

There is no magic formula for success in the field of vocational rehabilitation. The people we are working with are unique in terms of their cultural, educational and socio-economic backgrounds and also with respect to the environmental influences that have shaped their personal development.

We can, however, increase the likelihood of achieving a successful outcome by approaching our work with our clients in an organized, consistent and systematic way. The application of a common, strategic framework contributes to a clear understanding of the overall process from its beginning to its conclusion.

At the Workers' Compensation Board, a vocational rehabilitation service delivery model (see Figure 1) has been designed and refined specifically to:

- clearly reflect the primary objective of returning injured workers to competitive employment.
- recognize the possibility of other positive outcomes that do not include a return to gainful employment, since we must identify and respond to client wishes, such as the wish to retire.
- be results-oriented based upon goal-directed action by both the counselor and the client throughout the rehabilitation process.
- allow for the recognition of individual differences and the need to individualize plans to meet the unique needs of each worker.
- acknowledge the dual responsibility of the counselor and the worker in proceeding toward the mutually agreed upon goal.
- confirm service continuity as the cornerstone of successful rehabilitation.
- reflect the reality that, in its provision of service, the Board must operate within its mandate as set forth in the Workers' Compensation Act and approved policy documents.
- identify the need for ongoing evaluation throughout the rehabilitation process.
be consistent with respect to the program's fundamental principles.

Figure 1. The Vocational Rehabilitation Service Delivery Model of the Ontario Workers' Compensation Board.

While this model categorically divides the vocational rehabilitation service delivery process into clearly defined stages, specific time frames have been avoided. Superimposed on the steps associated with this model are the emotional stages commonly associated with an individual's adjustment to injury (shock, anger, depression, acceptance). Progression through these stages is highly individualized and will influence the client's readiness to pursue a vocational goal. As Dr. Akabas pointed out, the earliest return to work date may not be the best date to return to work. Our service design and delivery must reflect this reality. The steps in our model for vocational rehabilitation are as follows:
1. Case Familiarization
   - review pertinent documentation (e.g., service reports, medical reports).
   - arrange initial contact; wherever possible, home visits are made.

2. Initial Contact Phase
   - discuss the vocational rehabilitation role and nature of the service.
   - evaluate the client's expectations of the service.
   - conduct initial interview (e.g., personal data, employment history, perceived barriers to employment).
   - evaluate the worker's perception of his/her disability.
   - provide encouragement, support and guidance throughout the rehabilitation process.

3. Identification of Injured Worker's Needs
   - evaluate and verify required services with the worker.
   - establish the rehabilitation direction through selection of either the vocational path or an alternative course of action.
   - proceed with case closure if services are not required.

4. Development of Primary Vocational Rehabilitation Plan
   (The Board's focus is on the potential for return to work with the original employer in order to realize benefits in costs, work experience, service worker's emotional comfort, etc.)
   - determine prevocational needs and identify most appropriate resources to provide these services.
   - review job expectations.
   - identify items for discussion with the accident employer (e.g., liaison with union).
   - develop strategy for implementation.
5. Implementation of the Primary Vocational Rehabilitation Plan
   o follow through on Stage Four considerations.
   o integrate results from the various findings.

6. Development of Alternative Vocational Rehabilitation Plan
   (This stage is considered only after employment with the accident employer is ruled out.)
   o assess worker's skills in job search techniques, interview skills, resume preparation.
   o explore and identify vocational alternatives.
   o determine the need for various evaluative tests and/or assessments.
   o consider the need for academic upgrading or skills training.
   o develop strategy

7. Implementation of the Alternative Vocational Rehabilitation Plan
   o follow through on Stage Six considerations:
     --this may include a number of evaluation services--physical appraisal, situational assessment, vocational evaluation, on-the-job assessment.
     --it also may include training, as indicated--work adjustment training, training-on-the-job, academic and skill training.
   o integrate results with various findings.
   o move toward job location and placement.

8. Evaluation of Plan Effectiveness
   o ensure that all agreed upon task assignments are completed (counselor and client).
   o follow-up job placements to ensure that the worker is developing skills required for job retention.
consider reverting to an earlier stage in process if results are not achieved or needs have changed.

9. Successful Placement
   - confirm that placement is satisfactory to both worker and employer.

10. Closure and Final Evaluation
    - advise worker that services are being closed.
    - prepare final summary and closure documentation.
    - review services provided to assess the effectiveness and efficiency of the plan.

Complimentary Course of Action: Rehabilitation Aids/Special Needs

This course of action is designed to meet the specialized rehabilitation needs of workers, actions which will hopefully result in a greater degree of independence and integration within the community. This can be facilitated through the provision of supportive counseling, rehabilitation aids, mobility assistance, and home modifications. Considerations may include home-bound recreation or hobby-related activities.

Complimentary Course of Action: Analysis of Nonemployment Resource Alternatives

For a number of reasons, the worker may choose not to pursue a return to employment. This decision may be taken following an exhaustive consideration of employment options, or the worker may decide on this course of action earlier in the rehabilitation process. The worker's long-term financial security is reviewed and addressed in this course of action.

Present and Future Areas of Attention

We are presently devoting considerable attention to a number of items, each of which will have singular importance in the future of our work. Matters currently under review include:

- Ergonomics: Through the study of man/machine relationships, we may be afforded an opportunity to encourage workplace design changes or modifications to work procedures to better enable injured workers to secure gainful employment.
Employment Trends: With the major technological revolution now occurring in the workplace, profound changes are occurring in employment as we traditionally know it, thereby affecting the labor market and how we do our work.

Research: In order to keep pace with change, and to ensure the provision of efficient and effective vocational rehabilitation service, there is a need to undertake evaluative statistical research and analysis.

Employer and Labor Participation: It is becoming increasingly necessary to solicit and ensure the cooperative participation of both the employer and organized labor in the rehabilitation process as a means of effecting satisfactory, long-term placements.

Training: To meet the specialized needs of new jobs in an expanding technological employment market, it is becoming necessary to encourage and support the development of short-term skills training programs.

Public Awareness Campaigns: There is a continuing need to positively influence public attitudes about disabled persons and our work.

Monitor Service Effectiveness: Since public service providers are being held increasingly accountable for their service effectiveness, there is a need to conduct cost-benefit analysis and other self-assessments, to evaluate service performed, to maintain consistency, and to improve quality.

Vocational Evaluation: Improved measures of testing and evaluating vocational interests and aptitudes are being explored and used in the rehabilitation process.

Conclusion

At the Workers' Compensation Board, we are confident that our vocational rehabilitation program is effectively meeting the needs of injured workers today. We are fully aware, however, that these needs are changing rapidly, as are the financial, social, and employment environments in which we work. It is imperative that our services remain relevant and meaningful to both the injured workers and employers of our province. We must demonstrate creativity and a willingness to be innovative, accountable, and responsive with respect to tomorrow's needs. It is our commitment to these principles that poses one of our most significant challenges for the future.
Mr. Jan Albers is the director of the Vocational Training Center, the "Hoensbroeck," part of the Lucas-Stichting Foundation for Rehabilitation in the Netherlands. Mr. Albers was born in the Netherlands, and studied at Heidelberg University in Germany. He also represents his center as a member of the Network of European Rehabilitation Centers of the European Community.

The Hoensbroeck training center is situated in the southern part of Holland in the province of Limburg. It and a smaller institute in another part of Holland are the country's only special training institutes for handicapped people. This situation exists for many reasons. First of all, the development of integration of the handicapped after the Second World War in our country was mainly the development of sheltered work. Secondly, we have always made use of regular working and schooling facilities for the handicapped where integration has absolute priority. The third reason was, I believe, the development of our social security system. During the economically good years of the 1960's, new legislation was enacted in our country entitled the Disabled Insurance Act. Now a very high percentage of our population is making use of the benefits of this new law. We currently have nearly 700,000 people getting a pension on the basis of this law. That is more than 17 percent of a potential working population of about two million people. The pensions were and still are relatively high, and the difference between the working salary and the nonworking pensions is not very large. Nevertheless, it appears that special centers are needed for a number of handicapped people.

Another piece of background information is our rate of unemployment, which like many other western countries, is very high. Today, the rate is 18 percent. Since 1947, the Netherlands has also had a quota system. It's an old act, and the system really doesn't work. The reason for this is that we have no sanctions and the law is not adapted to the circumstances of today. There is a new act that has been in preparation for several years, and its intention is to set the quota system at five percent. However, it is still unclear whether or not this new law will be enacted this year.

Why a special center for handicapped persons? As you know, there are many reasons, pro and con. However, the main argument for us concerns the handicapping condition itself and the subsequent needs for guidance in the area of learning and personal rehabilitation counseling.
A second reason concerns the background of our clients, their vocational training level and professional background. Most of our clients have a relatively low level of education, so they have little possibility of using the traditional training facilities. Our institute accepts physically disabled persons (18 to 40 years; male and female) who do not have the formal certificates normally necessary for such training. To us, only the abilities are important. The aim of the center is to integrate disabled adults into the free labor market by means of qualified training.

The center was started in 1979 as an experiment that was financed by the national government and the social security system. The nearby University of Limberg was given the order to carry out a large study of this experiment, including a cost benefit analysis.

Our training center is a part of a bigger institution, The Lucas Foundation for Rehabilitation. We have several different institutes within the Foundation, including a medical rehabilitation center, centers for audiology and speech disorders, a center for rehabilitation technology, and our vocational training center. Together with the University of Limberg and the National Research Organization, an institution for rehabilitation research, we also have, since the beginning of this year, an information center. In addition, we have a school for speech therapy and occupational therapy. Also noted is the fact that our vocational training center is a member of the European Community (EC) network of rehabilitation centers.

Our vocational training center consists of four training departments, and the capacity of the center is 150 persons in residence. We have the ability to train disabled people in the fields of technical drafting, mechanical engineering, electronics; precision or fine mechanics, and business administration. These departments were selected as a result of a 1970's study done by the Rehabilitation Institute in Amsterdam and one of our social security bodies concerning vocational possibilities for disabled persons. The study indicated that the four vocational fields mentioned here could offer good professional opportunities for handicapped people due to the favorable situation of these occupations in the labor market. It is also the consensus of other countries in the European Community that these four departments were most often selected for special training centers for handicapped people.

The duration of the training is two years. In our center, the initial six weeks is the same for all candidates, a time of individual instruction. After these six weeks, participants go into the various training departments. The first month is a mixture of group instruction and remedial teaching, and in every sector, people are trained in various levels. The final training term for all the sectors is on a secondary vocational level. There are official examinations at this level, and each training program is finalized with a recognized certificate.
In addition to the official recognition at the end of the training, course members in every program have some extra attainments as well. This is done to further raise students toward the threshold of entry to industrial circles. For instance, in the electronics training, extensive attention is paid to microprocessors. In the mechanic training, participants learn to operate automation processors. In the administrative sector, the institute has at its disposal its own training firm where the trainees also learn how to operate computers. In the technical drafting field, training preparations have been made to introduce Computer Aided Design (C.A.D.). In the future, the center also wants to train in C.N.C.-technics in the mechanic sector. With this philosophy the institute tries to make trainees ready for the labor market.

Now I would like to give you some results of the center's five years of service. From 1979 through 1983, we had 421 candidates of which 309 were admitted and 112 were rejected. The main reasons for rejection were either poor educational background or abilities, or level of intellectual functioning too low for this training. But, as you might expect, admittance doesn't always result in successful examination or completion. The dropout rate was 18 percent in 1979, 22 percent in 1980, and 23 percent in 1981. At the moment the rate is 20 percent.

The work load and study hours during the training is relatively high. During the week, the trainees have 36 lessons, as well as about 10 to 16 hours of homework. It is a very hard training program, but the training results are relatively good.

Almost all course members pass their final examinations. In the mechanics and technical drafting/mechanical engineering sectors, some course members passed after a reexamination. In the administrative and electronic sectors, all course members eventually passed their examination.

The center's final aim is to be able to place all its course members in the free labor market. We did succeed in finding jobs for more than 80 percent of our candidates. This figure is based on the final examinations in 1981, 1982, and 1983. We found no significant differences from the various training sectors, and we consider this result very satisfactory knowing that there is high unemployment these days.

The cost of training is relatively high, about $100 a day. It means about 200 training days a year, excluding weekends, holidays, sickness, and so forth. The total cost for a year is about $20,000, or about $40,000 for the whole training program. An external cost benefit analysis has been conducted by our council for Social Security Benefit. Under favorable terms, we have achieved a benefit ratio of 3.7 to 1.0, and under unfavorable terms, the figures are 1.8 to 1.0.
I am delighted to have this opportunity to react to this session, which deals with the role of the employer. The foregoing papers have given us a wide spectrum of views from various countries. John Noble's paper took a very good look at the overall U.S. policy towards disabled and handicapped persons.

I am an economist. I assume that employers and employees are rational people who are able to follow their own self-interest. In general, the symposium has touched upon this topic, but usually with somewhat of an apology. The first appeal is to the best humanitarian motives, and the statement that "it's good business to hire the handicapped" comes as an afterthought. This may be the wrong order for our approach. To get a feel for the situation, one must go back to the original principles of workers' compensation, which came on the scene before World War I, in 1911.

The basic idea was that we would place the cost of work injuries on the employer, not so much because the employer was responsible for them—that may have certainly played a part—but because the employer was in the best position to do something about them. The idea was that if we placed the costs on the employer, the employer would find ways and means to minimize these costs. The employer, in pursuit of his own self-interests, would introduce various safety equipment and various ways to reduce accident frequency. The motive was profit seeking, but the results were humanitarian.

Consideration of self-interest leads to the question: Is rehabilitation cost-effective? Does it really pay to hire the people that we would like to see hired? The answer is not a simple one. Sometimes it does, and sometimes it does not, and I believe we have to face this problem.
Consider a person in the shop for whom the company has invested a lot in training. He has been with them for 10 to 12 years and is now doing a skilled job. Even if the person suddenly suffers a severely disabling work accident, perhaps becoming a paraplegic, so long as his cognitive functions are unimpaired, it is possible to get him back to work and probably pays to do so. On the other hand, consider Gus' Luncheonette where the hired dishwasher has been on the job for six weeks, or perhaps as long as six months. Assume that the employee has all kinds of problems, including alcoholism and a number of other assorted ailments. If that person gets hurt on the job, it is not evident that it is cost-effective for Gus to rehabilitate him. These are extreme cases, and most cases, of course, fall between these two extremes.

The major contribution we can make in this area is to inquire and learn why and where rehabilitation is cost-effective, and where it is not. There are differences between an expanding industry, for example, and one that is contracting. There are differences between an industry that is small and one that is large. There are variations according to the state that the industry operates in. Michigan is different than New Jersey when it comes to workers' compensation and other employment laws. All of this requires rather close analysis.

It is also necessary to look at the barriers to rehabilitation. In some cases it may be a lack of information. And in this regard, we can all do a better job in educating people as to the benefits and the costs of rehabilitation. I am not sure that's a major problem for most employers, but it may well be. In other cases, it may simply be technology in the sense that we may not know how to address the problem. Methods will vary depending upon the disability and the types of training that may be necessary.

All of this is significant in light of what was said by the panel members. The quota systems in Japan and Germany were described, and Mr. Albert's paper told us something of the Dutch experience. The evidence presented has not persuaded me to become an advocate of a quota system for the United States. The quota system differs from the approach we have used in the U.S. where we have stressed antidiscrimination and employer training subsidies.

What's wrong with a quota system? There are many things. For one thing, it interferes with the employment chances of handicapped people. The employer who hires his quota of handicapped people has, in effect, discharged his obligation. This is the old "I gave at the office" syndrome. One need not do anything more after that point.

Second, the people hired under the quota system may be persons who would be hired anyway. Are they hired at "no cost" to the employer, as some of them apparently are in England, or are they people whose tenure results in net costs to the employer?
That is, are the wages to be paid people who are being hired under the quota system greater than the value of what they produce? If so, one surely could raise many more issues here. Is this where such subsidies should be spent?

Another problem is that I suspect most employers are smart enough to be able to evade almost any quota system one could devise. Certainly, employers in Europe have been able to do this with impunity. In contrast to the quota system, we are developing in the United States a policy which we need not apologize for. It is the beginning of a policy on discrimination and affirmative action referred to by David Brigham in his paper. We have had more than our share of difficulties in this area. Nonetheless, I think many people in Europe would embrace an antidiscrimination program rather than the quota system. It is in this respect that we have to get back to the employer who operates in a market that contains restraints of all sorts. It is up to the employer to adapt to these constraints, whatever the rules may be. In certain areas we have gone a long way towards restricting the employer's freedom of movement. This is particularly true in the area of civil rights where we prohibit discrimination, and in some areas that require affirmative action.

Sections 503 and 504 of the Rehabilitation Act contain some of this same philosophy. As I listen to Harlan Hahn, he advocates that we go much further down the road to a state of almost absolute civil rights for persons with disability. He would seem to imply that disabled persons should be entitled to jobs almost as a civil right. I am a staunch advocate of Sections 503 and 504, although I recognize the problems we have had in enforcement and definitions in this area. A handicap or disability is something quite different than race or sex. It is not an inherent quality of a person. Most of the activities in which we are engaged in rehabilitation are designed to remove the impediment to functioning that defines the disabled person. We may not be able to remove a person's impairment, but we certainly want to remove his disability, i.e., his inability to participate in the labor market.

It is important in this area that the rules be well-defined. No matter what they are, employers can rationally respond only if these rules are known; only when they are known will they become enforceable. It is necessary to eradicate irrational selection procedures based upon a person's appearance or his physical or mental impairment. This is all that, in the end, an antidiscrimination procedure can do. It cannot, in and of itself, guarantee jobs.

I am not quite as enthusiastic as Mr. Brigham is that we have solved problems relating to costs of accommodation. If employer costs are as low as reported in the Berkeley study, it raises the question of whether the surveys have gotten to those who have real changes to make. Perhaps we are only getting at those employers who are making minor modifications.
Neither am I confident that we have solved our problems with the second injury funds, which date back to the beginnings of workers' compensation. The problem with second injury funds is that they are limited in their scope. In many cases, they cover only employees who are totally and permanently disabled. In others, there are complex interrelationships between the first and the second injury and unless the technical qualifications are met, the employer cannot be compensated from the fund.

The idea of second injury funds is an excellent one. They are designed to encourage employers to hire handicapped persons by minimizing compensation costs to the employer should an employee suffer a second or a subsequent injury. The time is probably long overdue for a major push in the United States to inquire as to the workings of these funds and to see whether we can remove some of the impediments to their being a true aid to the employment of the handicapped.

I am a little disturbed by the assumption made by some panel members that we are living in a "postindustrial" society. Manufacturing has not left the state of Michigan. We are not going to live in a world without unskilled jobs. We could so easily be caught up in a false vision of a future society unless we specify exactly what we mean by a postindustrial world. Of course we live in a changing world where jobs and job requirements are changing. But for many years to come, we will be living in a world where manufacturing will be important and where there will still be a great need for people to fill relatively unskilled levels. I don't think that is the immediate problem.

I think the immediate problem is to get down to brass tacks and to discuss frankly and openly the costs of accommodations and the costs and benefits of rehabilitation. This leads us right into the whole area of appropriate incentives and disincentives, not only for the employee but also for the employer. Public policy must support the natural desires of the employer to offer work and the employee to work. Disabled persons can, with appropriate policy changes, participate in useful work rather than collect governmental benefit transfers.
Mr. Herb Mosher is director of special projects for the Presbyterian Health Services. He was formerly director of rehabilitation programs for the Menninger Foundation. Mr. Mosher received his master's degree in communication and administration from the University of Kansas. He has served as vice-president of the International Association of Business, Industry and Rehabilitation and was the founder and past director of the Research and Training Center at the Menninger Foundation.

Thanks to a number of partnership programs, many disabled persons have had new opportunities to find steady jobs. These jobs have helped the disabled economically, as well as in other ways that we sometimes do not take time to measure. To explain this further, I would like to refer to two studies, one conducted in Michigan and one in California, which indicate some interesting facts that are very carefully documented in the two studies.

First, the studies show that a lack of steady work has serious implications for one's health, such as increases in cardiac problems, psychosomatic problems, and even an increased likelihood of contracting the flu. Second, from a psychological viewpoint, a lack of steady work causes increased marital disruption and family problems. Third, there is the issue of social status stability. If you consider the work you are doing, the conference you are attending, and the role you play in society, you realize that most of these activities revolve around your work.

It is important to point out that the individuals involved in these studies were able-bodied persons and that a significant minority of them developed clinical depressive syndromes as a response to being out of work. It is also interesting to note that when a large number of people are out of work, we refer to this as a depression, both economically and clinically. Thus, in addition to financial security, a steady job is extremely important for maintaining good health. Simply put, being unemployed can be hazardous to your health.

We are no longer a society that defines itself by the land we live on. We are a work society. In this respect, partnership programs try to not only increase the economic wealth of individuals, but also to increase their health, their stability, and their social relationships.
Birger Sjostrom is the head of the Vocational Rehabilitation Division for the Swedish National Labor Market Board. Mr. Sjostrom is a graduate of Uppsler University in history and political science. He has also been employed as a vocational guidance counselor.

Sweden is a country where few things are done without first being investigated by a national or a local committee. Adjustment groups, however, were developed during the 1970's from a grassroots movement. They began in Northern Sweden when companies ran into structural problems between their injured employees and their employment offices. They found that both employers and employees had similar problems. Consequently, both groups sat down together to discuss how to proceed and how to make the best out of the situation.

The cooperation resulting from this approach was so encouraging that some thought was given to using this same approach among larger companies in order to find suitable job opportunities for elderly and handicapped workers and to search for new or modified work places. After consulting with unions and employer associations, the National Labor Market Board decided to name these working teams, as they were called from the beginning, "adjustment groups."

Although we have several relevant laws in Sweden, the activities of these adjustment groups were never made subject to any particular legislation. Instead, it was left to the organizations of employers and employees to devise appropriate procedures. According to the resulting guidelines which have prevailed for some time now, adjustment groups are set up at workplaces where more than 30 persons are employed. The group usually includes three to seven members who represent the employer, the employee organizations, and the county employment office.

The goals of adjustment groups are to promote a more positive work life for older and handicapped workers, to propose measures to facilitate the recruitment of such workers, and to propose measures to help older and handicapped members of the work force remain in employment. A major barrier has been finding jobs that are suitable for disabled and/or elderly workers.
Labor market policy measures are especially helpful in overcoming this barrier. They provide grants for special modifications, technical aids for handicapped persons, and other incentives for the employer or the employee. During the group meetings, the employer representative reports on the changes in the size and composition of the staff, hiring efforts and other relevant matters. This allows the county employment service officer to obtain a firsthand view of the company's personnel policy and planning. With this information, the employment service officer has a better opportunity in the recruitment of occupationally handicapped persons. The union representative proposes practical solutions to the problems and gives information on the adjustment activities at the various union meetings.

In Sweden, legislation that supports the concept of adjustment groups includes the Co-Determination Act, the Employment Security Act, the Promotion and Employment Act, and the Work Environment Act. Enacted in 1976, the Co-Determination Act is concerned with the entitlements of employees regarding conditions at their workplace. Its importance to adjustment groups reflects the fact that the employer must negotiate before deciding on any important changes at the workplace and that the employees are entitled to participate in discussions on such matters as transfers to alternative duties and training.

The Employment Security Act is designed to enhance job security and contains special safeguards for elderly and occupationally handicapped employees. Old age or illness cannot, in principle, be accepted as objective grounds for dismissal. The Promotion and Employment Act is designed to help elderly and occupationally handicapped employees retain their jobs or to obtain other work in the regular labor market.

The Work Environment Act states that the employer must provide accommodations for the employee's special aptitudes in the workplace. While both employers and employees must cooperate in order to achieve a good working environment, the prime responsibility rests with the employer. Employers with more than five employees must have a personnel safety delegate whose task is to ensure satisfactory and safe working conditions. Workplaces with more than 50 employees must have a safety committee.

These four laws can be described as the foundation upon which the activities of the adjustment group are based. Under these laws all employers are required, at the request of the County Employment Board, to enter discussions with the Employment Service Office concerning the recruitment of elderly and occupationally handicapped job seekers. Employers must also discuss ways of improving working conditions for the elderly or occupationally handicapped employees. A County Employment Board may issue directives concerning the measures which need to be taken, as well as call
upon employers to increase the proportion of elderly or occupa-
tionally handicapped persons employed by the company. (This is as far
as the Swedes have gone in discussions concerning quota systems.)

The Central Bureau of Statistics in Sweden sent out a
questionnaire to about 600 employers of which 474 had more than 50
employees each and the remainder had between 20 and 49,
Twenty-five percent of the employers expressed the opinion that
adjustment groups were needed because of the very special nature of
their activities. Also, between 80 and 90 percent of the major
Swedish union organizations think that this is a very good way of
working with handicapped persons. Of the 5,000 adjustment groups in
Sweden, we have found that approximately half of them are working
according to the guidelines; the other half are only meeting once a
year. Potential problems with the work of these groups are
currently being discussed by a special government commission.

While the employment office attempts to get new people into
the work force (i.e., handicapped people who have not worked
before), work adjustment groups have typically concentrated on
people that are in the work force. In order to improve the impact of
these work adjustment groups, a governmental commission has sug-
gested that groups be placed under the jurisdiction of the safety
committees that exist in far more locations than the employment
groups. There are currently 18,500 safety committees now estab-
lished in Sweden dealing with environmental problems. If this
government commission's proposal is passed by Parliament, the main
task of these safety groups will be to oversee the activities of the
work adjustment groups.
GIRPEH
A NEW APPROACH TO A SOCIAL PROBLEM:
EMPLOYMENT FOR THE HANDICAPPED

Annick Mallet
French Regional Interprofessional Groups for
Employment of the Handicapped
France

Ms. Annick Mallet is the General Representative of GIRPEH (Groupements Interprofessionnels Regionaux pour la Promotion de L'Emploi des Personnes Handicapees). Ms. Mallet's training has been as a work adviser and sociologist. She was head of staff for the Employee Relations department of Sacilor Sollac Company and was responsible for management of disabled staff members.

In society, work is an essential part of life. The handicapped, like anyone else, attach a particular importance to the possibility of obtaining a job that will permit them to work alongside the able-bodied. However, of all the problems handicapped people must confront, employment still remains the most poorly handled. The working world has not been truly involved in any of the phases of the integration of the handicapped. And yet, there will be no solution without its active participation.

What happens when a business, large or small, finds itself faced with the problem of integrating a handicapped person? First, the personnel department attempts to solve the problem. However, the complexity these situations usually present requires the help of experts. This is where GIRPEH comes in. GIRPEH is a nonprofit organization that includes a cross-sectional representation of the various sectors of the working world. Created in 1977, GIRPEH's goal is to promote employment opportunities for the handicapped in normal working environments. Conceived by businessmen confronted daily with the most intricate aspects of personnel management, GIRPEH provides a meeting place for all those concerned with hiring policies—corporations, private businesses, organizations for the handicapped, training specialists, government agencies and others.

Three objectives were established for GIRPEH: (1) to help firms integrate and manage their handicapped employees, (2) to promote the integration of handicapped persons seeking employment, and (3) to develop ties between businesses and organizations which provide sheltered work areas for the handicapped.
GIRPEH functions as a service organization with its headquarters in Paris. For maximum efficiency, its structure is tripartite, interprofessional and regionalized. These terms are defined below.

**Tripartite**: The national authorities as well as the regional groups comprise three bodies sharing an equal voice. These include (1) the body of employers, made up of private and public companies, business associations, chambers of commerce, and agricultural and craft guilds; (2) the body of employees, made up of representatives from national labor unions; and (3) the body of qualified personnel for the handicapped, made up of the handicapped themselves and of people specializing in their concerns.

**Interprofessional**: This group addresses itself to all occupations in all areas of activity (i.e., factories, banking and insurance, service industries; commerce, crafts, agriculture and professional people).

**Regionalized**: The creation of regional groups throughout France allows for action as close to the job as possible; i.e., in direct contact with those concerned. Eight groups have been established or are in the process of being formed. Regional groups are seen as an intermediary step, necessary in order to open channels within important industrial/employment areas.

These three types of groups are funded by the contributions of member firms, who may also have a representative as a permanent part of the group, by government subsidies, and lastly, since 1983, by payment in the form of honorariums.

This last source of funding is vital, since GIRPEH, like most such organizations who are dependent on scarce funds received from private companies, must find new funding sources through its own efforts.

GIRPEH functions with a small permanent staff made up of employees and executives assigned by member organizations. About 40 voluntary counselors, generally executives who are preretired or retired from personnel departments, work closely with the permanent staff members. Thus the team possesses an excellent knowledge of the businesses involved and the problems that can accrue during the integration of handicapped persons into the work environment.

GIRPEH plays a dual role. It creates awareness and coordinates activities concerning employment of the handicapped, and it acts as a liaison among business circles, government agencies, the training/placement institutions, and handicapped people themselves.

GIRPEH seeks to enhance awareness of the problems that integration of the handicapped may create for the business world, to increase knowledge concerning existing methods of orienta-
tion, training, and employment of the handicapped, and finally, to provide information concerning the methods of accomplishing these goals within specific businesses.

Among the issues currently addressed by GIRPEH are: (1) creating awareness of the special problems involved in the professional integration of handicapped persons, (2) developing techniques on how to welcome and integrate the handicapped into the workplace, (3) understanding ergonomics in relation to handicapping situations, (4) informing companies on how to deal with official rules and restrictions, (5) developing the professional orientation of handicapped workers, and (6) utilizing techniques of job-seeking for handicapped workers.

When a company encounters an employment integration situation that cannot be solved through their own personnel department, GIRPEH's experts are called upon to make an analysis of the situation, to help formulate a policy decision, and to help resolve or avoid similar problems in the future.

The services provided for the handicapped person consist of group or individual professional guidance for those seeking employment. GIRPEH helps the handicapped person to analyze the work they seek, to examine their professional desires, and to choose a realistic goal. It also advises handicapped persons as to the most efficient means to accomplish their goals.

Furthermore, GIRPEH works with specialized training centers. GIRPEH representatives are available to participate in the development of training centers and to help them design programs appropriate to the needs of the job market.

Lastly, GIRPEH facilitates contacts between sheltered workshop centers and companies that can provide them with work orders. When possible, it helps with the transfer of handicapped persons from a sheltered workshop center to a competitive work environment.

The goals and operations of GIRPEH are now recognized as playing an important role in changing attitudes regarding handicapped persons in the work environment. Beyond the fact that GIRPEH answers a real need, this recognition is also the result of its operating principles which are based on realism, open-mindedness and independence. GIRPEH's realistic approach is based on a thorough analysis of the problems that arise with respect to the integration of handicapped persons into the normal work world. GIRPEH works as closely as possible to the job site and takes into account the particular situation of each employer. This step is implemented through the means of regional and local structures.
The principal phases of integration can be summarized as follows: (1) educating and involving the management of the firm; (2) defining the policy of the firm and installing methods to achieve this policy; (3) treating each case individually by taking into account the person involved, the job, the possibilities for work adaptation, and the career potential of the job; (4) involving all of the individuals taking part in the integration; and (5) sensitizing and preparing supervisors and fellow workers concerning the technical and personal problems that the handicapped person could incur.

GIRPEH remains open to all viewpoints expressed by all parties concerned. Its tripartite structure facilitates an open-minded availability at all times. Activities are conducted in continual collaboration with government bodies, the companies, welfare institutions, and all other public and private authorities participating in the process. GIRPEH is not a part of any official authority. A decision resulting from a tripartite vote does not oblige compliance from any of the local subscribers. Nevertheless, for the most part, national guidelines are followed.

Despite current economic difficulties, GIRPEH possesses many assets to ensure the continuity of its mission. More than half of the regional member companies are part of nationalized industries. If government encourages an affirmative policy on employment of the handicapped within the nationalized area, private businesses will follow suit.

By virtue of its structure and autonomy, GIRPEH has been able to act as a catalysing element in the working world and has raised consciousness concerning societal attitudes toward the handicapped.
THE PROJECTS WITH INDUSTRIES APPROACH

Jim Geletka
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Jim Geletka is a senior program manager at the Electronics Industries Foundation. He manages several special projects and was significant in the establishment of Projects with Industry (PWI). He has since implemented PWI projects in several states. He has also helped establish a comprehensive rehabilitation engineering center that is seen as a leader in the national projects with industry movement.

Projects With Industry has thus far been a very successful program. Through America's relatively short history, a variety of approaches have been undertaken to help disabled people. While the early efforts were well intentioned, often their effect was to reinforce dependency, create institutions and bureaucracies, keep disabled people segregated from the so-called able-bodied, and perpetuate misunderstandings about disability. Some 60 years ago, the federal government became involved in the vocational rehabilitation of disabled people through the establishment of a State-Federal Rehabilitation Program. The primary objective of this program has been, and continues to be, the provision of services to disabled people which will enable them to become gainfully employed. Through the years, the scope and size of the State-Federal Program has grown to include not only direct services to disabled people, but also funds to support research and demonstration projects, the training of rehabilitation professionals, the establishment of rehabilitation facilities and other special projects—all of which were aimed to reduce dependency. Nearly all of these efforts are designed with the ultimate goal of gainful employment for disabled people.

Until about 1968, and despite the emphasis on employment, very little had been done to systematically bring private industry and private employers into a partnership relationship with the State-Federal Rehabilitation Program. Certainly, there were many examples of highly successful individualized efforts, and some collective initiatives at local and state levels were striving to establish job placement relationships with employers. However, it was the Vocational Rehabilitation Act of 1968 that first introduced the Projects With Industry Authority which has successfully brought rehabilitation and industry together in a variety of innovative projects.
Under the regulations governing Projects With Industry, organizations eligible to receive assistance to support a Project With Industry include the following: any industrial, business, or commercial enterprise, labor organization, employer, industrial or community trade association, rehabilitation facility or agency, or other organization that has the capacity to arrange, coordinate, or conduct training and other employment programs, and that can also provide supportive services and assistance for handicapped individuals in a realistic work setting. Almost all of these types of groups have received support from the Rehabilitation Services Administration for a Project With Industry at one time or another.

The term Projects With Industry is hard to define because it means so many things to different individuals and organizations. One element that is common to all Projects With Industry, however, is variety. Other important commonalities are an emphasis on industry leadership and job placement. Projects With Industry is not a rehabilitation program, at least not in the approach that the Electronic Industries Foundation (EIF) takes. Rather, it is more akin to a marketing program. PWI becomes a marketing arm of the rehabilitation system to identify the manpower requirements of industry and to provide a supply of qualified workers that meet those requirements.

In EIF's model, three marketing principles are embodied in the Projects With Industry concept. The first of these three concepts is a product orientation; the product being a trained and qualified worker produced by the rehabilitation process. The second orientation is a customer orientation; the customer being an employer. The concern here is establishing those market strategies that allow you to identify the personnel needs of the employers that you are working with. The third concept is the sales orientation; to get the qualified disabled worker (the product) to the employer (customer).

Initial PWI funding was made available in 1970 and totaled about $450,000, for three projects. Between 1971 and 1975, funding was increased to $1 million per year, and the total number of projects grew to 15. However, it was not until 1976 that a series of events began to focus attention on Projects With Industry as a potentially powerful approach to job placement. First, job placement rates of 75 percent or higher were recorded in the earliest projects at the Human Resource Center (Albertson, New York), the Vocational Guidance and Rehabilitation Services (Cleveland), the Easter Seal Goodwill Industries (New Haven, Connecticut) and others. Second, the IBM Corporation began a program designed to train severely disabled persons in computer programming. The third key that seemed to provide a springboard for Projects With Industry was Congressman Robert Gimo of Connecticut, Chairman of the House Committee on Appropriation, who took a personal interest in the federal rehabilitation budget,
particularly PWI. He succeeded in boosting the funding level to $3.5 million in 1975 and $4.5 million in 1978. This increase provided enough money for these programs to have an initial impact across the country. PWI became a national project, supported by the Rehabilitation Services Administration Special Projects budget.

By 1977, 30 projects, plus 19 satellites were funded by PWI. These were implemented by such diverse organizations as the National Restaurant Association, the Electronic Industries Foundation, Goodwill Industries of America, Fountain House and several others. Over 1,500 persons had been placed and over 500 companies were participating in the many Projects With Industry. Since then, the administration's appropriation for PWI has steadily increased to almost $15 million in total and has been supplemented by an additional several hundred thousand dollars from the U.S. Department of Labor through the National Projects Section. There are now 90 projects, with a total of 145 program sites (some of the projects have multiple sites). Approximately 70,000 disabled persons have been employed since this partnership program between industry and the rehabilitation community began. In 1983 alone, it is estimated that about 10,000 disabled persons were employed (even if they were receiving only the minimum wage) earning a cumulative annual wage approaching $100 million. Altogether, the annual earnings of the 70,000 people that have been employed via PWI would approach $500 million per year, a significant contribution to the economy.

By most measures, PWI has been considered a successful program. This can be attributed to: 1) the leadership role played by industry, 2) the opportunity allowed and fostered by PWI regulations that encourage innovation and flexibility in program design, and 3) the consistent and close cooperation by state agencies in the PWI programs. It must also be recognized, however, that changes have occurred in both the rehabilitation movement and in industry that have had the effect of nurturing and supporting PWI and aiding in its growth and success.

Certainly, there is ample evidence that the state-federal vocational rehabilitation program is evolving into a service system that is cognizant of its relationship to employers in the private sector. Officially, a number of initiatives undertaken by both state and federal rehabilitation agencies have encouraged partnerships with business and industry. Job placement, for example, has once again been designated by the Rehabilitation Services Administration as top priority. Major studies in the past five to twelve years by various organizations (e.g., the Urban Institute, Greenley Associates and others) reveal that competitive employment is the major concern, desire, and priority of disabled people. Recommendations by the White House Conference on the Handicapped a few years ago, again stressed the importance of industry involvement in preparing disabled people for jobs, as did recommendations coming
out of the International Year of Disabled Persons two years ago. As recently as 1983, the consortium of Regional Rehabilitation Continuing Education Programs conducted a national conference on job placement which was followed up with regional conferences throughout the year. Such conferences are heavily oriented toward the development of strategies for increasing opportunities for industry-rehabilitation cooperation at state and local levels. Further, such efforts by the Regional Rehabilitation Continuing Education Programs will have a far reaching effect on the training and preparation of rehabilitation personnel, particularly in orienting them toward the needs of industry.

Too often in the past, it appeared that a degree of antagonism existed between rehabilitation and industry. Perhaps this relationship emerged because rehabilitation counselors were unrewarded for their efforts in job placement. Placement was not recognized as a priority, and there was almost a fear, if not an outright adversarial relationship, regarding working with industry. Typical feelings on the part of some counselors in the past have been that employers have jobs, but that they won't allow clients to have those jobs, give counselors a chance to experiment within their companies, or share information. Projects With Industry is, in part, an attempt to break down that adversarial relationship.

There are other trends, too, that signal the move toward closer ties with business and industry. Certainly the National Association of Business, Industry and Rehabilitation, an organization made up of PWI projects representing several thousand employers and rehabilitation organizations across the country, is fostering a trend toward closer ties with employers. Regional and state organizations are also beginning to relate very closely with the local business community. These organizations and many others have established initiatives to identify and meet specific personnel needs of business and industry. On the other side, business and industry are approaching the employment of disabled individuals from perhaps a new perspective. The chairman of our National Advisory Council, Bruce Carswell, puts it very succinctly. He says that business would rather approach the issue from the standpoint of commitment to the employment of disabled people rather than from a standpoint of compliance.

John Naisbitt, in Megatrends, emphasized that we are in a period of transition between eras and that society is experiencing great challenges to many traditional beliefs and institutions. These trends are also apparent in the rehabilitation movement. Projects With Industry is a result of a natural evolution from a rather introspective rehabilitation system to one that is beginning to move toward the next step, developing a very involved relationship with private industry. In fact, if we are presumably running a program to obtain jobs for people, employers have to be more than just a token party in an advisory capacity; they have to be a very integral part of the team.
To comment a little bit on John Naisbitt's work, one could point to a number of trends that have meaning for us in rehabilitation. An increase in participatory democracy, in politics and in corporation life, is a significant trend; the demise of hierarchial organizational structures in favor of networking or matrix management approaches, a rise in consumerism, an increase in entrepreneurship, and a new emphasis on self-help, self-reliance and local initiative are all examples of such trends. Against such a backdrop, a program as rich and diverse as PWI can thrive. PWI emphasizes innovation and encourages networking and voluntary participation to achieve results. It is always centered on local needs and certainly has what Naisbitt calls a "strategic vision"--namely, gainful employment for disabled persons. In many ways, PWI reflects the evolution of the rehabilitation movement which, in turn, is inevitably affected by current societal trends. In short, PWI is an idea whose time has come.

In conclusion, EIF's approach to PWI attempts to establish industry's total involvement to the point where they (industry) feel that they own the program. It is their program; it is not the rehabilitation organization trying to penetrate the employer to get jobs. The employer reaches out to the rehabilitation community to say that "these are the jobs we have; these are the qualifications that we require; these skills are needed in order to do the jobs; send us qualified people that we can employ, and we will employ them." The Electronic Industries Foundation has employed over 2,500 people through its programs during the past six years. We started with one program and now eight successful programs have been established. We have attempted, to the greatest degree possible, to encourage others to do the same.
THE KODAK APPROACH

Robert Jones
Eastman Kodak Company
Rochester, New York

Dr. Robert Jones is the corporate rehabilitation physician for Eastman Kodak Company. Dr. Jones received his undergraduate degree at Williams College, and his medical degree at the Harvard Medical School. He is on the Board of Directors of the Rochester Rehabilitation Center and is a survey consultant to the Commission on Accreditation of Rehabilitation Facilities. Dr. Jones has published a number of articles in medical and rehabilitation journals.

Kodak has a medical department and an industrial relations department which handle the normal flow of people to and from work in all respects. It is only when illness substantially interferes with one's work and these normal processes cannot obtain accommodated jobs that the rehabilitation team is called into action. Some basic principles are utilized with respect to rehabilitation. The first short-term principle is that of evaluation. The goal is to determine capacities in physical and physiological terms, in terms of knowledge and skills, and in terms of cognitive and coping styles. Thus, this principle focuses on the evaluation of personal capacity and job demands.

Armed with accurate and sufficient information about capacities and job requirements, one can determine what makes a good job match. This leads to the next steps—job trial, followed by job placement.

In certain long-term cases, management is added to the evaluation for those who have potential for change. Changes in behavior and capacity are sought. Having obtained an entry level job through short-term efforts, one could then enter programs dedicated to increase or improve physical capacities, knowledge, skills and style. Then, further matching efforts could be undertaken, and upward or lateral mobility would be better assured.

The following two presentations were made jointly; the first by Dr. Robert Jones, rehabilitation physician with Kodak, and the second by Geraldine Gobell, a rehabilitation counselor with the New York Office of Vocational Rehabilitation. They describe a model of a liaison relationship between a state office of vocational rehabilitation and private industry in which the rehabilitation counselor is located at the work site.
These basic principles can be invoked in several ways. One model has specialists working full-time for industry. Disability evaluators, vocational counselors, placement specialists, clinical psychologists and other rehabilitation specialists work under the aegis of the medical and/or industrial relations departments. The job matching process may be an extension of the employee assistance programs. Community rehabilitation sources are used as needed and available.

A second model has a plant physician and nurse joined by a vocational counselor from the state Office of Vocational Rehabilitation (OVR). The counselor utilizes community resources for necessary evaluations and case management programs, and associated costs are borne by the state agency. This three-person rehabilitation team works with the industrial relations department and the line organizations who make the placements.

Four factors are most likely to be associated with success in any variant of the job matching process: (1) the commitment of top management to the process, (2) evaluators with full access to the worksite and supervisory personnel, (3) evaluations which are credible and valid in the eyes of the line organization, and (4) clients who possess skills that fall within appropriate industrial norms.

One other factor to help assure effective and efficient service is appropriate personnel; skilled and effective personnel who work well together in the client's behalf and who are usually recruited from medical and vocational rehabilitation professional groups.
A PARTNERSHIP APPROACH TO UNITE THE PRIVATE AND PUBLIC SECTORS TO ACHIEVE EMPLOYMENT GOALS FOR DISABLED PEOPLE

Geraldine H. Gobeli
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Ms. Geraldine Gobeli is a rehabilitation counselor with the New York Office of Vocational Rehabilitation. She is a graduate of Syracuse University in communications and industrial relations. Ms. Gobeli has worked as an employee guidance counselor in industry, has served as a consultant to a number of employment agencies, and was formerly dean of a two-year business school. She has been a member of the continuing education faculty at the Rochester Institute of Technology for the past 25 years.

With an unswerving commitment to the disabled, Dr. Robert Jones, rehabilitation physician from Eastman Kodak Company, requested that a representative from the Rochester Office of the New York State Office of Vocational Rehabilitation serve on the Kodak Rehabilitation Team. This representative was to be the only non-Kodak person on a team which was composed of the corporate rehabilitation doctor, a rehabilitation nurse, a rehabilitation secretary and, when needed, representatives from industrial relations, benefits, area health teams within Kodak, and department supervisors. The primary objective of the program is to help employees with disabilities continue to work for Kodak. Dr. Jones felt that by involving a representative of the state Office of Vocational Rehabilitation, certain services could be provided to disabled Kodak employees to help accomplish this aim. The advantages of this arrangement have proved beneficial to the employee and to the company, as well as to the Office of Vocational Rehabilitation.

The people served by the rehabilitation team are those on long-term disability, employees on compensation, whether working or not, and workers at risk of termination because of poor job performance due to long-term physical limitations, emotional problems or substance abuse. The referrals to the rehab team come from Kodak area doctors and/or visiting nurses, Kodak supervisors, community-based doctors, insurance companies, the Compensation Board, Social Security services, and/or via self-referral. Each referral is seen by the corporate doctor who assesses the physical condition of the individual, as well as his/her limitations. The person is then scheduled to meet the rehabilitation nurse who determines such things as functional abilities and other relevant data. The rehab nurse also contacts the employee's department for a job review. With the completion of these assessments, the referral is then sent to the
representative of the Office of Vocational Rehabilitation who assesses the individual's vocational potential. Depending on that potential, a service plan that can be implemented within the company or the community is determined. As will be noted, the advantages of the program to the employer and the employee often overlap.

Benefits to the Employee-Client and Employer

The employee who is attempting to deal with his/her disability is often concerned about how he/she will be perceived by the company. By working with someone from outside the company, the disabled employee usually is more open and at ease than he/she would be with a company representative.

One of the major contributions that an OVR counselor can make is to provide vocational testing that may facilitate a job transfer, a job accommodation, and/or retraining. The results can give the employee-client opportunities to continue his/her employment while allowing the employer to benefit maximally by appropriate placement of that employee. Since the information provided to the company deals with assets and capabilities, the employee's privacy is protected. In addition to vocational testing, services can be offered that would help determine physical tolerance (i.e., how much an individual can lift, reach, push, pull, walk, and so forth), thereby facilitating an appropriate work prescription.

Tutoring can be provided to a learning disabled individual who needs to upgrade his/her knowledge and skills if a job transfer is to be obtained. (More and more, industry is becoming aware of employees who are learning disabled.) If an employee can continue to do physical work over the term of his/her employment, learning disabilities are not an issue. However, if an individual experiences a disability or if his/her job is phased out because of technology, sometimes efforts must be made to maximize the individual's ability to read and do math if he/she is to continue their employment.

There are times when an individual must be referred to a rehabilitation facility in order to assess post-illness or injury work skills and sustained work tolerance. When necessary, special arrangements, with the company's cooperation, can be made for these situations. This is especially important for an employee who is returning from sick leave or long-term disability.

Guidance and counseling that involve both career options and work behaviors are also provided. Assisting a disabled employee in establishing appropriate career goals is a more standard type of activity for the vocational rehabilitation counselor. However, there are times when an employee with behavioral problems needs counseling if he/she is to remain on the job.
Attendance problems are often the cause of conflict between a company and the disabled employee. Disabled individuals who have had numerous absences are at job risk since they are subject to the same rules and regulations as nondisabled employees. In these situations, it can be more effective for someone outside the company to discuss attendance policies with the employee-client in order to avoid personality conflicts between a disabled employee and the supervisor.

Besides providing support to the employee-client, the OVR counselor can serve as a good source for reality testing. Sometimes a disabled employee can over-simplify the ease with which he/she may be moved into another job. Too often, the disabled employee expects preferential treatment when in reality he/she may be required to take a job with a lower pay classification. The priority for the company is to place the disabled person in a job he/she can do. The priority for the disabled employee may be to find "just the right job" at the same pay with similar promotional opportunities. The OVR counselor can encourage the employee-client to be more realistic in terms of his/her job potential in relation to the needs of the company.

Since the counselor works within the company, he/she becomes knowledgeable about company policies and procedures. Each company has its own culture, and it becomes necessary for the OVR representative to understand that culture if he/she is to be effective in counseling the employee-client. Knowledge concerning the nuances of the workplace is sometimes vital to ensure successful rehabilitation activities. When the counselor and the employee have common ground—that is, both of them understand the culture of the company—then the counseling and guidance provided to the employee are based on the reality in which the employee has to function.

Having a counselor on the premises can also be most helpful to the employee-client. Assigned to corporate office space, the OVR representative is available to the employee-client during the course of the work day. The employee does not have to take time from his/her job; he/she can make arrangements to meet before or after work or during lunch break. There are times when the employee-client may be in immediate need of counseling and/or advocacy in order to remain on the job, and through this arrangement, the immediate need can be met.

There are also times when a disabled person will need to terminate his employment. In this situation, the counselor can follow the employee into the community, effectively providing services that are both appropriate and timely. On occasion, the state agency counselor may even facilitate employment with another company. Sometimes the disabled person, especially one who cannot maintain a regular work schedule or who is not medically stable, needs a special work setting such as a sheltered workshop in a rehabilitation facility.
There are other times when, because of severe disability, the individual needs to remain at home. When this happens, activities may be undertaken to prepare the individual for an at-home role that will facilitate a mate's remaining in or entering the work force.

**Benefits to the Office of Vocational Rehabilitation**

OVR benefits from the arrangement with Kodak because it allows for early intervention to prevent job termination whenever possible. The counselor has access to medical and work records, as well as to information from the client-employee's supervisor. The OVR counselor can visit the worksite and have regular contact with industrial relations in an effort to have accommodations made in the client's job or to facilitate a job transfer.

In general, the rehabilitation process is not simplistic. In or out of the industrial scene, it is complex. If a disability is "only physical," then it can usually be dealt with as a matter of accommodation or job transfer. Any retraining that is done can be based on residual skills. However, it is not unusual for physical disabilities to have related emotional components (i.e., poor coping styles and/or learning disabilities). Early intervention on behalf of the client-employee while he/she is still employed enhances the chances for long-term success.

By placing state agency counselors in industry, counselors become more sensitive to the needs of the employer. Actual on-site involvement promotes a better understanding of the realities of the work place, particularly for counselors with no industrial experience. Such experience ultimately benefits all clients.

**Financial Incentives**

There are also financial incentives to both the employer and the state agency in this partnership arrangement. The cost of vocational evaluations may be borne by the Office of Vocational Rehabilitation. These evaluations are available at no cost to anyone who requests services from the state OVR. Therefore, the disabled employee, working or nonworking, is eligible for and is receiving the same services that are available to everyone in the community. The information obtained through this evaluation can determine eligibility for service while providing the employers with important information that could facilitate continued employment and/or appropriate placement. Also, not to be discounted, are the company's savings in disability benefits, as well as improved productivity by appropriately placed disabled employees.

OVR saves on the cost of general medicals and specialist exams since such information is provided by the company. Further, it is cost-effective to the agency since the costs of evaluations and personal adjustment training are reduced by using the employment
setting. Such an arrangement also permits continuous employment and/or expediting the return to work. Therefore, the employee-client continues to pay taxes or is more quickly returned to the tax rolls.

The partnership of the public and private sectors is cost-effective for all concerned. It allows the public and private sectors to share the cost of rehabilitation. Considering that business and industry contribute to vocational rehabilitation services through state and federal taxes, they are realizing a return on their tax dollar. At the same time, the employee, who also pays taxes, likewise gets a return on his/her tax dollar.

Conclusion

It has generally been the feeling among many private sector employers that the involvement of the public sector in employment relations is something to be avoided. Historically, the public and private sectors have been at odds about issues relating to employment of the disabled. Business and industry as well as the public sector agree that activities must be undertaken to enhance employment opportunities for the disabled. However, it is the implementation of this objective that often leads to misunderstanding and lack of cooperation. When the private sector understands the expertise that the public sector has with the rehabilitation process and when the public sector understands the needs of the private sector, then common ground will have been achieved to successfully implement affirmative action legislation. Interaction between representatives of the public and private sectors can lead to a better understanding, and this will ultimately promote employment opportunities for all the disabled.
A VIEW OF VOCATIONAL REHABILITATION IN POLAND:
The Invalids' Cooperatives

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In 1980, under the auspices of the United States Academy of Sciences, a group of rehabilitation professionals spent three weeks in Poland for the purpose of sharing information regarding rehabilitation in the democratic and socialistic systems. In Warsaw, the group visited a number of Invalids Cooperatives, as well as a rehabilitation hospital, the training center for the staff of cooperatives, and the Central Research Institute. It is interesting to note that rehabilitation counseling as a profession does not currently exist in Poland. Psychologists and social workers fill this role.

Poland has a mandate stating that industries which are not part of Poland's Supreme Cooperative Movement must hire at least four percent of their employees as disabled persons. This principle, however, is not enforced, and there does not seem to be any motivation to move in the direction of stricter enforcement procedures. It may be that disabled people in Poland are adequately served by the cooperative movement, and thus there is little incentive to integrate them into nonsheltered work sites. Invalids Cooperatives (essentially a version of sheltered workshops) are part of the overall national work cooperative movement in Poland.

Invalids' Cooperatives

Invalids' Cooperatives are firms operating autonomously, neither government owned nor run, and are managed, operated, and staffed mainly by disabled persons. These individuals are both workers and members of the cooperative, since employees can be elected to the board of directors and have a right to vote on decisions at every level. Disabled people are represented throughout the firm's hierarchy. A minimum of 70 percent of its employees must be disabled in order for the firm to be designated as an Invalid's Cooperative.
The government allows a tax exemption for the firms that have been designated as cooperatives. The size of the exemption varies in direct proportion to the number of disabled employees. A special fund is collected from monies saved from the tax exemption and is used for employee independent living programs. Cooperatives may also receive governmental preference in the appropriations of scarce buildings, grounds and raw materials. Or, cooperatives may be selected to be the primary or sole producers of specific goods such as brooms, light bulbs or certain rubber products. To assure that workers receive at least minimum wage despite piecework payments, the cooperatives provide a supplemental income from a special fund.

Some cooperatives focus on particular populations and can therefore structure medical and psychosocial rehabilitation procedures to these specific populations. For example, the group visited a textile factory, the Saturn Cooperative, which employs a large number of mentally ill patients. In addition, the group also visited another cooperative which focuses on severely mentally retarded persons, who work on a regular and active basis. Due to the severity of their mental retardation at this latter site, the workers had difficulty remembering their job tasks when they returned from vacation. In order to deal with this problem, employees participate in work activities and work retraining programs which are aimed at returning these individuals to their regular jobs. This retraining process, during which workers receive a minimum wage, is considered to be a natural requirement for employees with low learning ability.

The growth of the work cooperative movement for disabled people got its impetus in 1949 after World War II and the Soviet invasion. Combined, both events resulted in large numbers of disabled persons. From 64 cooperatives in 1949, the cooperative program has grown to 435 today. Currently, the 435 companies are divided into 17 different provinces, each of which has a provincial union. All provincial unions operate under the central government's Invalids' Cooperatives Union. Besides operating vocational schools for disabled youngsters, this central union has branch offices that incorporate medical rehabilitation centers. The union also operates patient care facilities in most of the cooperatives and subsidizes regional research centers. For example, the areas of job restructuring and reengineering are being studied at the Central Research Center in Warsaw. The Central Research Center focuses on cultural and recreational rehabilitation and is also studying possible alternatives for the establishment of cooperatives in rural areas, where currently only 10 percent of the cooperatives are located. Members of the Invalids' Cooperatives account for 12 percent of the productivity of the whole economy. Of the 274,000 workers that the cooperatives employ, 203,000 are disabled.
An important point to note is that most Polish cooperatives are not sheltered employment as we know it in the United States. However, some cooperatives have sheltered work sites which are used to provide training or to reestablish persons who have left the work site and need to be retrained again. A very substantial homebound employment program also exists. This program is a very well established part of the cooperative movement and grew out of the socialist philosophy of universal, mandatory work. Approximately 40,000 disabled persons are members of these cooperatives.

Extensive vocational counseling is provided for those persons who are not industrially injured but, rather, need to choose an initial vocation. Vocational counseling is available at various cooperatives, and these counselors work together for placement and training purposes. Vocational training is done at the work site, or, if necessary, the person is sent to another facility to be trained. Whenever practical, the following additional services are provided by the cooperative: medical care (most process test results in their own laboratories), job modification and independent living modifications which include physical and social improvements to both the home and work sites. In addition to the work site-oriented program, there is also an emphasis on sports activities that go on after the workday is over.

In summary, the cooperatives are very proud of the fact that they have organized medical services for disabled persons, and that they have created in Poland the post of social worker, as well as organized vocational counseling experiences, and an industry-based counterpart of the sheltered work concept.

At the Institute of Orthopedic Medicine and Rehabilitation (which is completely separate from the Invalids' Cooperatives), an interesting concept deserves more attention and evaluation in the United States. Working closely with the Institute, the Department of Industrial Rehabilitation has established a factory comprised of small workshops. Each workshop, or work station, has been specifically designed to be physically therapeutic for the patients of the Institute. Nine cooperating industries supply the workshops with materials so that actual goods may be produced by the patients.

This particular institute (and there are several of them) works primarily with industrially injured workers, as opposed to persons who need rehabilitation or who have had long-term disabilities. During the three months or so of hospital rehabilitation, the injured workers actually work on the tasks they will be performing upon their return to the place of employment. The work sites are each individually modified to accommodate the disability. The institute focuses on hand related injuries and strives to allow the person to work for about four hours a day at a job very similar to either the
preinjury or intended work site. Furthermore, the work itself is therapeutic. As an example, a job given a press operator who had sustained a hand injury would be modified to improve the individual's strength or dexterity while he/she performs the work task. In other words, the four hours during which the person is working also increases the person's muscle strength. In addition, the duration and work conditions are gradually changed in an attempt to achieve the preinjury level of functioning. And finally, a financial accommodation also exists at the institute. Although the patients are paid on a piece rate basis, minimum wage is assured to maintain an incentive for workers.

The institute uses a vocational evaluation system which was developed in Poznan and is used by Polish vocational psychologists. The evaluation system is very similar in design to the equipment that Valpar uses for the assessment of range of motion. However, the Polish system is probably more effective than the Valpar unit because it measures both the range of motion and the strength of the movement at the same time. Once again, a team consisting of a vocational psychologist, a medical doctor, and a psychiatrist work at the evaluation site to develop the restoration plan in conjunction with the vocational plan.

In conclusion, the group's initial goal was to determine whether rehabilitation counselor training could be usefully adapted to the Polish culture. The consensus was that such an adaptation would be impractical for one basic reason. Counselor training in the U.S. focuses on job placement, and this is not an issue in this socialist country where everybody must work. The group's final recommendations to Polish rehabilitation authorities was to encourage improvements in Poland's evaluation and work adjustment training programs rather than to initiate the traditional model of rehabilitation counselor training prevalent in the United States.
Terry True is the personnel manager for REMPLOY, Limited in London, England. Mr. True has been with REMPLOY for over 30 years, with particular responsibilities for labor relations. He has also served on a number of public committees concerned with rehabilitation, resettlement, and welfare programs.

Being "disabled" can imply being "different." However, it can be argued that disabilities are part of our normal lives, since most people at some time in their life suffer from some emotional or physical impairment. Thus it is a mistake within our society to refer to "the disabled" because this leads us to think of them as being separate human beings. We have become guilty of giving them labels like "epileptic" or "schizophrenic," when what we should be doing is to ensure that they feel and view themselves as totally integrated members of society. It may sound paradoxical, but I would like to believe that sheltered workshops can aid this integration process.

In striving towards integration in society, the disabled person understands the importance of holding down a job. Employment is not only the most efficient and effective means of achieving financial stability, it also provides a yardstick for the individual to measure of his/her own worth and, through that, his/her self-respect. The ability to hold a productive job is a positive demonstration to society of normality and of acceptance by society.

In the United Kingdom, REMPLOY is a major provider of work for people who are seriously handicapped by their disabilities. REMPLOY is a government sponsored company which provides purposeful employment for severely disabled people in sheltered conditions where they are not competing with the able-bodied.

Throughout our history in the United Kingdom, there are recorded many individual efforts to arouse the conscience of society towards its least fortunate members and to understand the needs and aspirations of the disabled. However, it was manpower shortages during war and the experience of employing the disabled between 1939 and 1945 that shaped the government support and rehabilitation and resettlement services that now exist for people who are substantially impaired either from birth or as a result of an injury or illness. Since the Disabled Persons Employment Act was passed in 1944, there has been freely available in the United
Kingdom a continuum of services for the handicapped which include medical rehabilitation as well as vocational assessment, training and placement services.

At the end of resettlement, responsibility is placed upon industry to provide a quota of jobs for disabled people. There are a variety of incentives that encourage industry to discharge that responsibility, and increasingly we are turning towards these incentives rather than relying on the legality of the quota. Nevertheless, the Disabled Persons Employment Act of 1944 created a version of a "quota system" which requires any company employing more than 20 people to take at least three per cent of its work force from a register of disabled people maintained by the Department of Employment.

Despite all efforts, unemployment among the disabled in the United Kingdom remains disproportionately high, and to this extent, we are failing to provide equity by giving disabled people their full share of such employment as is available.

In this context, REMPLOY has become quite a unique employer within British industry. REMPLOY is an organization that seeks to combine a commercial objective with the provision of a social service. It has a management structure that is quite similar to any other commercial trading company, but the only shareholder is the government which provides both the loan capital and the revenue.

REMPLOY does not operate as a charity. It is a viable and competitive industrial company that has to survive in the market place. At the end of 1983, REMPLOY consisted of 94 production units, employing a total of 11,000 people and embracing 44 separate trades. We have found from long experience that we can only remain in business by offering reliable goods and services at competitive prices and by operating efficiently and sensibly. However commendable the social aims of REMPLOY may be, they are not going to cut any ice when it comes to selling our products. We have found that the only way we can survive is to compete with industry on its own terms. Although REMPLOY receives help from the government, the assistance is strictly controlled through cash limits. REMPLOY has no guarantee of survival and has to contribute substantially towards its total cost from its own sales revenue. Thus, disabled people considered likely to encounter serious difficulty in competing for jobs are referred to REMPLOY, and REMPLOY retains the right of final selection.

Potential employees come with a very wide variety of medical disorders, covering the entire spectrum of physical and mental handicaps. While work methods or machinery may be adapted to suit a particular disability, the major emphasis in REMPLOY factories is focused on developing individual skills. Potential
employees undergo a preemployment assessment to demonstrate their ability and capacity for full-time productive work. Employees cease to be eligible for state social security benefits, and they rely on their income or the wages they expect to receive from REMPLOY. In turn, employees are expected to work to the best of their abilities and, after training, be able to produce at a level of output which is at least one-third of what is expected of an able-bodied person in a similar job. This is a minimum standard and, by the time of successful job placement, most of our employees are comfortably able to exceed the minimum.

Too often, the use of the word "rehabilitation" is associated with employment in ordinary industry, when it might be better defined as maximizing the economic contribution a disabled person can make. It is our experience at REMPLOY that rehabilitation can, in fact, take place within sheltered employment, especially if the workshop is run along businesslike lines and has an industrial, rather than an institutional, atmosphere. Rehabilitation really lies in the individual's satisfaction in knowing that he/she is doing a useful job and making the best use of his/her abilities, no matter how limited those abilities may be.

In the United Kingdom, the term "sheltered employment" means long-term, paid employment for the more severely handicapped person who is able and willing to work. To put it in context, the U.K. has approximately 110,000 disabled persons who are job seekers. Out of that number, approximately 8,000 are considered to be in need of sheltered employment. The principal objective of REMPLOY is to employ in a working environment, the maximum number of people suffering from physical, mental and visual disabilities who are willing and able to work. These are people who are unable or unlikely to obtain employment in open industry because of the severity of their handicap. REMPLOY aims to provide in each factory jobs which call for the widest possible range of skills and abilities, while simultaneously accommodating the widest range of disabilities for employees of all ages. The company has to operate effectively and efficiently as an industrial organization, providing productive employment within the limits of its resources. It is not a function of REMPLOY to provide merely diversionary occupation nor to assess and train disabled people for employment in open industry.

REMPLOY does not see its objective necessarily as assisting disabled persons into the open labor market. There is a danger of confusing employment and rehabilitation objectives, in the sense that you end up with an unhappy compromise. For example, there would be a tendency to judge the efficiency of sheltered workshops by the number of people that they can transfer to open market employment; but this is neither an appropriate nor valued measure of efficiency, especially when the policy of the sheltered workshop is to provide the opportunity for long-term employment. Clearly, there will be disabled people who may benefit
to such a degree from their work experience, or improve in their health status to the point where a transfer to ordinary work becomes a realistic possibility. In fact, about one in seven REMPLOY workers leave us for this reason. On the other hand, a purely rehabilitative objective would tend to deny the opportunity of employment to many disabled people who have little or no hope of reaching normal employment standards.

For the majority of disabled workers, REMPLOY provides the means whereby disabled people can find social and economic independence. The factory manager is the key in the company’s management structure. The degree to which each worker takes a personal pride in his/her performance is a measure of the manager’s ability and success in marshalling the individual’s skill. The achievement of competent and profitable work, both in a personal and company context, helps to further the mental and physical progress of disabled people, enabling them to play a more important social role, both in and out of the factory.

We have found that the employment of disabled people in subsidized workshops can yield an economic return. This arises where the subsidy paid is less than the expenditure that would otherwise have arisen in the provision of social security benefits, which is the alternative cost of keeping the disabled person unemployed. The provision of sheltered work could result in a net saving of public funds thus making perfectly good economic sense. However, the same argument could be applied to any group of workers who are subject to unemployment, and there is no particular economic reason why special measures should be targeted only at the severely disabled. Quite clearly, the economic benefits that may arise from the provision of sheltered employment will either be eliminated or restricted at times of less than full employment. So at face value, it does not make economic sense to give priority to people with a restricted ability over the able-bodied unemployed. In the final analysis, one has to acknowledge that the selection of priority groups in the labor market has as much to do with political judgment and public sentiment as with the objective measures of need. As Paul Cornes indicated, a political judgement should take into consideration the fact that disabled people generally are more prone to unemployment than other workers, and that once unemployed, they are likely to experience some substantially longer periods of unemployment.

In the present economic climate in the U.K., where we have over 3,000,000 unemployed, I can see little economic justification for special measures to help the disabled as opposed to other groups. Judgments about priorities, therefore, must essentially be made on the grounds of social justice. It is our experience that in times of high unemployment, public opinion is prepared to accept, and indeed expects, that particular help will be given to disabled people. As well, politicians are sensitive to public opinion, especially during
election years. Public opinion, of course, may be shaped by the thought that tomorrow we, too, may personally need this particular form of help.

Actually, any set of policies, designed to give disabled people particular economic priority, involves the identification of such people as being disabled. This measurement of need may help with the allocation of resources, but the mere fact of being labeled as "disabled" can, in itself, lead to a loss of confidence and self-esteem. Unless carefully handled, therefore, the very process of selecting disabled people for preferential treatment could lead to their disadvantage. This is one reason why we in REMPLOY prefer to talk in terms of abilities, rather than disabilities, and why we encourage as much normality in the work situation as it is possible to achieve.

Emphasis has been given during this conference to the financial support which needs to be given to disabled people in order to compete equally. In the U.K., there is an increasing need for sheltered workshops, as I have described them, to become more efficient in achieving this social purpose. One solution to this problem is for government procurement agencies to place more public sector contracts in sheltered workshops. Such an approach could lead to more cost effective use of public funds. A particular advantage is that it would give workshops added confidence to reequip and retrain for the new technologies. The intention would be to provide a firmer base from which sheltered workshops could operate. For without doubt, the biggest problem in operating sheltered workshops in the U.K. is in sales and marketing.

Of course, any transfer from the private sector could meet resistance from both employers and unions, and the switch must be a gradual one. There is also a need to ensure that pricing arrangements are satisfactory to both the government and the workshop. REMPLOY is one of the few companies in the United Kingdom that has actually increased the number of new jobs during an intense period of recession. There still remains, however, a long way to go before we are able to claim that the severely disabled are getting their fair share of jobs.
STRATEGIES TO FACILITATE THE TRANSITION FROM SCHOOL TO EMPLOYMENT OF DISABLED YOUNG PEOPLE

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This paper will briefly describe the problem of facilitating the transition from school to employment for disabled young people. I will discuss the extent of the problem, the socio-political forces that are affecting policy developments, and government and nongovernment programs designed to meet the problem. Finally, some observations concerning future directions will be discussed.

The Extent of the Problem

According to the Australian Bureau of Statistics (ABS), the 1981 Survey of Handicapped Persons indicated that 1,264,000 Australians were handicapped and a further 677,000 persons were disabled (World Health Organization International Classification). Thus, 13.2 percent of the population or 1,942,000 Australians were estimated to be disabled, with 94.1 percent of these living in private households and the remainder in institutions. In descending order, the most frequently reported groups of disabling conditions were musculoskeletal disease (e.g., arthritis, diseases of the back, rheumatism), hearing loss, and circulatory disease (e.g., heart disease and high blood pressure).

These disabled people face a wide range of problems in their involvement in the labor market because of:

- social perceptions about disabled people and their limitations;
- the failure to make minor changes to the workplace so as to accommodate disabilities.
limited training and educational aspirations, because many disabled people have been discouraged from developing their abilities and seeking full participation in the labor market;

- specific limitations in ability to perform certain kinds of work due to the disabling condition.

Technology, however, is providing an increasing number of specific aids for disabled people. In addition, technological change is altering job requirements in many occupations, opening up opportunities for many disabled people.

The ABS Survey indicates that if we limit our study of labor force participation to those handicapped persons living in private households between the ages of 15 and 64, several observations can be made.

In 1981, handicapped persons represented 3.8 percent of labor force participants, and their labor force participation rate was 39.5 percent, compared with 70.1 percent for all persons aged 15 to 54 years. The labor force participation rate of handicapped females was 28.4 percent and of handicapped males, 49.3 percent. The unemployment rate in 1981 of handicapped males was 10.4 percent compared with 4.8 percent of all males in the labor force. For all handicapped persons, the unemployment rate was exactly twice that of the population in general. The highest level of unemployment of handicapped persons was found among those who had mental disorders, respiratory disease and nervous system disease. Those with hearing loss, musculoskeletal disease and sight loss had the highest level of employment. Nine out of 10 handicapped persons reported that they had difficulty in finding work. While job availability was the main concern, the most frequently mentioned problems related to the need for modifications in the work place or work time. A higher proportion of handicapped persons worked part-time than the general population, 26.6 percent compared with 16.0 percent.

The policy regarding the education of handicapped young people in Australia favors an integrated approach, with the handicapped child being educated in as near normal an environment as possible, consistent with the individual's needs. The actual education experience of handicapped young people in Australia varies according to their living arrangements and the nature and severity of their handicaps. In the ABS Survey, 95 percent of handicapped school-aged children in institutions were severely handicapped and nearly all attended special schools. Over four-fifths of the handicapped school children residing in households attend regular schools. Handicapped school children with intellectual impairments were most likely to attend special classes at special schools rather than regular classes at regular schools. Compared with all school
children, proportionally fewer handicapped children attending school were enrolled at the secondary level, suggesting that many handicapped students either do not reach or do not proceed very far through secondary schooling.

Inappropriate curricula, with a continuing emphasis upon an "academic" education at the secondary level, exacerbates the problems faced by many handicapped students. Little progress has been made in reeducating secondary and postsecondary school teachers in dealing with the educational problems of handicapped persons. However, the federal government's establishment of a Participation and Equity Program for secondary aged students may help to rectify the current situation. The government, and the community in general, are concerned at the poor retention rates for secondary school students.

The 1981 Survey also revealed that 28.2 per cent of handicapped persons 15 to 64 years of age had postsecondary school qualifications, compared with 37.7 per cent of the general population. Of the handicapped population with postsecondary school qualifications, 12.0 per cent held a trade or apprenticeship qualification, 11.2 per cent a certificate or diploma, and 3.1 per cent a bachelor degree or higher qualification, compared with 12.4 per cent, 16.7 per cent and 5.3 per cent of the general population respectively. Lack of qualifications was most evident in the age range of 15 to 24 years.

Clearly, handicapped people of all ages can be said to have reasonable equality of educational access and opportunity. Plans are currently underway for a national collection of special education statistics to assist in policy development. A further positive step has been the establishment of a new Disability Advisory Council at the national level (replacing the National Advisory Council on the Handicapped), with disabled people comprising a significant majority of its membership.

Socio-Political Forces

In terms of the socio-political forces we seem to be following the North American experience. The North American civil rights legislation and the International Year of Disabled Persons have both had a profound effect upon our policies in Australia. Programs that were started in that year are continuing.

The declaration of the 1981 International Year of Disabled Persons gave an impetus to developments in community attitudes and public policies which were beginning to change in the late 1970's. It is only since 1980, however, that legislation has existed in Australia to prohibit or discourage discrimination on the grounds of physical impairment.
By 1983, the states of New South Wales (NSW), Victoria and South Australia had in operation antidiscrimination legislation to cover physical impairment, and the NSW statute now also covers discrimination on the grounds of intellectual handicaps. We have not addressed the question of whether, notwithstanding the existence of legislation, there may be a need for further action, such as government subsidies to offset the costs of employing persons with disabilities, affirmative action or the introduction of a quota system.

In New South Wales, there is a Director of Equal Opportunity in Public Employment who is responsible for ensuring that management plans regarding the employment of women and minorities are submitted by departments and authorities (including universities and colleges of advanced education). The plans are reviewed to ensure that they are adequate in conception and implementation. This system is now being extended to management plans for persons with physical and intellectual disabilities. Each NSW government department has established an equal opportunity office.

The Federal Public Service has a policy of equal employment opportunity for disabled workers, and special placement officers examine their needs and take follow-up action. In 1981-82, these officers assisted 1,248 disabled applicants, of whom 254 were appointed to permanent positions and 47 were appointed to temporary positions. In 1982-83 these figures were 1,559, 438, and 47, respectively.

The Federal Public Service has initiated a policy of affirmative action to assist disabled persons in securing permanent employment in government jobs.

Consumer movements are also beginning to have perceptible effect upon public policies and the conduct of private facilities serving handicapped people. The principles of normalization and less restrictive alternatives provide a philosophical base for service providers in gaining access to generic services on behalf of handicapped people.

**Government Initiatives in Assisting the Transition from School to Employment**

At the federal level, the Commonwealth Employment Service (CES), administered by the Department of Employment and Industrial Relations, and the Commonwealth Rehabilitation Service (CRS) which is administered by the Department of Social Security, provide the bulk of the programs available for handicapped people. In addition, the Department of Education and Youth Affairs is involved in programs specifically targeted to handicapped children and youth. Since these rational departments are responsible for the major share of funding, state governments have tended to play a fairly minor role. This has had the effect of dampening local initiatives.
Services provided by the Department of Employment and Industrial Relations (DEIR)

Under Section 6 of the Commonwealth Employment Service Act (1978), the CES is required:

- to make special arrangements and provide special facilities wherever necessary so to assist such persons who are immigrants or Aboriginals, who are young or handicapped ... or who otherwise have special requirements or disadvantages in relation to employment.

In the International Year of Disabled Persons, CES formulated the "Open Employment Strategy" which continues to form the basis of CES activity on behalf of disabled job seekers. Assistance is given in at least three ways: 1) the provision of specialist staff such as the Disabled Persons' Officer and employment counselors in CES offices; 2) the Labor Force Program for the Disabled; and 3) special programs to generally assist youth entering the workforce.

Within the Labor Force Program for the Disabled, DEIR has established several efforts. Work preparation programs are conducted on a fee-for-service basis by community-based agencies. These programs, of which there are currently 15, provide a structured program of assessment, vocational evaluation, vocational and related training, job search, placement and follow-up.

Subsidized employment and apprenticeships in which employers are paid a wage subsidy and employees are paid at least the minimum wage. The subsidy period varies according to the skill level of the job, with a minimum period of 20 weeks and a maximum of 52 weeks. Employers may also be reimbursed up to $2,000 for modification to the work place or purchase of equipment essential to enable employment to proceed.

Formal training is available to persons formally assessed as disabled who wish to undertake a vocationally oriented course in a field where they are likely to gain employment on graduation. Trainees are paid unemployment benefits plus a training allowance. Course fees and essential equipment up to a maximum of $375 per year are provided.

Retraining through the above listed programs is considered for employed disabled persons who are at risk of unemployment or are forced to change their jobs because of a disability.

Services provided by the Department of Social Security (DSS)

Under the provisions of the Social Services Act 1947-77, DSS is responsible for income maintenance programs for handicapped
people in the form of pensions, benefits and allowances. In 1948, the Department established the Commonwealth Rehabilitation Service which provides a comprehensive program of rehabilitation incorporating medical, social, educational, psychological and vocational components. These components are offered through a network of centers and programs.

Rehabilitation centers have been established in all state capitals and regional centers in rural areas. These centers generally, but not exclusively, cater to the postmedical rehabilitation needs of physically handicapped people. The rehabilitation centers have followed a traditional medical model organization, but this is slowly changing.

Work therapy and work adjustment centers concentrate upon the assessment and counseling aspects of vocational training. Specific training is contracted out to community resources on a fee-for-service basis. Once assessment and/or training has been completed, the client may undergo work therapy with an employer. The cost of this is met by the CRS. Alternatively, the client may spend some time in a work adjustment center, which is designed to provide an intensive course of work adjustment and work conditioning under simulated industrial conditions.

Work preparation centers are examples of some of the most innovative Australian work preparation programs now provided for mildly intellectually handicapped adolescents. Two pilot programs were established in 1973, and there are now seven centers, each serving approximately 50 trainees. Three additional centers are currently being planned.

These centers, which provide intensive vocational and social skill training, either in an industrial setting or in enclaves within the community, have an extremely successful record in placing and holding young, mildly handicapped people in employment. Despite the current high youth unemployment rate in Australia, the centers have been able to maintain a percentage of successful placements at least as high as that for the same age group within the nonhandicapped population.

Since their inception, the Centers have been linked to a university-based resource team which has developed and monitored a variety of programs. Longitudinal evaluative studies have been conducted and other forms of technical assistance, such as staff training, have been provided by the resource team.

Two interesting activities being conducted at present are the development of an implementation checklist and the establishment of an information base from which indices of cost-effectiveness and cost-efficiency may be determined. The implementation check-list is a form of peer appraisal to ensure that organizational structures are suitably in place.
These centers have had a distinctive influence on other programs for handicapped youth in Australia, particularly in colleges of technical and further education, adult education and sheltered workshops.

**Services Provided by Nongovernment Agencies**

The majority of these agencies conduct programs subsidized by either DEIR or DSS.

As mentioned earlier, DEIR are currently funding 15 work preparation programs, a number of which specifically address handicapped youth. One such program is The Handicapped Employment and Training Assistance Program (HETA) being conducted by The Crippled Children's Association of South Australia. This program assists young disabled people, aged 15 years and over, who are assessed by HETA as having the potential to obtain open employment. After a period of 17-26 weeks of assessment and training, the graduates of the program move to a job placement stage where peer back-up support is provided. NADOW is an organization specializing in training physically disabled people in office work, including computer training, and currently conducts two programs under DEIR funding.

Under the provisions of the Handicapped Persons' Assistance Act, 1974, DSS subsidizes community groups which operate sheltered workshops and activity therapy centers. The former usually caters to mildly disabled people who have vocational skills on assessment. More severely disabled people who do not possess job skills, are usually served in activity therapy centers. In 1982, there were 8,618 persons receiving sheltered employment allowances and 7,214 persons were involved in activity therapy centers.

Two interesting developments are underway to upgrade the quality of programs in both these facilities. First, The Australian Council for Rehabilitation of the Disabled in conjunction with the New South Wales Association of Rehabilitation Facilities is conducting a pilot program to accredit sheltered workshops in NSW. This pilot project is being evaluated by the Macquarie University Unit for Rehabilitation Studies. The basic index being measured is the effect the accreditation process has upon the quality of life of the handicapped employees.

Second, a demonstration project is being set up by which the Unit for Rehabilitation Studies is to replicate the University of Oregon's Specialized Training Program for severely disabled persons. Here an attempt is being made to show that severely handicapped people can be trained to perform vocational skills.
And lastly, there are some programs being conducted by private industry. One of the few corporations in Australia to embrace an affirmative action policy for disabled people is the Colonial Sugar Refining Company, which has appointed a special officer to place disabled people in the company. Twenty-four employees have been placed during a two-year period. Telecom, a semigovernment agency, also has actively sought to train and employ handicapped people.

**Concluding Comments**

Despite the apparent energy of particular groups in coming to grips with the specific problems of helping young disabled people enter the workforce, there are a number of issues which still need to be addressed.

The first relates to definitions. For instance, more attention may need to be given to the emerging social definitions of handicapping conditions as recommended by the current World Health Organization classifications of impairments, disabilities and handicaps. For example, a person may be seen as handicapped in a school setting, but not in a postschool setting. Conversely, a person may not be seen as handicapped until he/she enters the workforce.

Second, there is an obvious gap in Australia's manpower planning for people working as instructors, teachers, or rehabilitation counselors. Where training does exist, it is often inappropriate and/or too superficial to meet the needs of post-secondary school disabled people.

Third, there is a need for a greater use by disabled youth of generic facilities. While colleges of technical and further education, colleges of advanced education and universities have assisted increasing numbers of physically handicapped people (e.g., hearing and visually impaired and orthopedically disabled), very little has been done for the groups which experience the greatest difficulty in entering the workforce--those with intellectual handicaps. In cases where programs have been provided, they have often been conducted within an institutional setting.

Finally, there is a need to provide more rigorous evaluation systems to monitor programs ostensibly designed to assist young disabled people in making the transition from school to work.
Dr. Edwin Martin is the president and chief executive officer for the Human Resources Center in Albertson, New York. His doctoral degree is in speech pathology and psychology from the University of Pittsburgh. He was formerly assistant secretary for Special Education and Rehabilitative Services, U.S. Department of Education. Dr. Martin has also served as a lecturer in education at Harvard University, and as the former Director of the Bureau of Education for the Handicapped.

As I was taking notes and attempting to react to this panel, I couldn't help but think about how well the panel was chosen to display a variety of different models of work in the area of partnership. I found myself thinking about a very wise teacher that I had who was trying to teach us the concept that the basic assumptions we hold influence our behavior. These assumptions lie deep within us, sometimes spoken, sometimes unspoken, sometimes clarified in an analytic form and other times not. If possible, it would seem to be important to be able to verbalize our own basic assumptions, because they constitute the theory on which we operate. The closer we come to being able to analyze these assumptions, to see them clearly, the more likely we are to have a useful theory.

Having developed a few theories in my time and having attempted to argue them against people with eclectic views, I can tell you that the most difficult theory to argue against is eclecticism. For the most part, eclectic assumptions are not very visible to the person who holds them, and even though they might be inconsistent, they don't yield to an analysis because they are not visible. My wise friend told me that whenever possible we should try to challenge basic assumptions, especially in the kind of business that we are in. As an illustration, she reminded us of a time when people assumed the world was flat and explained how this assumption influenced behavior, obviously causing a great deal of behavioral difficulty in the area of exploration. When people began to challenge that assumption and began to picture a global world, they were opened up to all kinds of new experiences.

This example can be applied many times in the area of our assumptions about the disabled. It has been my experience that at almost every stage of my life, I have underestimated what disabled people could do, and similarly many professional rehabili-
tation specialists, special educators, physicians and others have done the same thing. If you look at the evolution of your own careers, I think you will discover that, even over a very brief period of time, disabled people are doing things that you might not have thought they could do.

In reacting to the papers, I have tried to catch a note or two about each presenter. I thought that Mr. Sjostrom, in his paper, challenged an assumption about employer and union incompatibility. He described a system that tends to assume that people can work together cooperatively. To demonstrate this principle, he describes a cooperative group approach involving employer-employees and government employment offices. He also highlighted for us a focus on attitudes as a major dimension of these groups. I couldn't help but be fascinated by his observation that the groups grew from the bottom up, rather from the top down. It is somewhat reminiscent of the approach often ascribed to the Japanese business people.

Ms. Mallet talked about GIRPEH and the assumption of equal employment opportunity. She seemed to be describing a tripartite involvement, and I was interested in the concept of regionalization. The subject of government subsidies was also raised for the first time, a topic which will be returned to again and again. This model seemed to depend a great deal on networking and on technical systems. It reminded me of the model of the Industry Labor Council which we operate at the Human Resources Center. This is essentially a private industry-labor cooperative model in which we do staff administrative work and provide technical assistance. The difference is that the GIRPEH model has also gone into direct services for the disabled. It has become a service provider to disabled individuals, as well as a source of technical assistance to organizations.

Talking about the government role, Mr. Geletka described private sector/public sector rehabilitation coordination, that is, programs supported by government funds to bring about private/public sector activity. He also challenged some assumptions, old assumptions, that industry, business, and rehabilitation centers could not really work together collaboratively. Furthermore, he challenges a very interesting assumption that industry is a customer; it is not the subject to be spoken at, trained at, and so forth. Mr. Mosher addressed this earlier, when he noted that the Menninger's PWI program offered unlimited follow-up to our customers (employers). The PWI model that Geletka talked about, emphasizing the tactics of industry, product orientation, customer orientation, and sales and marketing orientation, challenges an assumption that rests primarily on emphasizing the "inputs" of the rehabilitation process (e.g., a trained staff with master's degrees in rehabilitation). We have assumed that by improving these input variables we will necessarily be able to roll out the finished product line—disabled people who will get hired. Surprisingly, however,
our products were not hired, at least to the degree that we hoped they would. Thus, we have had to challenge some of our assumptions to see if we could learn more fully what other factors were operating in the environment, including employer attitudes and other employer-related variables—emphasizing "output" rather than input variables.

Dr. Jones and Ms. Gobell talked together about "bridging"—an interesting concept. They also raised for the first time an emphasis on physical and cognitive styles, on coping and psychological processes. They discussed the introduction of the rehabilitation counselor inside a particular corporation. This model raises a lot of questions in terms of feasibility, in terms of the numbers of corporations and the numbers of dollars that may be involved, and it challenges assumptions about what kinds of public support companies should expect. I was fascinated here by the emphasis on the possible out-placement role for disabled workers. Many of you may be familiar with the fact that industry will sometimes pay considerable sums to consulting firms to help place executives who have become persona non grata in some fashion or another, but they are not as likely to spend as much time helping the worker on the line find another job. The notion of an out-placement role for rehabilitation, emphasizing psychological, social and coping dimensions challenges again some of our basic assumptions.

Dr. Geist talked a little bit about the attitudes she found in Poland. She perceived the attitudes to be very positive toward the disabled worker. She described to us essentially a highly segregated setting, involving not only work but also social, athletic, cultural and other living arrangement activities. The challenging assumption here concerns the question of what variables are important and which ones comprise our attitudes toward the disabled. Ordinarily, I would assume that positive attitudes would be reflected in a preference for employing disabled people within integrated settings. What she really raises in her paper is the question of how does one try to achieve the benefits of specialized programs and, at the same time, maintain some of society's social integration goals. This is an issue not completely resolved in special education, for example, despite the emphasis in the United States and in many other nations on integration of disabled and non-disabled children.

There is a body of strongly held experience that suggests that, for certain groups of disabled children, an education through specialized schools and programming has some strong positive features, particularly with respect to developing social skills and participating in a full range of activities. This issue appeared in Geist's paper and to some extent in Mr. True's paper. True discusses the sheltered workshop concept as a strategy for employment. He emphasized the need for a program to be competitive and valid in terms of its products, but at the same time he underscored
the need for government subsidy to make that possible. Our assumptions about independence for real work and real pay challenge the notion of whether or not outside competitive employment is in fact desirable or necessary to achieve societal goals and our own individual needs.

Finally, Mr. Parmenter pointed out several other issues. He raised for the first time, the concept of transition, an important topic in the U.S. He mentioned developmental disabilities and schools and independent living. In thinking about partnership initiatives, most of us focused on partnerships between labor unions, between employers, between the government, and between disabled persons themselves. Mr. Parmenter raised questions about partnerships with other agencies, other groups of disabled people, the schools, and the independent living movement. He also challenged some assumptions about testing and the nature of testing.

Finally, I think that there are several things that are left for us to do with respect to the papers we have just heard. First of all, we have to find mechanisms for integrating and synthesizing these models, not for equalizing them by reducing them to the least common denominator. I think we need to avoid this reduction, even though there is a need for integration and synthesis to take place. I think we must also try to avoid what I call the "great clinician" approach, a concept that came to me in my work as a speech therapist. I was forever running into people who did wonderful things in their own particular clinical program and who then wrote a theory about it saying that the way to achieve the same results was to behave exactly as they did. I think there is a great danger in thinking that a specific program is the only way to go and the only way it will work, because we then ignore variations in personality, in the ecology, and so forth.

I think we must continue to try to influence public policy because underlying all of these interesting programs, almost without exception, was a public policy that was, at least in part, supportive of it. I am drawn to this by thinking of several behaviors that have occurred recently in the U.S. These include a proposal on the part of the administration to repeal sections of the Rehabilitation Act (that is, to revise and limit section 504 regulations), a proposal to repeal Public Law 94-142 (The Education of All Handicapped Children Act), and actions which cut off almost a half a million people from social security disability benefits. That these negative actions could be proposed and implemented to some degree, tells us that people who are professionals in the rehabilitation field, people who are disabled, and parents of disabled persons need to keep monitoring the public policy process constantly. The fact that these things can be proposed by a governmental body alerts us to the great need to continue to monitor and work on public policy.
We also need to establish common terminology and to try to learn to speak the same languages among rehabilitation, business, and related fields. Finally, I would agree with Mr. Parmenter in saying that we have come a very long way in both our clinical practice and our science in the broadest sense. But we still are a field without an evaluation base. We need to commit ourselves, as professionals across nations and across our professional divisions, to the development of evaluation models.
SESSION V

SYMPOSIUM OUTCOMES AND RECOMMENDATIONS FOR THE FUTURE
SESSION V: SYMPOSIUM OUTCOMES AND RECOMMENDATIONS FOR THE FUTURE

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Session V is both a summary of the issues raised in this Symposium and a look at the implications for policies and practices toward employment of disabled people. It is divided into three separate parts—specific reactions by the five members of our closing panel, a look at future trends in relation to disability and rehabilitation, and a summary of the recommendations that resulted from the Symposium participants.

We asked the five panelists—Ed Berkowitz, Harlan Hahn, John Noble, Gail Schwartz, Birger Sjostrom, and John Noble—to comment on and react to some of the major points that have been brought up during the two-and-a-half days of the Symposium. From their diverse professional perspectives, they have identified topics they believed needed reinforcing or which caught their attention as the conference proceeded. These reactions are presented as Part I of Session V.

As the final presentation, we invited Dr. Frank Bowe to look at future trends and the implications of these trends upon the policies and employment practices which may affect disabled people. It is within this evolving future context that recommendations for policy formation and practice innovations must be cast, so that our efforts and resources are not lost on solutions that are applicable only in retrospect. Dr. Bowe identifies three major trends in the United States, Europe, and Japan that may affect the employment of disabled persons in the near future. His comments are presented as Part II of Session V.

At the end of the Symposium, we asked all Symposium participants for their reactions and to "send a message to the policy makers" by way of individually recorded policy and practice recommendations. These individual responses were then summarized and organized into a comprehensive document concerning rehabilitation policy and practice recommendations. This summary is Part III of Session V and represents our conclusion to the Symposium.
It is quite a challenge for me even to begin to summarize what's happened here, because one of the themes has clearly been diversity itself. But the task that occupies me now is to discern what it is in this international analysis that has validity for America and the American scene. To begin, as compared with almost any of the other social welfare systems that have been discussed here, the American system is different.

It seems to me that other countries have a tradition that emphasizes two basic entitlements. The first entitlement is a right to a job. In America, this is a much weaker tradition. We do have the Full Employment Act of 1946, but it has never been honored as a central point of our public policy. I personally believe that it is very significant when a social welfare system begins with the assumption that you have a right to a job, particularly in Western European countries. With this assumption, the whole business of providing for the employment of the handicapped has a much more central place in public policy.

The second feature of the European tradition is a right to income maintenance, a certain basic income. In America, by way of contrast, I believe the central theme to our social welfare system is retirement. If there is any benefit or any entitlement or right that Americans have, it is the right to retire, and I think our disability system is best seen as an extension of our retirement system. If one compares the amount of government expenditures annually for disability insurance (the retirement part of our social security disability program) with the amount expended for rehabilitation, their relative sizes would be along the lines of 18 to 1. This amount does not take into account the medical entitlements that disability insurance brings with it. It is worth noting in this international setting that we do not have a health insurance law here in America, except for the elderly and the indigent, and this fact is also a striking contrast between the European and American systems. At any rate, disability insurance is much bigger than vocational rehabilitation—about $18 billion for disability insurance and perhaps $1 billion for all the various parts of rehabilitation, with an additional $5-6 billion for workers' compensation. The biggest single chunk of workers' compensation money is in the form of income maintenance and not rehabilitation. The American situation is not like the Ontario example. In Ontario, one gets the sense that from the outset the province of Ontario made a much larger commitment to rehabilitation as part of workers' compensation, That is just not the story here in America.
Another thing I see that seems to be an international phenomenon is that just as there was a tremendous expansion in disability entitlements in the 1970's across all nations, we now see a very fundamental shift toward the private sector as the focal point of social action. If this conference had been held 10 years ago, it would have focused on the problem of filling gaps in the public sector to meet various identified problems. This conference proceeded from a totally different assumption. As we acknowledge that there are problems, we are now asking what the private sector can do to address these problems. I think that is a very important shift.

The encouraging side of things is that in some ways the private sector has a bit more flexibility in getting at these problems than the public sector does. There is a developing idea on the part of the private sector that an employee's benefits might include not just an income maintenance benefit or the right to long-term disability benefits under private insurance (to use the American example), but also the right to continuing employment. That has been a tradition in the industrial sector which I think is really coming back now.

As an example, the Pilkington Company in Britain springs to mind. In the U.S., the same sort of entitlement is seen at Control Data, IBM, and even the federal government, which is possibly the largest employer in the U.S. at this point. It is interesting that in all of these places, including our federal government, the definition of disability is different for income maintenance benefits than it is in the public service sector. As a U.S. federal government employee, one can draw disability benefits because of an inability to do one's customary or previous job in one's specific grade level. This is different than within our social security system, in which you have to be unable to do any job whatsoever to qualify. It seems to me that in settings which have an emphasis on occupational disability, whether it is in the Pilkington Company in Britain or within the U.S. federal government, there is more interest in rehabilitation in the classic sense; i.e., interest in remaking the person or bringing out his/her abilities so that he/she can continue in the company.

For the next item, I would like to speak a bit historically. In other times, we have seen shifts from the public to the private sector as the focal point of action. In America, for example, right after the First and Second World Wars, there were shifts in emphasis to the private sector as the focal point of social action. It seems to me that this has relevance to rehabilitation.

One could argue that each of the previous shifts from the public to the private sectors has been accompanied by a tremendous interest in rehabilitation as a way of bridging the public and private sector, as a way of involving disabled workers in the private sector. That
certainly was the case in 1920 in America when we started our Vocational Rehabilitation Act. It was the case after the Second World War when we put into practice our expanded Vocational Rehabilitation Act of 1943. It was definitely the case in 1953 when we had our great transition from the New Deal to General Eisenhower as president. Each of those transition points mark points of real growth for our vocational rehabilitation program here in the United States.

Interestingly enough, the transition that we are undergoing now from the public toward the private sector is unaccompanied by any increase in interest in vocational rehabilitation among the disability programs. In fact, we see all sorts of contrary trends which I believe are important for the setting of public policy. For example, John Noble in his earlier talk mentioned the Omnibus Budget Reconciliation Act of 1981, which I think is going to be what President Reagan will be remembered for. That is a very significant omnibus piece of social legislation with thousands of provisions. Essentially, one of the provisions was to end the program that was attempting to take people off disability insurance and rehabilitate them through the Beneficiary Rehabilitation Program. Although one would think that this provision would have been naturally expanded during this period of time, it was, in fact, ended.

The best example of rehabilitation activities during times of transition (1943 and 1953) would be the Eisenhower administration. He was a conservative coming to power after a great number of liberals had been in power, and he was casting about for a program that had good conservative values. The program he found was Mary Switzer's vocational rehabilitation program. The Omnibus Budget Reconciliation Act of 1981 has a very different spirit to it. There isn't that same rediscovery of rehabilitation. I think the reason is that rehabilitation itself has simply not been in a position to carry the ball.

If I may make a somewhat controversial point, one can see that very clearly in the very interesting Kodak example that we had presented to us. The Kodak example was one of the purest expressions of the rehabilitation philosophy we had at this conference. One of the things that was very striking is that the counselor "points out what is realistic to the client." Those are the words I would like to center on, "points out what is realistic." The example further explains that "maybe the client thinks he is going to be a foreman, but that may not be realistic." This counseling approach originates from a very long tradition of vocational counseling that has been the basis of many rehabilitation programs. But, if you are a handicapped activist, you might very well ask who they think they are to tell me what is realistic for me. It is this ideological and intellectual confusion that we so often see. The Kodak program is exactly the kind of program we would like to see;
an excellent way to bridge the public and private sectors. And yet, in the middle of this model, there is still confusion about the role of the counselor. That confusion, it seems to me, is why vocational rehabilitation is not advancing as far as we would like.

A related issue is whether or not we really believe in the private sector. In fact, it is unclear where the public sector ends and where the private sector begins. If, as the people in Washington claim, they believe in the private sector, then it seems to me that Kodak should pay 100 percent of the costs, because the benefits are actually accruing most directly to Kodak. One could argue that the benefits accrue from the taxes they have paid, but, in fact, this is a human capital investment of the type that Kodak makes all the time in its managers when it sends them to get MBAs and so on. This is just another investment that Kodak should be making. It is clear that this is the logic of this conference. If these programs are truly cost effective, then Kodak should be absorbing the costs. This is a public policy issues that is, as yet, unresolved in rehabilitation activities.

The image that I would like to leave with you in all of this is that when we think about disability policy in the aggregate, we should have realistic images in front of us. Having spent a year studying disability programs, two contrasting images are quite striking to me. The one image is the center for independent living image in Berkeley where you see people who are young, severely disabled, and aggressive. They are fighting to get into the labor force. The other image is the disability insurance hearing. There is the administrative law judge and the applicant, a 53-year-old, tired, demoralized person. It seems to me that those are the images that we have in front of our eyes. If we can somehow reconcile them, we will have achieved something here.
I am concerned about the issue of paradigms and the problem of definitions. The entire discussion since the opening session has been predicated on the assumption that everyone knows what disability is. And they don't. Most speakers have equated disability with vocational limitations or functional impairments, and they have not identified their definitions as such. Even today it was said that disability is really an extension of the concept of pensions for retirement. There was also a comment that disability is a health issue rather than a matter of income maintenance. As I tried to suggest earlier, disability actually is not either of these two problems, disability is something else. It is a product of the interaction between individuals and a disabling environment.

Most of the programs that we have been discussing deal with the supply of disabled workers rather than with the demand for disabled workers. There has been talk about training and counseling and placement and related activities. In that connection, most speakers have missed the obvious points—that disabled people are usually counseled and trained for entry-level positions which offer little future or promotional opportunities. Then counselors wonder why they may encounter some resistance when they guide disabled people in that direction. I think the resistance is understandable.

In this definitional confusion, policies also tend to equate disability and unemployability or inability to engage in substantial gainful activity. I suggest that there are very few people, if any, who could not participate in significant work if environmental factors were taken seriously. We should be aiming for environments that are appropriate and conducive to meaningful employment for everyone rather than making the assumption that there is a relationship between functional and occupational limitations without taking the environment into consideration as an important intervening variable.

I must admit that I am troubled by the emphasis on the private sector. When I hear some of these stories about what certain kinds of industries are trying to do or about efforts to identify good models for the employment of disabled persons, I am afraid that attention is diverted from the fact that the unemployment rate among people with disabilities is higher than among any other segment of the population. We have to consider unemployment as the major problem. That is why I made the suggestion about quotas. It is clear to me that educational efforts and voluntary approaches to the solution of this problem have not worked. If they had been effective, there would be a lower unemployment rate. We have to move toward a policy that is more compulsory in nature, rather than programs that are voluntary or persuasive in their approach.
I would suggest that there are probably three basic rationales for rehabilitation. I think the first reason has to do with altruism. Programs based on altruism only lead to paternalism and patronizing attitudes and to a subordinate position for the people for whom the policy was allegedly designed.

A second possible basis is cost effectiveness. If workers can be returned to the labor force and thereby contribute to economic growth, that may be a legitimate justification for the profession of rehabilitation. I do not think that has been accomplished either. I think it is entirely reasonable to have doubts about the cost effectiveness of rehabilitation. I think this approach involves questionable assumptions in economic theories about the necessity of growth as a mechanism for promoting social objectives. Rehabilitation may or may not be cost effective; I do not know. I am not impressed by cost-benefit analysis as a research technique, because such analysis is based on a series of normative presuppositions. We could debate those normative issues for weeks, but I doubt that a consensus could be formed which would provide a firm foundation for rehabilitation.

I think there are other reasons for doing what we are doing. I think we are really involved here in a struggle by a segment of the population to gain equal rights. We are in a struggle to promote the employment of people who previously have been the victims of prejudice and whose unemployment stems primarily from job discrimination. And that is an ennobling reason for undertaking a program such as rehabilitation. I submit to you that if my analysis is at all accurate, that the first two objectives have not worked. Neither altruism nor cost effectiveness constitute a meaningful or appropriate incentive for the strivings of a profession such as rehabilitation. The concept of providing equal rights for a segment of the population that has been the target of discrimination is a much more viable motivation which is capable of capturing our energies and sustaining our efforts.

If you accept that notion, we also have to recognize that there are two essentially different approaches to the solution of the problem. One approach focuses on the individual, which is highly compatible with individualistic traditions and values. American society often views changes within the individual as the principal mechanism for solving human problems. There is another orientation that relies on collective efforts to change the environment. As the environment changes, so will the individual, and eventually the problem will be ameliorated. That approach focuses on public policy. And I am very pleased that in the last few days, we have begun to identify public policy as a major field in the study of disability and rehabilitation. Rehabilitation has a significant opportunity to supplement and complement its traditional focus on the individual with a corresponding emphasis on collective approaches to the solution of social problems.
And so, I would welcome you in the effort to change laws and policies that have not worked in the past and that are interfering with the legitimate aspirations of the disability community in this country and throughout the world. They also impede the ability to do the work of rehabilitation. Those laws and policies are based upon incorrect, inappropriate understandings of the nature and meaning of disability. Once laws, policies, and government programs are brought into line with an accurate and realistic knowledge of what disability means in society, I believe significant progress can be made toward the attainment of equal rights.
I work with the Washington Business Group on Health. We represent 200 major employers in their role as purchasers of health benefits for their employees, retirees, and dependents. We were established about 10 years ago and have spent most of our time monitoring federal legislation and helping companies to develop health care cost management strategies. We are currently establishing a new Institute on Rehabilitation and Disability Management, an outgrowth of our corporate interest in disability management.

I think the examples that have been portrayed here the last few days have been excellent, and I am very enthusiastic about them. But when I look at our 200 member companies within the U.S., I realize that there are many companies who are not this far along. We need to promote their further corporate involvement. Examples like Kodak will be useful to me in demonstrating new ways that corporations can get involved. However, before the private sector becomes more involved, they need to see data on the cost-effectiveness of rehabilitation. The corporate community still questions the cost-effectiveness of rehabilitation.

Ed Berkowitz has mentioned that some employers offer continued employment. I think that may be true; but I think it's also important to look at what other kinds of health benefits employers offer. Currently, the rehabilitation benefit is not substantial in a lot of companies. Many of our companies will provide coverage for medical rehabilitation, but only in general hospitals, not in comprehensive rehabilitation facilities. This is true even though the comprehensive rehabilitation facilities are able to cut down the length of stay and get people back to work sooner.

Another change that I think is needed is benefit redesign in the area of back pain and psychiatric disability. I receive frequent calls from our corporate members telling me that 30 percent of their disability claims are for back pain and about 10 percent are for psychiatric disability. And these numbers are growing. I have not heard much discussion during the last few days about insured mental health benefits, but I think that is an important component from the corporate perspective for any kind of disability management program.

Corporations need to better manage their disability benefits and services. I am concerned by the lack of coordination among corporate divisions involved in some facet of disability plans. Corporations can do a far better job in developing disability management strategies. We have seen that companies that aggressively manage their disabled employees and their disability benefit programs can save as much as 25 percent on disability.
I assure you that disability costs within the corporate community are very, very high—approximately what health care costs were about five years ago. I would hate to see disability costs grow without the development of cost-effective disability management systems.

I do not believe that corporations find it easier to simply pass health care costs on to the consumer. I should preface my remarks by saying I am representing only the major employers, basically 200 of the "Fortune 500" companies. Their health benefit plans are significantly different from smaller employers. Cost sharing, co-payment deductibles, and other types of benefit design changes are new ways in which corporations are handling rising health care costs. Because health care costs have escalated, companies have felt that there has been an inordinate amount of inappropriate utilization. They believe that if the employees have some responsibility for the economics involved in the receipt of health care services, then they will be wiser buyers and more appropriate utilizers of health care. By and large, I think companies are very generous with their health benefit packages. Corporations now feel that health care benefits should also be a part of their responsibility, because they now understand that healthier employees will be more productive and contribute more to increased corporate profits.

I agree with Dr. Galvin when he observed that we need more research. Many of our conclusions are based on faith alone. Somehow it seems to make sense, it seems to be logical, and it seems to be in concert with our value systems and our assumptions. So we promote a lot of this and hope that people will replicate it. Yet, I am struck at how little evidence there is. We have very limited empirical data to confirm the impact of health promotion, exercise and other programs we have discussed here on specific disabling impairments such as cardiac problems. I hope that there is interest in conducting this research, particularly in the private sector where many of these programs take place.

One of the things that we will be doing at the Institute of Rehabilitation and Disability Management is to demonstrate the cost-effectiveness of rehabilitation. We are conducting this effort in conjunction with the newly established National Rehabilitation Hospital in Washington, D.C. Therefore, we will be able to use their data base to analyze length of stay and return to work data. In addition, we will be conducting large-scale studies that involve corporations.

As we pursue these topics, we must be careful about making distinctions between the public and private sectors, since the public sector employs one-third of the U.S. labor force. On the other hand, in comparison to what the private sector is attempting to accomplish, I believe that government has not necessarily been the most progressive in its personnel practices.
I come from a country with a very strong public sector that has been growing very rapidly. As I think most of you know, Sweden has run into some economic problems because our system costs too much. Consequently, even in Sweden with its socialist government, we are focusing on private industry much more than we have done in the past. In addition, we are also dealing with this relationship between cash and work. We are turning away from simply giving people money if they are out of work or pensions if they are in rehabilitation systems. Instead, we are focusing on employment, even for elderly people. There's a very interesting discussion in Sweden now about people who are 58 years and 3 months old. At this point, they are entitled to benefits and may simply retire.

We are also discussing the problem of cost benefits. Of course, we can't completely translate this issue into the Swedish way of thinking, because the economy is a bit different. Politicians use very nice words when they are up for election. They say, of course, that we owe assistance to disabled individuals, and we should take care of them. But when it comes to the actual decisions about money, they suddenly speak a different language. So we evaluate the costs of these problems and say that the costs are this much in one part of the economy, maybe we need to get them back in another part of the economy.

I have come to the conclusion that in Sweden we have to concentrate even more on rehabilitation in the open market (i.e., private sector). In Sweden, as well as in other countries too, we built some good rehabilitation and training institutions in the late 1960s. But in this rapidly changing world, these institutions are antique now, and we cannot renew them in the same rapid way as the world outside changes. If I go to see a modern industrial production facility, I find that it is nothing like our training centers. Industries have changed very, very rapidly, and we have to cooperate with them in a much better way than we do today. I believe we should not emphasize more building of huge institutions but instead, emphasize training for our clients out in the open market.

We have found in some of our programs that if we can get the handicapped person in the labor market as early as possible, he/she has a much better chance to get a job. There are various reasons for this. The person is better adapted to the situation, knows what the demands are, and receives training that is adapted to the situation. There is also an economic reason for moving away from institutions. Simply stated, they cost too much, and it is more economical and more effective for us to purchase training experiences directly from industry.
Perhaps the most important reason to move away from institutions is one of attitudes. In my experience, the best advocate for the handicapped is the handicapped person himself or herself. As Ed Martin pointed out, throughout history there have been these negative attitudes concerning the disabled, and I do not think we can reach any solutions by trying to get rid of negative attitudes first. But if the handicapped person is working together with the nonhandicapped, this interaction can show that the handicapped person is different in some ways, but that these differences do not matter. For all these reasons, I think we should emphasize "training out" in the employment setting much more.
As I listened to many of the presentations, there was much discussion of the various means to achieve commonly valued goals, including the goals of equity and efficiency in the allocation of resources. We should be aware that several different meanings can be attached to the terms "equity" and "efficiency." Depending on the meanings that are accepted, you reach very different conclusions.

Equity can be seen as a compromise on efficiency, or it may be seen as society's humane response to its members who cannot perform or conform to society's normative expectations about functioning or even appearance. Efficiency may be seen as the most productive use of resources in the creation of goods and services needed by society, or it may be seen as the most productive use of society's resources to achieve its valued goals, including helping those who cannot participate in society without assistance. Ultimately, the trade-off issue gets played out as a value conflict between competing goals or the means to achieve these goals, each of which is legitimately valued in its own right.

The basic question for society is how much it values equal participation in society and equal sharing of the goods and services produced by that society, regardless of individual attributes, including the ability to work at peak levels of performance. The sharing of power, i.e., to have control over sufficient resources so as to be able to act independently, is the social goal that we are concerned with here.

As I see it, the basic equity/efficiency trade-off issues for the handicapped are:

- The degree to which work is to be the principal means by which goods and services are distributed among society's members vs. allocated according to redistribution principles, i.e., received according to need and produced according to abilities.

- The degree to which physical and social integration is to be pursued as a matter of equity vs. compromised for the more efficient allocation of work production and the delivery of services. The Polish Invalide Cooperatives are an example of how efficiency in the organization of work and the delivery of services for the disabled are accomplished by compromising the physical and social integration of the disabled in Polish society.
The degree to which income redistribution and work activity can be combined in the final analysis to optimize the well-being of all of society's members. This might involve job sharing and wage sharing in varying degrees between handicapped and nonhandicapped workers—especially as the level of economic activity fluctuates over time.

One way of optimizing the productivity of disabled workers within the regular workplace without resort to quotas or affirmative employment schemes (none of which appear to work very well) is to adopt a tax policy which totally or partially eliminates the corporate income or a value added tax on the production of disabled workers.

Such a tax policy would affect the prices which firms could place on their products as a function of how much of their revenues is produced by disabled workers. It would be in the best interest of competing firms to hire the handicapped, retain employees who become handicapped, and find ways of optimizing their productivity. Government intervention would be minimized; employers would take the initiative and make whatever investments are deemed necessary to integrate handicapped and nonhandicapped workers in their workforce. Although there may be disagreements over the definition of handicap or disability, they should be no greater than those that now affect current policies; hence, the definitional issue should not prevent adoption of the appropriate tax policy.

Edward Berkowitz is an associate professor of history at George Washington University, and is the director of the program in history and public policy. He has also been a senior staff member of the President's Commission for a National Agenda for the 1980's. Dr. Berkowitz is currently completing a book on public policy toward disability for the Twentieth Century Fund.

Gail Schwartz is the director of the Institute for Rehabilitation and Disability Management, a unit of the Washington Business Group on Health. Ms. Schwartz has a master's degree in public health and a bachelor's degree in rehabilitation counseling.
In the United States, we have created piecemeal programs that in turn have a piecemeal effect on meeting the needs of disabled people. First, we created a disability insurance program. Then, we created a rehabilitation program. We created a special education program and a supplemental security income program. These programs were all created to meet a different need at a different point in time, without thought for their interrelation.

I imagine Congress saying, "there shall be a brick," and Congress being Congress, there was a brick. Twenty years later, Congress said again, "there shall be a brick," and lo and behold, on the seventh day there was a brick. And the process continued this way. From my limited experience, I believe what we have not done in the United States and in most other countries is to pull away from the bricks and ask if there is a path? Does this path lead somewhere or does it lead in many different directions?

For this reason, we do not have a rational disability policy. The message to people who are disabled has been neither consistent or clear. The message has not been consistent or clear to parents of disabled children or to employers of disabled individuals because we have built our policy brick-by-brick.

We could cite examples of this problem in every country we have named here. In fact, we have spent the last few days looking at each brick. We've talked about sheltered workshops. We looked at another brick and talked about quotas. We looked at a third brick, and talked about social security programs. We have analyzed each of them, and we have heard presentations describing these bricks in great detail. What I think we must do now is try to determine what this thing is that we have created from bricks. Is it a path or is it a wall?
I believe that our most important first step is to examine the entire picture and analyze it rationally. We must ask ourselves about the messages we are sending to disabled people and to society, and how we can make them more clear and more consistent.

Let me give you an example of the problem. I have spoken with handicapped children whose first question, even at the age of 14, was when they would receive their first check from Social Security. Even before deciding on a job future, the message they had received was that because they are different the government will give them a check. This first impression from society is not consistent with our missions in special education or vocational rehabilitation. It should come as no surprise when handicapped people are reluctant to work. This is consistent with the worldwide message that handicapped people will be taken care of by society.

In my own view the clear and consistent message should probably be, "you are responsible for yourself"—that society will provide an education as its obligation, and, if needed, aid in obtaining that education or job training or in getting a job; but that you, like others, are responsible for yourself. With this message, I think most motivation problems that we have talked about would fall before the force of law and reason.

As a second step, we must recognize and respond to major trends that are likely to significantly alter life for disabled people, and premise our actions and policies to incorporate these social changes. What follows is, of course, a personal view of the future that is shaped by experience. No one knows what will happen, particularly today, with change so pervasive a factor in our lives. All I can do, all anyone can do, is to draw upon what we have seen in business and in government throughout the United States and in Europe, and to project what may happen ahead in a few years. I believe we must take into account three major trends in the United States, Europe, and Japan which I expect will exert significant influence upon the employment practices of disabled persons in the near future. Let me outline these briefly and then turn to what kinds of work people with disabilities will likely be doing in the years to come.

One very important trend is toward the personal use of microcomputer power. That is of very special relevance to the employment of people with disabilities. It has powerful implications for education and training, for initial and career employment, and for the employment retention of persons who become disabled while working.

A second trend is the emergence of an increasingly older population. The greying of America, Europe, and Japan is becoming a central element in national economic planning. As the
population grows older, the fact that almost one in every three persons over 65 years of age has a disability draws attention to handicapped people at the highest levels of government and industry.

The third trend I want to discuss today is the increased questioning of the entitlement nature of governmental aid toward persons who are elderly or disabled. To date, we have seen a "we'll take care of you, because you can't take care of yourself" mentality. Increasingly, that has given way to measured consideration of whether elderly and disabled people can in fact care for themselves to an extent far greater than previously assumed. We are finding that society pays a very high price for cradle-to-grave social services program. Consequently, at this point, we are questioning our policies; at some future point, we may have to change them.

These trends are, of course, related. And I believe that they merge to create an environment in which, at least in the developed nations, disabled people will be employed to a greater extent in the years to come than they are today.

The Personal Computer

The remarkable growth of the personal use of microcomputers means several things for employment of disabled people. First, it suggests that the nature of work is changing. In an industrial age, employers understandably preferred to hire "Greek gods" who had all senses and abilities intact. But in an information age, we are finding that such capabilities are often not essential. Today, robots do routine heavy lifting in thousands of plants worldwide; many robots also "see" and, to some extent at least, "hear" as they perform their work. Today, sophisticated laboratory equipment based upon the microcomputer is used instead of human eyes to explore the heavens and to analyze chemical substances. Today, speech synthesizers and voice recognition technologies are being applied to reduce the paperwork in modern offices.

Put simply, computers can do what disabled people often cannot: lift, move, see, and hear.

Sales is an excellent example. Traditionally, companies hired good-looking, gregarious and able-bodied salesmen to create the "right image" for the corporation in the customer's mind. Today, however, telemarketing increasingly is "the" way in which sales activities are conducted. With telemarketing, you neither see nor meet the salesperson. Physically disabled and blind people can operate telemarketing equipment as well as able-bodied individuals. That's important, because sales jobs are probably the single, fastest-growing occupation in the Western world today. In the United States alone, according to Forecasting International of Arlington, Virginia, a staggering eight million new jobs in telemarketing will be created before the turn of the century.
Consider commuting to work as another example. With personal computers, it is often not necessary for a supervisor to watch someone do a job. The worker can work at a satellite office, at home or even at the beach. The computer tracks hours worked, performance, errors, and cost variables. The supervisor can look over a printout to evaluate the work performed. So the fact that someone is unable to commute in rush hours or cannot even come in to the office to work no longer disqualifies that individual from many jobs. Today, half of all jobs in America are information jobs that can be done in much this way. When Equitable Life faced a large backlog in claims last year, the company farmed the work out to housewives, retired persons, and physically disabled individuals who worked out of their homes or sheltered workshops. Equitable eliminated the backlog. American Express handles much of its word processing work in exactly this way.

What all of this means is that employers may be much more willing in the future to consider the employment of disabled people and the retention of injured workers. Someone is blind? So what? A simple $200 add-on to the company's desktop computer lets the worker do everything that others in the office do. Someone becomes a paraplegic in an automobile accident. We can just string a few telephone wires into his home, and go on from there. American Express says using home-based employees actually costs less than paying for equivalent office space at the company. And, within five to ten years, computers will "hear" for deaf people as well. Personal computers have important implications for education of disabled people, for delivery of health care services, and for recreation and the leisure activities of disabled people. But I think the impact in employment will be most dramatic.

An Aging Population

America now has more people over 65 than it has teenagers. In the 1980 election, fully one-third of all votes cast were those of people aged 55 or over. Additionally, according to the U.S. Bureau of Census, about one in three over-65 persons has a physical, sensory, mental, or other disability.

All of this means that older and disabled people are going to receive increasingly close attention from business and industry. We are starting to see the effect already. In the advertising game, there has been a shift away from the darling of the media—the 25-44 year old movers and shakers—to a new sweetheart—the older person with substantial personal resources, a paid-up mortgage, and a yen for travel. Banker's Life in Chicago has eliminated all retirement-age restrictions. Bank of America, Citibank, and Chemical Bank are going after the home-based banking market in part to capture the patronage of older and disabled people unwilling to risk life and limb from accidents or incidents by coming to banks and stores with money.
One very important implication of the greying Western society is the fact that disabled individuals may be called upon by virtue of their life experiences, to be the experts who advise agencies and companies that will provide home health services and aids to the mushrooming older population. Johnson and Johnn, American Hospital Supply, ARA Services, and Superior Care are examples of companies moving into this market. As we take what we have learned in independent living and apply it to services for older people, we will be opening up new employment opportunities for hundreds of thousands of disabled people.

Economics

In an industrial age, it might have made sense to require physical wholeness from workers. Today, it often doesn't make sense. Technology can do what many disabled people are unable to do. If this is true, does it remain necessary for the government to subsidize people with disabilities for life?

In the United States, more than one-quarter of the entire federal budget goes for services to older persons, few of whom work. At least $30 billion more each year is spent on subsidies for disabled persons under the age of 65. The costs have risen so high and so fast that both federal and state governments are trying to back away from the obligations inherent in Social Security Disability Insurance.

Here we have a combination of a rising ability to work and the growing costs of subsidizing nonwork. I expect to see governments in the United States, Europe, and Japan begin to offer major incentives to private employers to put disabled people to work so the state may take these people off the aid rolls.

Complex social planning questions arise here which are by no means resolved at this time. What is the role of the state with respect to older and disabled people? What rights do people who have worked for decades have in the way of state-supported retirement? What should a society do if putting disabled people to work means that some able-bodied people might not be able to find employment?

To date, these kinds of questions are only beginning to be explored by many leaders in government and industry. Traditionally, we have thought that older and disabled people were people who "can't," and we have based our policies on that belief. Now, our leaders are beginning to discover that millions of disabled and older persons are individuals who "can"--and this realization is throwing into sharp focus the entire question of the relationship between the state and its special needs populations.

In Norway, people who put off retirement between the ages of 67 and 70 receive nine percent per year extra retirement benefits
when they do leave their jobs. The United States will pay about the same level of bonuses early in the next century. I think these are the first signals that indicate the direction in which we are moving—toward greater employment of disabled and elderly people.

References


PART III: CONCLUSION

Rochelle Habeck and Donald Galvin
Michigan State University
East Lansing, Michigan

During the final session of the symposium, participants were to "send a message to the policy makers" by way of individually recorded policy and practice recommendations. The recommendations summarized below capture the central issues and ideas raised during the symposium, both as a conclusion for this document and as our continued agenda.

**Government Practices**

Analyze employment policies and practices in the context of a rapidly changing labor market and its potential impact on the role of work in the life of the individual and for society.

Develop a national employment policy that specifically includes and addresses the needs of disabled people, balancing these commitments with the needs of other disadvantaged groups.

Analyze and revise benefits schemes (social security, income maintenance, worker's compensation) so as to achieve an integrated system of benefits that foster employment and/or enhanced independence for disabled people.

Further develop and expand the use of tax incentive schemes to encourage employers to hire disabled persons.

The employment problems of disabled people may be viewed as essentially an issue of equity and civil rights. Civil rights legislation should, therefore, be strengthened as a companion strategy to the present emphasis on individualized rehabilitation services.

**Rehabilitation Policy**

Reaffirm health promotion, prevention and early intervention as important and requisite phases in the rehabilitation process.

Further develop public rehabilitation policy that promotes and encourages participation of the private sector in planning, administration, service provision, training, and research in rehabilitation.

Allocate resources to address the rehabilitation and work retention of employees who become disabled, as well as rehabilitation and employment procurement on behalf of disabled job seekers.
Specify the interface between public and private sector policies and responsibilities in terms of expanding employment opportunities for disabled people.

Continue financial support of international collaboration in rehabilitation to identify effective approaches which address the problems of disability and employment.

Rehabilitation Practices

Further promote the development of successful innovative approaches in business and industry, including early intervention at the workplace, transitional work stations, employee assistance programs for injured workers, accommodations at the workplace and on-site rehabilitation.

Enhance the consultant role of the vocational rehabilitation practitioner in an effort to better serve employers, improve employer receptivity toward hiring and/or retraining disabled workers, and enhance employer participation in rehabilitation and employment efforts on behalf of disabled persons.

Further develop cooperative agreements between employers and government to foster work adjustment, training and employment opportunities for disabled persons within the open labor market.

Employer Policies and Practices

Encourage corporate leaders to collaborate with rehabilitation professionals, advocacy groups and disabled individuals to create training, work adjustment and employment opportunities.

Participate in job creation efforts to reduce the economic burden of unemployment.

Foster a "corporate culture" which stimulates and reinforces return to work efforts on behalf of ill and injured employees.

Adopt successful models of early intervention and rehabilitation at the workplace.

Utilize modern technology to accommodate disabled workers and enhance their functional abilities at the workplace.

Support efforts to enhance awareness among all employees regarding the need for returning workers to employment after illness or injury.
Organized Labor

Adopt policies and priorities that promote the reemployment of union members following illness or injury.

Address apparent discrepancies between statements of union policy and actual practice at the local level regarding employment and accommodations for disabled workers.

Encourage the expansion of Employee Assistance Programs to include a comprehensive range of rehabilitation services on behalf of ill or injured union members.

Rehabilitation Training

Encourage the Rehabilitation Services Administration to support long-term training in employer-based rehabilitation.

Include training in the dynamics of the labor market, employer collaboration, labor union practices and policies, worker's compensation law and insurance schemes in the long-term training of rehabilitation counselors.

Provide preservice and inservice training in consulting skills for rehabilitation practitioners in order to facilitate collaborative, mutually beneficial relationships with employers.

Revise medical education and practice so as to focus more attention on the functional residual capacities of disabled persons, rather than focusing exclusively upon deficits or limitations.

Rehabilitation Research

Increase funding for policy and economic studies which evaluate the impact of current practices and the potential impact of alternative approaches.

Specifically support evaluation studies of early intervention models at the workplace to identify those approaches which are most efficient and effective.

Also conduct studies that evaluate the costs and benefits of worksite rehabilitation services in terms of the employer's concern for reducing health benefit costs.

Conduct longitudinal studies to evaluate the long-term benefits and outcomes of the rehabilitation process, including economic and noneconomic impact.

Investigate the relevance and utility of the ERTOMIS (West Germany) worker ability/job requirement assessment system.
Conduct policy analysis on the question of the effectiveness and feasibility of quota schemes in enhancing employment opportunities for disabled persons. Symposium participants recognize that this policy approach may be controversial and that the evidence from abroad may be inconclusive, yet such schemes merit further study.
APPENDIX I

ERTOMIS Assessment System
Abilities Profile Sheet
Requirement Profile Sheet
Definitions of Functional Criteria
### Abilities Profile

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<td>4.08</td>
</tr>
<tr>
<td>1.71</td>
<td>Upper-leg + hip-joint</td>
<td>one-side</td>
<td>4.09</td>
<td>1.71</td>
<td>Upper-leg + hip-joint</td>
<td>one-side</td>
<td>4.09</td>
</tr>
<tr>
<td>1.72</td>
<td>Upper-leg + hip-joint</td>
<td>both-sides</td>
<td>4.10</td>
<td>1.72</td>
<td>Upper-leg + hip-joint</td>
<td>both-sides</td>
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</tr>
<tr>
<td>1.80</td>
<td>Head mobility</td>
<td>4.11</td>
<td>1.80</td>
<td>Head mobility</td>
<td>4.11</td>
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<tr>
<td>1.81</td>
<td>Trunk mobility</td>
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<td>1.81</td>
<td>Trunk mobility</td>
<td>4.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.82</td>
<td>Coordination movement, upper limbs</td>
<td>4.13</td>
<td>1.82</td>
<td>Coordination movement, upper limbs</td>
<td>4.13</td>
<td></td>
<td></td>
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<tr>
<td>1.83</td>
<td>Coordination movement, lower limbs</td>
<td>4.14</td>
<td>1.83</td>
<td>Coordination movement, lower limbs</td>
<td>4.14</td>
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<td></td>
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<td>2.01</td>
<td>Standing</td>
<td>4.15</td>
<td>2.01</td>
<td>Standing</td>
<td>4.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.02</td>
<td>Sitting</td>
<td>4.16</td>
<td>2.02</td>
<td>Sitting</td>
<td>4.16</td>
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</tr>
<tr>
<td>2.03</td>
<td>Crouching, kneeling</td>
<td>4.17</td>
<td>2.03</td>
<td>Crouching, kneeling</td>
<td>4.17</td>
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<td>2.04</td>
<td>Lying on concentrated session</td>
<td>4.18</td>
<td>2.04</td>
<td>Lying on concentrated session</td>
<td>4.18</td>
<td></td>
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<td>2.05</td>
<td>Walking</td>
<td>4.19</td>
<td>2.05</td>
<td>Walking</td>
<td>4.19</td>
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<tr>
<td>2.06</td>
<td>Climbing, traversing</td>
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<td>2.06</td>
<td>Climbing, traversing</td>
<td>4.20</td>
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<td>2.07</td>
<td>Lifting</td>
<td>4.21</td>
<td>2.07</td>
<td>Lifting</td>
<td>4.21</td>
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<td>Eyesight focus</td>
<td>one-side</td>
<td>4.23</td>
<td>3.01</td>
<td>Eyesight focus</td>
<td>one-side</td>
<td>4.23</td>
</tr>
<tr>
<td>3.02</td>
<td>Eyesight focus</td>
<td>both-sides</td>
<td>4.24</td>
<td>3.02</td>
<td>Eyesight focus</td>
<td>both-sides</td>
<td>4.24</td>
</tr>
<tr>
<td>3.03</td>
<td>Eyesight color recognition</td>
<td>4.25</td>
<td>3.03</td>
<td>Eyesight color recognition</td>
<td>4.25</td>
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<td></td>
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<td>3.04</td>
<td>Eyesight vision angle</td>
<td>4.26</td>
<td>3.04</td>
<td>Eyesight vision angle</td>
<td>4.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.05</td>
<td>Hearing, listening</td>
<td>4.27</td>
<td>3.05</td>
<td>Hearing, listening</td>
<td>4.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.06</td>
<td>Listening direction of signals</td>
<td>4.28</td>
<td>3.06</td>
<td>Listening direction of signals</td>
<td>4.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.07</td>
<td>Smoking</td>
<td>4.29</td>
<td>3.07</td>
<td>Smoking</td>
<td>4.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Remarks:

6 = Full (normal) Ability  
1 – 2 = Reduced Ability  
3 = No Ability
<table>
<thead>
<tr>
<th>No.</th>
<th>Criterion</th>
<th>Assessment 0 / 1 / 2 / 3</th>
<th>Rs</th>
<th>No.</th>
<th>Criterion</th>
<th>Assessment 0 / 1 / 2 / 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.11</td>
<td>Fingers</td>
<td>one-side</td>
<td></td>
<td>3.08</td>
<td>Tasting</td>
<td></td>
</tr>
<tr>
<td>1.12</td>
<td>Fingers</td>
<td>both-sides</td>
<td></td>
<td>3.11</td>
<td>Touching</td>
<td>one-side</td>
</tr>
<tr>
<td>1.21</td>
<td>Hand + wrist</td>
<td>one-side</td>
<td></td>
<td>3.12</td>
<td>Touching</td>
<td>both-sides</td>
</tr>
<tr>
<td>1.22</td>
<td>Hand + wrist</td>
<td>both-sides</td>
<td></td>
<td>3.13</td>
<td>Equilibrium</td>
<td></td>
</tr>
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<td>1.31</td>
<td>Fore-arm + elbow</td>
<td>one-side</td>
<td></td>
<td>4.01</td>
<td>Impulse</td>
<td></td>
</tr>
<tr>
<td>1.32</td>
<td>Fore-arm + elbow</td>
<td>both-sides</td>
<td></td>
<td>4.02</td>
<td>Maladaption</td>
<td></td>
</tr>
<tr>
<td>1.41</td>
<td>Upper-arm + shoulder</td>
<td>one-side</td>
<td></td>
<td>4.03</td>
<td>Assitance</td>
<td></td>
</tr>
<tr>
<td>1.42</td>
<td>Upper-arm + shoulder</td>
<td>both-sides</td>
<td></td>
<td>4.04</td>
<td>Periscopic faculty</td>
<td></td>
</tr>
<tr>
<td>1.51</td>
<td>Foot + ankle</td>
<td>one-side</td>
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<td>4.05</td>
<td>Concentration focus</td>
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</tr>
<tr>
<td>1.52</td>
<td>Foot + ankle</td>
<td>both-sides</td>
<td></td>
<td>4.06</td>
<td>Learning ability/memory</td>
<td></td>
</tr>
<tr>
<td>1.61</td>
<td>Lower-leg + knee</td>
<td>one-side</td>
<td></td>
<td>4.07</td>
<td>Imagination, vision</td>
<td></td>
</tr>
<tr>
<td>1.62</td>
<td>Lower-leg + knee</td>
<td>both-sides</td>
<td></td>
<td>4.08</td>
<td>Vocational independance</td>
<td></td>
</tr>
<tr>
<td>1.71</td>
<td>Upper-leg + hip-point</td>
<td>one-side</td>
<td></td>
<td>4.09</td>
<td>Vision, creatively</td>
<td></td>
</tr>
<tr>
<td>1.72</td>
<td>Upper-leg + hip-point</td>
<td>both-sides</td>
<td></td>
<td>4.10</td>
<td>Teamwork</td>
<td></td>
</tr>
<tr>
<td>1.81</td>
<td>Head mobility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.82</td>
<td>Trunk mobility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.83</td>
<td>Coordination movement, upper limbs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.01</td>
<td>Sitting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.02</td>
<td>Standing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.03</td>
<td>Crouching, kneeling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.04</td>
<td>Work in constrained position</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.05</td>
<td>Walking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.06</td>
<td>Climbing, traversing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.07</td>
<td>Lifting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.08</td>
<td>Carrying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.01</td>
<td>Eyelash focus</td>
<td>one-side</td>
<td></td>
<td>8.01</td>
<td>TOL of light</td>
<td></td>
</tr>
<tr>
<td>3.02</td>
<td>Eyelash focus</td>
<td>both-sides</td>
<td></td>
<td>8.02</td>
<td>TOL of climate</td>
<td></td>
</tr>
<tr>
<td>3.03</td>
<td>Eyelash color recognition</td>
<td></td>
<td></td>
<td>8.03</td>
<td>TOL of noise</td>
<td></td>
</tr>
<tr>
<td>3.04</td>
<td>Eyelash vision-angle</td>
<td></td>
<td></td>
<td>8.04</td>
<td>TOL of pites, vapour, dust</td>
<td></td>
</tr>
<tr>
<td>3.05</td>
<td>Hearing, listening</td>
<td></td>
<td></td>
<td>8.05</td>
<td>TOL of humidty + toxic liquids</td>
<td></td>
</tr>
<tr>
<td>3.06</td>
<td>Listening, direction of signals</td>
<td></td>
<td></td>
<td>8.06</td>
<td>TOL of mechanical vibration</td>
<td></td>
</tr>
<tr>
<td>3.07</td>
<td>Smelling</td>
<td></td>
<td></td>
<td>8.07</td>
<td>TOL of extreme barometric pressure</td>
<td></td>
</tr>
</tbody>
</table>

**Special requirements:**

- Leadership: [ ] yes [ ] no

0 = Full (normal) Requirement
1 = Reduced Requirement
2 = No Requirement

Date: [ ] Assessed: [ ] Approved:
Definition
of the criteria and degrees of abilities and requirements for the
ERTOMIS employment referral sheets

Evaluators please note:

Abilities and requirements should be evaluated exclusively in terms of
the degree of ability (function) currently available to the handicapped
person or required by the job (including those abilities attainable
through the use of compensating health aids such as eyeglasses, prostheses,
hearing aids, etc.)

The cause of origin of a handicap or functional disturbance should not
be considered in this evaluation.

Criteria requiring the differentiation between "one side" and "both sides"
should be evaluated as follows:

- if "one side", left or right: under "one side" 0 and/or 1/2
  "both sides" 3
- if "both sides", left or right: "one side" 0 and/or 1/2
  "both sides" 0 and/or 1/2.

Frequently occurring "explanations" will only be given with numbers —
explanations related to specific functions will be listed under the criteria
in question.

Explanation 1: The degree of availability of function and/or functional
requirement of limbs or other parts should be evaluated
in terms of the functionality of the joints and/or the
related musculature and both the central and peripheral
nervous support.

Explanation 2: Full functionality means the intact interplay of the
related joints, the musculature and the central and
peripheral nervous system supply. In assessing full
functionality, other central nervous system functions
such as intact coordination and sense of balance should
also be considered. Normal cardiovascular conditions
should also be present.

Unless otherwise noted — abilities and requirements should be graded
according to the following system:

<table>
<thead>
<tr>
<th>Ability Profile (APr)</th>
<th>Requirement Profile (RPr)</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>available</td>
<td>required</td>
<td></td>
</tr>
<tr>
<td>full and constant function</td>
<td>full and constant function</td>
<td>0</td>
</tr>
<tr>
<td>limited and/or temporary function</td>
<td>limited and/or temporary function</td>
<td>1/2</td>
</tr>
<tr>
<td>no function</td>
<td>no function</td>
<td>3</td>
</tr>
</tbody>
</table>
Definitions

1.11 finger movement - one side 1.12 finger movement - both sides
The subject
APr: can  RPr: must
work with his fingers - as the most important "work tools" of the human body.

1.21 hand movement - one side 1.22 hand movement - both sides
including wrist joint
The subject
APr: can  RPr: must
work with his hands - as bearers of the fingers.
Explanation 1.

1.31 lower arm movement - one side 1.32 lower arm movement - both sides
including elbow joint
The subject
APr: can  RPr: must
work with his lower arm - as bearer of the hand.
Explanation 1.

1.41 upper arm movement - one side 1.42 upper arm movement - both sides
including shoulder joint
The subject
APr: can  RPr: must
work with his upper arm - as bearer of the lower arm.
Explanation 1.

1.51 foot movement, one side 1.52 foot movement, both sides
including ankle joint
The subject
APr: can  RPr: must
use his feet - as the most important locomotion devices
Explanation 1.

1.61 lower leg movement, one side 1.62 lower leg movement, both sides
including knee joint
The subject
APr: can  RPr: must
work with his lower legs - as bearers of the feet.
Explanation 1.

1.71 thigh movement, one side 1.72 thigh movement, both sides
including hip joint
The subject
APr: can  RPr: must
work with his thighs - as bearer of the lower legs.
Explanation 1.
1.80 head movement (including cervical vertebrae)

The subject

APR: can  
RPr: must

carry out work-related turning and bending motions of the head.

Explanation 1.

1.81 trunk movement (especially movement of the spine)

The subject

APR: can  
RPr: must

carry out work-related turning and bending motions of the trunk.

Explanation 1.

1.82 coordination of upper body 1.83 coordination of lower body

limb movements  
limb movements

The subject

APR: can  
RPr: must

coordinate the movements of fingers, hands, lower and upper arms, lower legs and thighs.

Explanation: Coordination is a result of a conscious interplay of different limbs and/or parts of the body as a complex function of the central nervous system. Paralytic symptoms can be easily confused with coordination impairments.

2.01 sitting

The subject

APR: can  
RPr: must

work in a sitting posture.

Explanation: Sitting without functional limitation means an intact interplay of one part of the spinal joints and the lower leg including the intact central and peripheral nervous system supply, making possible free sitting without the aid of technical devices. This ability might possibly be limited by impediments (impaired function) in the area of the spine, the hip joints and the related musculature and nervous system supply.

2.02 standing

The subject

APR: can  
RPr: must

work in a standing posture.

Explanation 2.

2.03 crouching, kneeling

The subject

APR: can  
RPr: must

work in a crouching or kneeling posture.

Explanation: Neither of these positions is possible without a coordinated interplay of the lower limb, trunk and head movements, constrained posture ability, good sense of balance and normal cardiovascular condition.
2.04 constrained posture
The subject

APr: can
RPr: must
work in a position in which certain individual parts of the body must
be tensed up while other parts of the body will simultaneously have to
carry out controlled movement relative to the job, and without loss of
balance.
Explanation 2.

2.05 walking
The subject

APr: can
RPr: must
in the exercise of his work walk on flat ground or on slightly uneven ground.
Explanation 2. as a rule, work activities do not involve running.

2.06 climbing, traversing
The subject

APr: can
RPr: must
in the exercise of his work climb on stairs or ladders and/or walk on
sloping ground.
Explanation 2.

2.07 lifting
Here we must evaluate the weight of the load, the height of the lift and
the time required for all work-related lifting within an eight-hour shift -
according to the following grading table, which is based on a lift height
up to 1.2 metres and a carrying distance of 2 metres per activity:

<table>
<thead>
<tr>
<th>Weight in kilogrammes</th>
<th>time required for activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>up to 1 hr. per shift</td>
</tr>
<tr>
<td>male/female</td>
<td></td>
</tr>
<tr>
<td>M &gt; 25 f &gt; 12</td>
<td>0</td>
</tr>
<tr>
<td>m &lt; 25 f = 12</td>
<td>1</td>
</tr>
<tr>
<td>m &lt; 12 f = 6</td>
<td>2</td>
</tr>
<tr>
<td>m &lt; 6 f &lt; 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Explanation 2. The evaluations on the table refer to full and constant
functionality. In cases of limited ability, the evaluation
should be "3" - these grades should be entered into the
RPr in accordance with the table. Handling a load of
1 kilogramme is not to be evaluated as "lifting".
2.08 carrying

Here we must evaluate the load which is to be transported by walking and the aggregate elapsed real time of transport (lifting up, transporting, setting down) of all carrying activities in an 8-hour shift. The following grading table is based on a carrying distance between 2 and 50 metres.

<table>
<thead>
<tr>
<th>weights in kilogrammes</th>
<th>time required for activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>up to 1/2 hr. per shift</td>
</tr>
<tr>
<td></td>
<td>male</td>
</tr>
<tr>
<td>m &gt; 22</td>
<td>0</td>
</tr>
<tr>
<td>f &gt; 11</td>
<td></td>
</tr>
<tr>
<td>m &lt; 22</td>
<td>1</td>
</tr>
<tr>
<td>f = 11</td>
<td></td>
</tr>
<tr>
<td>m &lt; 12</td>
<td>2</td>
</tr>
<tr>
<td>f = 7</td>
<td></td>
</tr>
<tr>
<td>m &lt; 4</td>
<td>3</td>
</tr>
<tr>
<td>f &lt; 2</td>
<td></td>
</tr>
</tbody>
</table>

Explanation 2. Transporting a load of less than 1 kilogramme is not to be evaluated as "carrying".

3.01 focus of vision

The subject

APr: can
RPri: must

focus his vision sufficiently well to meet work requirements.

Explanation: This includes the ability/requirement to focus vision at varying distances and under different light conditions.

3.02 spatial vision

The subject

APr: can
RPri: must

recognise and estimate different work-related distances and/or elongation of objects and/or the relative speeds of different vehicles (as in overtaking another car).

Explanation: Spatial vision with one eye is, as a rule, first attainable after receiving special training.

3.03 colour vision

The subject

APr: can
RPri: must

recognise and distinguish different colours (especially red and green) and nuances of colour.
3.04 Field of Vision

The subject

- can

- must

without moving his head - use his eyes to see a field of vision with an angle of 35° in clear focus.

3.05 Hearing

The subject

- can

- must

perceive and judge work-related sounds, words, tones (informational) in terms of pitch and volume.

Explanation: The hearing of different persons may perceive various pitches and volumes differently or have different sensitivity to these factors on the left and right sides.

3.06 Directional Hearing

The subject

- can

- must

hear and recognize from which direction various work-related sounds and tones are coming.

3.07 Smell

The subject

- can

- must

perceive the nature and intensity of work-related smells.

3.08 Taste

The subject

- can

- must

perceive the difference between the nature and intensity of various work-related flavours.

3.11 Feel, One Side

The subject

- can

- must

using the tips of the fingers and/or the back of the hand differentiate and evaluate various:

1) shapes
2) surface structures
3) material structures (fibre material, graininess, etc.)
4) temperatures
5) vibrations.

Explanation: Indicate under "Remarks" what kind of feeling is being considered - differentiates between one side and both sides.

3.12 Feel, Both Sides
1.13 sense of balance
The subject
APRi: can
RPr: must
maintain the balance of the body, both at rest and in motion, under
the influence of powers within his own body and outside it.

4.01 drive
The subject
APRi: can
RPr: must
take this fundamental condition of his inner dynamic behaviour structure -
which has the potential of serving him in the completion of his work
or can lead to uncontrolled behaviour patterns - and use it purposefully
toward the completion of his job responsibilities.

4.02 enthusiasm
The subject
APRi: can
RPr: must
place his personal performance capacity at the service of the effective
performance of his work.

4.03 attention
The subject
APRi: can
RPr: must
keep his senses (see criteria group no. 3) directed on the entire job
process, take in relevant observations, signals and items of information
and subject his own performance to conscious controls.

4.04 perception
The subject
APRi: can
RPr: must
quickly take in and understand work-related observations, processes
and signals and/or the content and significance of read information.

4.05 concentration
The subject
APRi: can
RPr: must
maintain alert attention on job-related tasks and persons, even in
cases of constant change.

4.06 learning/ remembering
The subject
APRi: can
RPr: must
keep acquired and understood information, instructions and signals -
simple or complex - available in his memory for shorter or longer
periods of time.
4.07 Imagination
The subject
APr: can
RPr: must
realistically imagine job-related figures, sizes, surface and cubic
areas, shapes and sizes - and concretely visualise interrelationships,
organisational structures and function-oriented processes.

4.08 Independence
The subject
APr: can
RPr: must
draw from his vocational training and on-the-job experience to make
job-oriented decisions of all kinds and carry them out without outside
assistance.

4.09 Inspiration/Problem Solving
The subject
APr: can
RPr: must
independently recognise the special problems in novel, work-related
situations and find his own solutions for these situations or assignments
based on known possibilities, which decisions can then be practically
carried out.

4.10 Teamwork
The subject
APr: can
RPr: must
work together with fellow-workers (superiors, colleagues and subordinates),
in mutual respect of the special qualities and abilities of all parties
concerned, to find and apply practical solutions to human and work
problems.

4.11 Critical Control
The subject
APr: can
RPr: must
subject all the results of work and behaviour - his own and that of
others - to a critical control of both human and work factors, and deal
with criticism of his own work by others.

4.12 Responsibility
The subject
APr: can
RPr: must
carefully and precisely perform all jobs in keeping with the rules
and/or the instructions of the persons involved, and -
- keep promises and appointments made to others in conjunction with
his job (as punctuality is the basis of mutual reliability),
- take good care of the material and tools he uses,
- observe all safety rules and regulations.
Explanation: Responsibility requires a personal identification with norms, values, moral principles and expectations and manifests itself in relations with persons and objects in the form of an attitude of obligation recognition. Such qualities as care, precision, circumspection, conscientiousness and consideration are all closely identified with the concept of "responsibility".

4.13 stress resistance
The subject
APr: can
RPr: must
endure physical, mental and emotional stress in his own activity and in relations with co-workers (superiors, colleagues and subordinates), visitors, customers, etc. over long periods of time.

4.14 perseverance
The subject
APr: can
RPr: must
remain completely and unrestrictedly concentrated on his work assignment - even if success is not always at hand.

4.15 reaction speed
The subject
APr: can
RPr: must
quickly react to sudden and unexpected changes in the work situation.
Explanation: Reaction speed is the time required to react psychomotorically to a more or less complicated stimulus.

4.16 work tempo
The subject
APr: can
RPr: must
perform the phases of his job (in terms of intensity and effectiveness) at a speed which will permit the emergence of agreed work results (productivity and wages) within the agreed time frame.

5.01 speech
The subject
APr: can
RPr: must
speak clearly and understandably, in terms of grammar and vocabulary, on work-related subjects.
Explanation: Speech impediments may have a wide variety of causes. When they occur in the area of the central nervous system, they are known as neuropsychological disorders, in the sense of so-called "aphasias". Here we can differentiate in a general sense between word comprehension on the one hand, and, on the other, the inability, once work
comprehension has been achieved to put the psychomotoric tools to work to speak words distinctly. Needless to say, disorders in the peripheral area may have been caused by paralysis of the musculature or by anatomical deformities or injuries to the organs of articulation. The person filling out the ability profile thus has the option to "remarks" column to make specific clarifications in this regard.

5.02 writing
The subject

APri: can
APri: must
write legibly and comprehensibly, in terms of grammar and spelling, with respect to work-related matters.

Explanation: Writing is a complex ability, which requires both mental capabilities as well as an intact control on the part of the central nervous system and intact organs of mobility.

6.01 light/illumination
The subject

APri: can
APri: must
work under available, work-related light conditions (in which surface reflections and extreme changes in light conditions - welding glow, glowing glass or iron - may increase the difficulty).

Explanation: An ability to work under changing light conditions fundamentally involves both a peripheral and a central function. With peripheral function, we mean the optical organ, the central function of the central nervous system including the vegetative nervous system. Possible limitations in the central area may occur in cases of brain damage.

6.02 climate
The subject

APri: can
APri: must
do his job under given temperature, humidity, stressful air speed, and heat radiation conditions.

Explanation: An endurance evaluation for specific climatic conditions which exceed normal conditions also requires a consideration of cardiovascular conditions and central nervous system, particularly vegetative nervous system, functions.

6.03 noise
The subject

APri: can
APri: must
do his job in the presence of noises, sounds or tones which could be considered disturbing or damaging.
Evaluation:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Noise Level (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>85 dB (A)</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>55 - 85 dB (A)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>up to 55 dB (A)</td>
<td></td>
</tr>
</tbody>
</table>

Explanation: The ability to endure specific noise stress may be influenced by disturbances both in the central nervous system and the acoustical organs.

6.04 gases/ vapours/ dust

The subject

AP: can
RPr: must

Inhale work-related gases, vapours and/or dust.

Explanation: These work places must be equipped according to the rules for the handling and use of dangerous substances. The maximum permissible work-place concentrations are all defined by law. The type of gases, vapours and dust should be indicated in the "remarks" column. The ability may be affected by metabolic disorders (cirrhosis of the liver - solvents!) Various allergies may also bring about certain limitations.

6.05 liquids/ moisture

The subject

AP: can
RPr: must

Do a job which involves touching or working in certain work-related liquids or moisture.

Explanation: The work places must be equipped according to the appropriate regulations for the use of dangerous substances. If work places are organised according to these regulations, this ability can only be limited by specific functional disorders, such as metabolic disorders of the liver in constant contact with solvents, allergies, as well as hypersensitivity because of disorders of the central nervous system. As with other criteria, we would recommend consulting the appropriate insurance regulations for industrial medical examination. The nature of the liquids should be indicated in the "remarks" column.

6.06 mechanical vibrations

The subject

AP: can
RPr: must

Do his job under the influence of mechanical vibrations which have a direct effect on the body (tractors, pneumatic hammers, etc.)

6.07 changes in atmospheric pressure

The subject

AP: can
RPr: must

Do his job in the presence of constant changes in atmospheric pressure.
Explanation: This includes mining, deep sea diving, etc. Please refer to the appropriate work regulations for your area.

7.01 Leadership

This includes the following qualities required of a supervisor:

1) overview and decisiveness
2) planning and scheduling
3) giving instructions and making assignments
4) controlling work, making corrections and giving recognition
5) securing cooperation in group situations, including the maintenance of good co-worker relations and motivating fellow employees.

Explanation: Because of the complexity of the qualities and characteristics required, this ability is extremely difficult to evaluate. This leadership ability should really only be evaluated in cases where the object's training and abilities would suggest that such an evaluation would be in his special interest.
APPENDIX II

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LIST OF PRESENTERS

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