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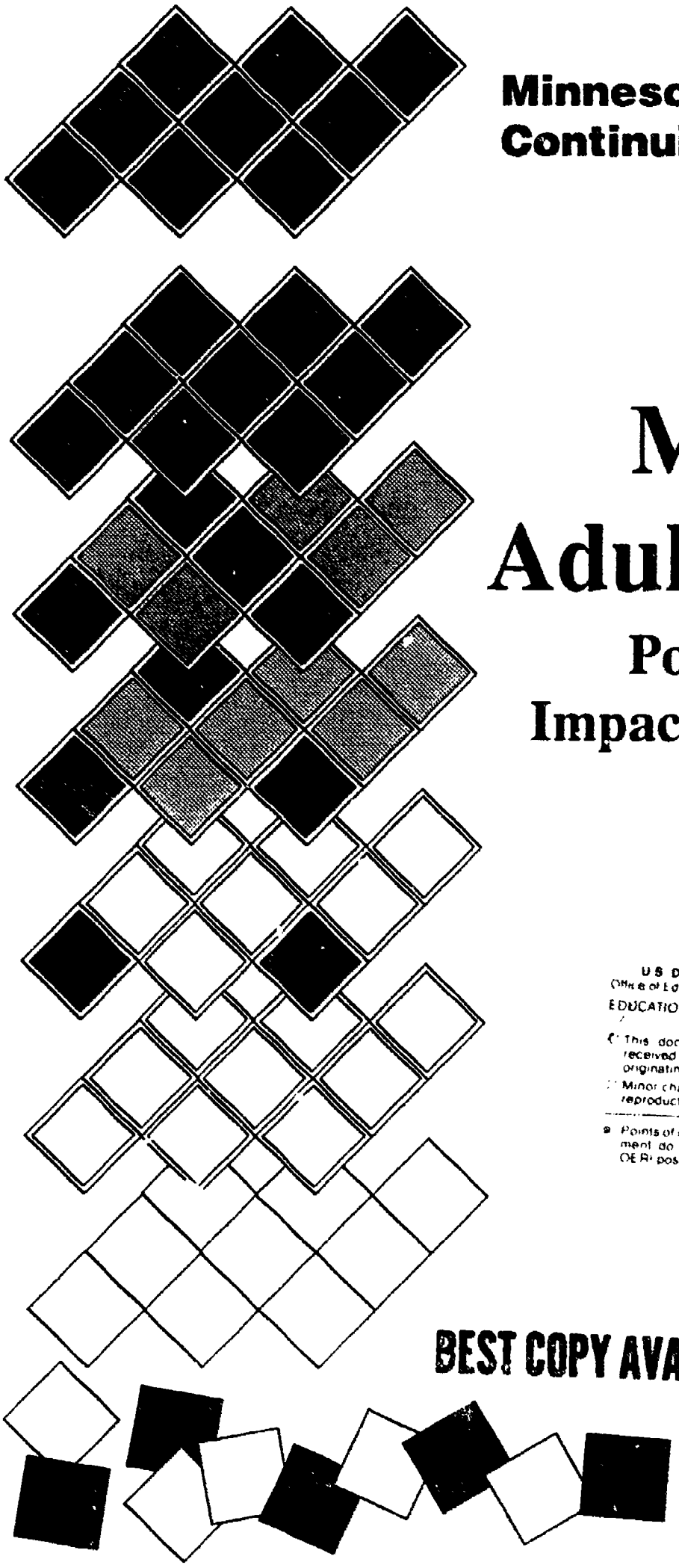
ABSTRACT

This monograph examines adult education issues in Minnesota, such as the proper role of the Federal Government, institutions of higher education, the business sector, the non-profit sector, labor unions, the public schools and community education, teachers, public school administrators, and learners in the fight against adult illiteracy in the workplace; and accountability for the learning that occurs. Chapter 1 of the monograph describes the current status of efforts to improve the literacy level of welfare recipients. This chapter also addresses the difficulties faced by the long-term structurally unemployed. Chapter 2 examines the role of literacy training in helping displaced workers in becoming reemployed and in helping the underemployed to improve their job status. Chapter 3 looks at the mechanics of using current literacy tests as criteria for hiring and promotion as well as the legal implications of having a work force unable to read crucial product safety and warning information. The final chapter reviews briefly the roles of government, education, the private sector, and the individual in improving the literacy level in the state. A brief review of the programs currently available to adults in need of literacy education is also included. (20 references) (KC)



Minnesota Association For Continuing Adult Education

Minnesota's Adult Literacy:

Policy Directions and Impact on the Workplace

Rosemarie J. Park
Rebecca Olson

Minnesota's Adult Literacy: Policy Directions and Impact on the Workplace

MACAE Monograph Editorial Board

Foreword

At the 1986 Annual Missouri Valley Adult Education (MVAEA) Conference, held in Sioux Falls, South Dakota, Howard Hovland of South Dakota gave a contribution to the MVAEA which led to the creation of the MVAEA Development Fund. The Minnesota Association for Continuing Adult Education (MACAE) was the recipient of the first MVAEA Development Fund grant, awarded in 1988 at the 44th MVAEA Conference held in St. Louis, Missouri.

The purpose of the grant was to provide seed money to MACAE for the development and publication of a series of issues-oriented monographs about adult education in Minnesota.

This monograph is the second in Minnesota's adult education series. We are grateful to the MVAEA and Howard Hovland for their contribution to this series.

This second monograph is a provocative one, touching on such sensitive topics as the proper role of the federal government, institutions of higher education, the business sector, the non-profit sector, labor unions, the public schools and community education, teachers, public school administrators, and learners in the fight against adult illiteracy in the workplace; and should programs be accountable for the learning that occurs.

Some of the answers offered in this monograph are controversial, and some questions remain unanswered. I look forward to many hours of interesting dialogue regarding this publication.

MACAE is grateful to the authors of this report for their contribution to our understanding of workplace literacy in Minnesota:

Rosemarie Park, Associate Professor of Education, Adult Education, University of Minnesota and Rebecca Olson, Teacher and Counselor in the General College, University of Minnesota.

Benjamin F. Bryant, President
MACAE

Introduction

> **There is no way in which the United States can remain competitive in a global economy, maintain its standard of living, and shoulder the burden of the retirement of the baby boom generation unless we mount a forceful national effort to help adults upgrade their basic skills in the very near future.**
>
> (Jump Start, 1989, iii)

Adult literacy has become a major issue with implications for educational, social and economic policy. There are many who view the relative decrease in American economic importance and the increase in the influence of the Japanese as a direct result of educational inadequacy on the part of the American workforce. The failure of many individuals to leave the welfare system and become productive members of society is also blamed on illiteracy. Such concerns have fueled an already well developed educational reform movement.

With the media, politicans, and state and local governments becoming actively interested in adult literacy, it is time to assess some of Minnesota's efforts to address this problem. This monograph will give an overall description of current national trends and how they are reflected in this state; in addition the authors assess how effective recent efforts to improve adult literacy are likely to be.

Specifically, Minnesota's efforts to improve adult literacy have focused on the economically disadvantaged — welfare recipients, the structurally unemployed and workers who have been displaced in the job market. The economic and social benefits of literacy education for welfare recipients and the unemployed have been used as the rationale for recent increases in funds and programs.

Chapter one of the monograph describes the current status of efforts to improve the literacy level of welfare recipients. This chapter also addresses the difficulties faced by the long term structurally unemployed who as part of the welfare population are most in need of help. Chapter two examines the role of literacy training in helping displaced workers in becoming reemployed and in helping the underemployed in improving their job status.

Chapter three looks at the mechanics of using current literacy tests as criteria for hiring and promotion as well as the legal implications of having a workforce unable to read crucial product safety and warning information. The final chapter briefly reviews the roles of government, education, the private sector and the individual in improving the literacy level in this state.

Prior to discussing the issues, a brief review of the programs currently available to adults in need of literacy education follows.

Adult Literacy Education Programs

There are a variety of programs available to adults in Minnesota who wish to improve their literacy skills. The choice of a program may be determined by the specific goals individuals set for themselves or by the need for a specific credential. Most programs are free, but most post secondary colleges, either technical or community colleges, require tuition.

Adults who are unable to read at all can call the Minnesota Literacy Council and request a tutor. Tutors who have received 12 hours of training are matched with a student. Tutoring can take place at any convenient location. Increasingly volunteers also work in Adult Basic Education programs, which in this state are run through Public School Community Education. Table 1 gives a brief description of points of contact for adults interested in literacy programs.

Community Education programs are funded by both state and federal money. They hire trained teachers with elementary or secondary backgrounds, and some with adult basic education licensure to work with adults. Programs mostly cater to three levels of adult literacy skill; 1) Non-English speaking, 2) basic skills, and 3) GED preparation, including brush-up skills.

Delivery Systems	Non-Profit Private Volunteer Agencies	Public Community Education ABE/GED	State Vocational Technical Colleges	Community Colleges
Target Population Goals	1. Need basic literacy 0 → 4th grade. 2. Need basic language and reading instruction	1. Need a GED or High School diploma. 2. Need literacy to help with parenting. 3. Need general literacy 4. Need basic literacy 0 → 4th grade.	1. Need job training on-the-job classroom training 2. Want to enter vocational college class. 3. Need to improve skills beyond grade 5 for work related goal.	1. Need occupational training. 2. Need AA degree. 3. Need to improve skills beyond grade 5 for occupational goal.
Referral Systems	General Population Social Welfare Agencies Businesses in need of basic services for non-readers	General Population Social Welfare Agencies Businesses interested in general literacy improvement.	Businesses in need of job training for employees' job specific literacy.	Businesses interested in occupational training.

Adult Literacy, Welfare and Unemployment in Minnesota

Rosemarie J. Park

Minnesota, like many states, is increasingly interested in developing a reputation as a state with a well educated workforce. The type of industry Minnesota wishes to attract is high technology and depends on high quality labor. Consequently, Minnesota has seen adult literacy as an issue associated with economic wellbeing. The following chapter deals with efforts to improve the employability of welfare recipients.

Literacy, Welfare and the Structurally Unemployed

Literacy for adults as a value in and of itself is rarely used as an argument to increase program funding. Rather the trend has been to justify adult literacy in utilitarian terms as a means of helping people become employed and off the welfare rolls.

There has been general acceptance of the idea that illiteracy is a barrier to becoming and remaining productively employed. Literacy training has been an integral part of youth training programs for the economically disadvantaged such as Job Training Partnership Act since its inception. It should be noted here that youth are now guaranteed twelve years of education in Minnesota, up to age 21. In the 1986 legislative session Minnesota legislators recognized that lack of literacy was a barrier to employment similar to mental or physical disabilities. Recipients on General Assistance, the basic form of welfare for those adults without children, could claim lack of literacy as a significant barrier to employment and thus would be eligible for benefits.

This 1986 legislation, initiated by Representative Karen Clark of Minneapolis, was important in that it established a principle that literacy is needed for almost any form of employment. Immediately after the legislation was passed the Minnesota Department of Human Services set up a study committee to determine the appropriate level for "functional literacy" a term not defined in the statute. The committee followed current federal practice in determining that an eighth grade level was "functional". This level was based partly on research on the levels of literacy needed to perform jobs and practice and partly on a study done by the Minnesota Office of State Planning. The study found that there were nearly 30,000 job openings where welfare recipients could be employed, but only twenty-one percent of these jobs could be performed with reading skills of less than sixth grade (Feb. 1986). (For a review of the research on literacy needed in the workplace, see chapter 3).

This legislation was not without critics. Local welfare agencies worried that the literacy level was set too high and might encourage too many people to claim general assistance. There was also some feeling that those who claim to be illiterate as an entitlement to welfare benefits should also be obligated to take part in literacy training programs. The welfare legislation was subsequently amended in the 1986 legislative session to require attendance in "occupational- vocational literacy training programs". By using the term occupational-vocational literacy, the authors of the bill hoped to make the literacy instruction provided specific to employment and training. Occupational-vocational literacy is contrasted with more generic Adult Basic Education which are offered to prepare participants for a broad spectrum of adult literacy goals beyond vocational employment.

Welfare reform and literacy training in other states

Efforts to improve the literacy of welfare recipients are not unique to Minnesota. Missouri's welfare reform initiative is called **Learnfare and Welfare-to-Work**. Initiated by Governor John Ashcroft, the welfare reform package is aimed at boosting the educational level and job potential of Aid to Families with Dependent Children (AFDC) parents who lack high school diplomas by requiring registration in Adult Basic Education or GED programs. Adult Basic Education (ABE) is a broad based general education program run usually through Community Colleges or Community Education programs and funded with federal money. It is designed to help those adults whose functional achievement level in the basic skills is less than an eighth grade level. GED programs prepare adults for the General Educational Development tests. The GED certificate is equivalent to a high school diploma.

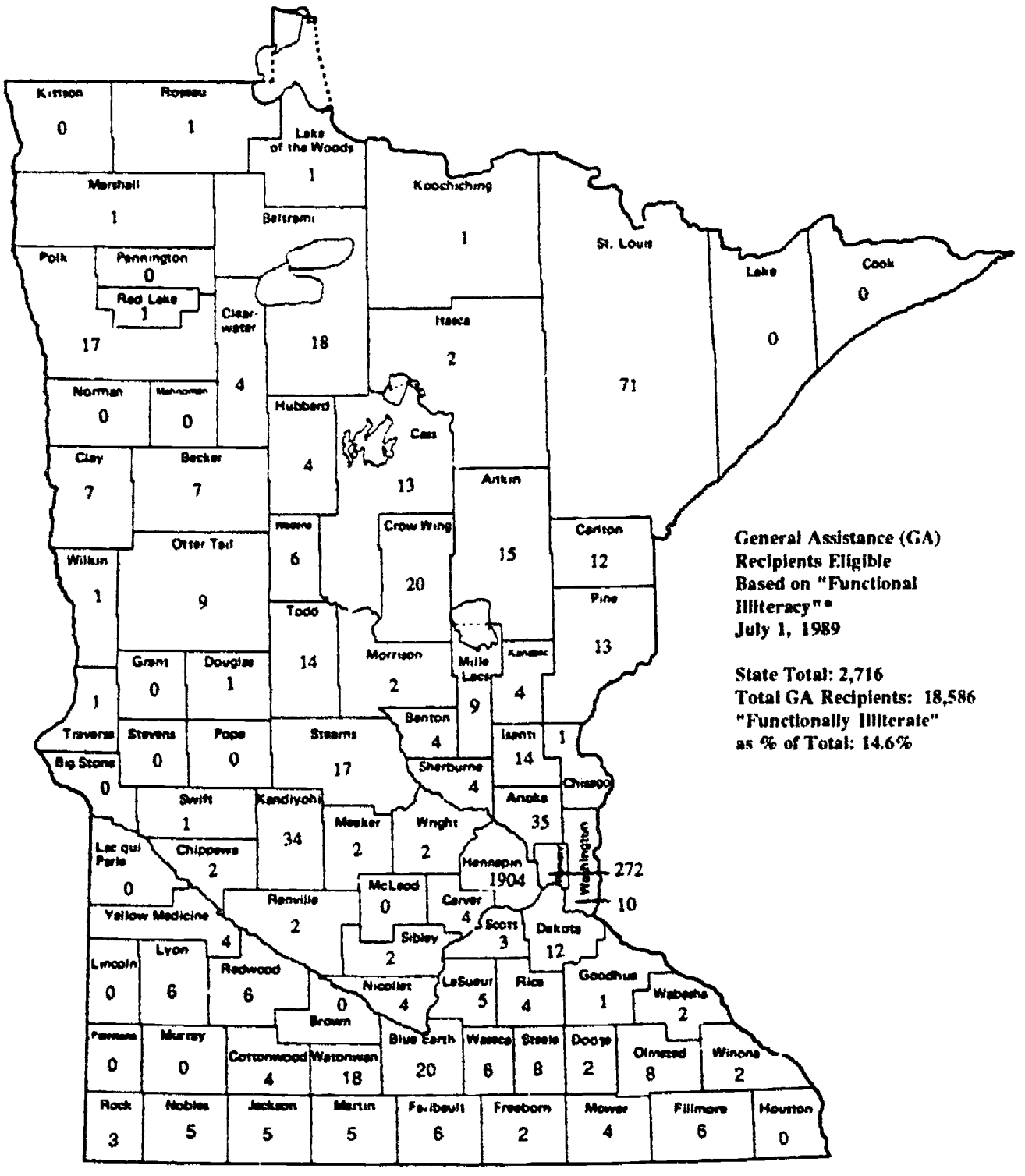
Both the Missouri and Minnesota efforts contain two elements that are increasingly common in welfare legislation nationally. There is a recognition of the interrelationship between teen pregancy, lack of high school completion and extended dependence on welfare. There is also the tendency to require welfare recipients to work or prepare for work in some way as a condition of benefits. The "work-fare" programs require welfare recipients who are physically and mentally able and do not have preschool children to either work or prepare for work in some way.

The welfare system in Minnesota has undergone several major revisions that reflect these trends. The last of these revisions is the voluntary PATHS plan initiated by Governor Rudy Perpich. PATHS, like "Learnfare", is designed to encourage teen parents to complete high school. PATHS also provides for training and work readiness programs designed to improve employability.

Welfare payment and attendance in literacy programs

Minnesota has a total of 355,000 persons between the ages of 18 and 64 who have not completed a high school diploma. Of this number, 35,000 are public assistance recipients (Minnesota State Planning Agency, 1988). More than 2000 General Assistance recipients have been required to participate in literacy programs as a condition of getting benefits. This has put a strain on existing literacy programs (See Figure 1).

Figure 1: General Assistance and Illiteracy by Region in Minnesota



General Assistance (GA) Recipients Eligible Based on "Functional Illiteracy"* July 1, 1989

State Total: 2,716
Total GA Recipients: 18,586
"Functionally Illiterate" as % of Total: 14.6%

*Tested below the 8th grade level, not eligible for GA under other categories.
MN Dept. of Human Services Data; compiled by the MN State Planning Agency.

As the result of required attendance, literacy programs keep attendance records and report to case workers about the progress made by welfare participants. For programs geared to totally volunteer participation, this has been a problem both bureaucratically and philosophically. How should the required **progress** be measured? What mechanisms are necessary for reporting? Is the relationship between teacher, volunteer literacy tutor and student damaged by this new element of accountability? In addition, the legislation has asked that the literacy training provided be geared to occupation or vocational outcomes. Teachers in literacy classrooms deal with a multiplicity of adult literacy needs. They are frequently unable to make wholesale changes in curriculum, especially when most are paid by the hour with little or no preparation time. Can the current system cope with these new demands?

Responsiveness of literacy education system

The process of forcing educational change through legislative mandate is not new. The purpose in having secondary schools compete with each other and the post-secondary system by opening enrollment to all regardless of school district is to effect change without necessarily providing additional funding.

Adult literacy programs are vulnerable to legislative change. Funding, since the 1964 Economic Opportunity Act (Title IIB) and the 1967 Minnesota Adult Continuing Education Act, has relied largely on federal and state money. Since the early 1980's federal funds have been curtailed while state funds have increased moderately. Still uncertainty about funding persists. This has led in some cases to a marginal mentality. Some programs, with noteable exceptions in Saint Paul and some of the suburbs, are administered much in the same way adult enrichment programs are run. The literacy programs continue only as the demand for them exists. Teachers are hired part-time and administrators respond to inadequate funding levels by saving money through not committing funds to contracts and full-time employment with fringe benefits for teachers. Once the federal funding goes, so does the program.

Part of this uncertainty in funding has been ameliorated by efforts beginning in 1985 to allow local school districts to raise levies specifically for adult literacy programs. Many districts have done this. But the funding problem has been far from solved. The average spending per adult now is around $400 annually compared to $4000 in the regular K through 12 system. Staff are still largely part-time or volunteer and programs survive on a year-to-year basis with little prospect of sufficient funding.

State money has also gone into ABE/GED programs. In the biennium 1989-91, Minnesota put an additional $8 million into ABE programs. Federal money did not diminish and local funds increased. It should have been easy to build the program stability and curriculum changes required by the new welfare legislation. Why has the system become so stressed?

The reponse to welfare participants

Many of the reasons for the difficulties in accommodating to the needs of welfare recipients have been mentioned above. The marginality of adult literacy programs, a lack of long term funding and dependence on a part-time and volunteer workforce have been mentioned. There are, however, additional reasons that have to do both with the nature of the ABE/GED system as it has developed and with the difficulties many welfare clients bring with them into the classroom. The literature on poverty is repleat with situational and dispositional burdens born by those who are poor.

The need for experienced professional staff

ABE ane GED programs in Minneosta have never required a strong professional base from its teachers or adminiatrators. The idea that teachers need a strong theoretical and clinical preparation to teach adults has been mostly ignored. Either elementary or secondary training has been held sufficient. In some cases, no specific preparation is felt necessary (as with the National Advertising Council's invitation for volunteers to teach adults to read; **the only degree you need is a degree of caring**).

Until recently Minnesota had one of the few University programs to prepare adult literacy teachers. The adult literacy system has simply been too impoverished to support preservice teacher-training programs and the staff who obtain credits and degrees in adult education. Consequently, teachers have had to learn what works more or less on the job and from federally funded state sponsored inservice education workshops.

The addition of dollars has not translated into more full-time teachers for programs. When additional teachers are hired, the same part-time pattern persists. The Adult Literacy and Learning Bulletin notes that the percentage of part-time teachers has increased nationwide, while the percentage of full time teachers has decreased. Saint Paul and some of the larger suburban programs provide contracts (Minneapolis does not provide contracts), but even so, the hiring pattern is mostly part-time throughout Minnesota.

Reaching the target population

Teaching adult literacy is not easy. The system reaches less than 6% of the target population. Most adult literacy participants are poor and many are welfare recipients. They have a hard time remaining in literacy programs. The drop-out rate for most programs approaches 60% (Wilder Report, 1987). Teachers have attempted to accommodate a variety of adult learning goals in classrooms in an effort to keep students coming back. This has led to a situation where a teacher may be dealing with 16 individuals and 16 learning agendas in the same classroom. The addition of even four or five welfare recipients with a need for vocational literacy is bound to produce a problem. With few books and few computer software programs specifically oriented to the workplace, the part-time teacher has to try to develop an entire curriculum in her unpaid spare time.

The welfare clientele also need counselors to help them deal with the many problems they face in the outside world. There are virtually no full-time counseling positions available in ABE/GED programs in Minnesota.

Should welfare clients be required to attend literacy programs

Some adult educators are uncomfortable with changing the volunteer nature of literacy programs. To them, it is an ethical imperative that adult students are those "who want to be there". They dislike the coercive nature of the new system and are a little wary of these new clients. Adult literacy students have always had to deal with the many problems associated with poverty, but the General Assistance recipients tend to bring more of these problems with them.

Education is not in and of itself a guarantee against poverty. For some people it does provide the way out. To remain illiterate is almost certainly a guarantee of remaining poor. If there is an obligation to provide education for those who need it beyond age 18, do those accepting welfare have an obligation to improve their lives and attempt to become independent? More and more, society's answer is "yes".

Only a small proportion of those needing to improve their literacy skills actually attend literacy programs (Delker, 1986). Their reasons for not attending are both situational and dispositional. Poverty makes it hard to attend classes consistently when immediate needs dictate day-to-day living. Childcare and transportation are basic necessities to running literacy programs , but federal and state guidelines are beginning to recognize this need. Many people by disposition dislike academics and are conditioned by past failures. Since most adults need some change in life experience to initiate participation in ABE programs, why not use the opportunity of welfare provision to provide educational services creatively to those most in need and eliminate barriers to attendance?

Insisting that someone do something constructive for themselves despite their own reluctance is not a new idea. Should society insist on treatment for the mentally ill? Can a client refuse treatment? This debate is bound to continue. If we insist that certain people get treatment for illiteracy, then we should also be obligated to make sure that such treatment works. Already the Minnesota legislature has set aside money for childcare and transportation for welfare mothers in school. We have not systematically looked at literacy training to determine whether it advantages participants economically and providesthe literacy skills to get, hold, and progress on the job.

Conclusions

Minnesota is clearly in the forefront of literacy legislation and welfare reform. The efforts of legislators such as Representative Karen Clark, Senator Donna Peterson and others reflect current concern about the educational needs of disadvantaged poor people.

If this legislation is the beginning of an integrated system of lifelong learning for all undereducated Minnesotans, then it can only improve the state's chances of prospering in the fast changing decades to come. Careful monitoring and evaluation of the services delivered will tell whether the state holds up it's end of the bargain of requiring participation in a program that really does help. Failure to provide adequate programs can only lead to blaming the victims of poverty for yet one more failure.

If the system is to succeed, then much needs to be done to build the structure of the system. The marginality that has dogged the system in the past must be removed. Full-time professional staff and stable programs are a necessity. Good materials and access to high quality computer technology are also crucial.

Linkages with ongoing adult education and vocational preparation and training programs are needed. Literacy is not a skill that can be acquired rapidly. Adults who lack literacy skills need on-going support systems to help build a way out of welfare. This may require prolonged help while they build the literacy skills they need to find jobs and succeed once employed. Avenues from workplace literacy programs into vocational and occupational training must be provided. Too often short term federal and state programs continue to succeed in producing people whose marginal skills make them "last hired and first fired".

References

Chisman Forrest P. **Jump Start: The Federal Role in Adult Literacy.** Final Report of Project on Adult Literacy. The Southport Institute for Policy Analysis, January 1989

Report fo the Task Force on Funtional Illiteracy in Minnesota, Mn Office of Full Productivity and Opportunity, Suite 200 375 Jackson St. St Paul MN. February 1986

Learnfare and Wefare-to-Work Missouri's Wefare reform Initiative. John Ashcroft, Governor, January 13, 1987

Interagency Adult Literacy Initiative Background and Componants. Minnesota State Planning Agency, February 1989.

Chase Richard. **Adult Literacy Services in Minnesota** Wilder Research Center, February 1987

Delker Paul. **Beyond Literacy in an Uncertain World** Knoxville, TN: The Commission of Adult Basic Education (ED272715)

A.L.L. Adult Literacy and Learning Points Bulletin, September-October, 1989, Vol. 1, No. 2. Washington, DC: U.S. Departfment of Education.

Reentering the Workforce: The Literacy Needs of Dislocated Workers

Rebecca Olson

Viewed in the final months of 1989, worker dislocation appears to be getting the public and private sector attention it deserves. United States lawmakers have conscientously passed plant closing legislation, approved extension of health benefits, and allocated retraining funds. The true educational needs of dislocated workers, however, are just recently beginning to be examined.

The literacy needs of the national workforce

In order to understand the educational or literacy needs of dislocated workers, we must first examine the general literacy needs of a changing workforce.

It has been established that since 1980, six percent of our national workforce has been displaced . Leveraged buyouts and corporate mergers have caused large numbers of workers to be laid off. In addition, our nation's economy has moved from a dependence on heavy manufacturing to a service industry base. The remaining manufacturing jobs are often threatened by computerization. Multinational corporations have relocated large northern plants to southern states with histories of cheaper labor and less union support. While heavy manufacturing jobs have relied on expertise in one specific part of an operation and often on physical strength, service jobs demand a greater reliance on computer literacy, oral and written communication, job flexiblitiy, and the ongoing upgrading of skills.

Employers are justifiably concerned about the literacy skills possessed by the current and future workforce. Some estimates indicate that 75% of our current workforce will eventually need to retrain. In an October 1989 **New York Times** article, CEO's from Xerox Corporation, Proctor and Gamble, Johnson and Johnson and other corporations predict dire consequences for our economy because many of our children "are not being educated fast enough and to sophisticated enough levels to keep pace with the advances and upgrading in jobs."

Changes in Minnesota's workforce

Although Minnesota has a reputation for a highly educated and productive workforce, the state has been hard hit by economic dislocation. The states's largest industries (agriculture, mining, wood products, heavy manufacturing and computer manufacturing) have all experienced disastrous layoffs or plant closures since the early 1980s.

The Minnesota Department of Jobs and Training reports that approximately 24,000 workers were dislocated in a twelve month period from mid

1987 to 1988. In a department survey of workers dislocated from 1984 through 1988, those interviewed had been employed at their jobs an average of eight years before dislocation. Roughly one-third on those surveyed were unemployed; of the two-thirds who were reemployed, wages had declined 25% and one-third had lost medical benefits (Stoetz, 1989).

Although some would advocate looking to younger workers to fill the literacy void in the changing workforce, the state's demographics suggest otherwise. It is projected that during the years 1985-90, the number of state workers in the 20 to 24 age group will have decreased by 16% while workers in the 35 to 44 age group will have increased by 24%. By the year 2000, the average worker will have completed his or her education 20 years ago, but promotional considerations will still force many Baby Boomers back into retraining. Early retirements will cause the labor force to shrink even further (Minnesota State Planning Agency, 1989) The

Key Trends in Training Retraining in Minnesota

As the baby boomers age, fewer young adults are entering the work force:

- From 1985 to 1990 the number of Minnesota workers between the ages of 20 and 24 will decline by 16 percent. During this period, the number of workers aged 35 to 44 will grow 24 percent.

- The growth of the workforce from all sources is declining. From 1980 to 1985, 125,000 workers were added to the Minnesota labor force. Only 94,000 workers will be added between 1990 to 1995.

- By 2000, the average worker will have completed his/her education 20 or more years ago.

- As skill demands rise, workers will increasingly have to retrain. Nationwide it is estimated that 30 million currently employed workers (75%) will need retraining.

- The promotional squeeze experienced by baby boomers will cause more to retrain.

- Workers will continue to retire at an early age causing the labor force to shrink further. Only 15 percent of Minnesota men age 65 and older are in the labor force.

Minnesota State Planning Agency. Future Scans, March 2, 1989.

following key trends are provided by the Minnesota State Planning Agency (**Future Scans**, March 2, 1989).

Considering these statistics, it is imperative to provide viable means of upgrading the literacy skills of dislocated workers in the state. What are the special educational needs of dislocated workers?

Research on dislocated workers in Minnesota

A 1988 survey by Park, Storlie and Dawis of dislocated workers in four diverse industries —mining, manufacturing, wood products and farming — examined workers' employment goals, interest in retraining programs, use of basic skills in previous jobs, perceived need for basic skills upgrading in future jobs, and their general perception of the state employment situation.

Of those interviewed, a vast majority were male with the average age of the workers being 46 years. The average years of completed education was 11.9 years. In this survey the average tenure on the original job was a staggering 20 years (See table 2). When questioned about their work

Table 2: Description of the Sample

	Lumber	Manufacturing (1)	Manufacturing (2)	Mining	Agriculture	Total
Sex						
Male	35	24	8	41	26	134
Female	3	5	22	0	4	34
Race						
White	38	24	20	41	30	153
Black	0	4	8	0	0	12
Hispanic	0	1	1	0	0	2
Asian	0	0	1	0	0	1
Age (average)*	46	39	39	51	46	46
Range	28-59	26-59	27-61	32-65	32-59	26-65
Years education*	11.8	11.6	13	11.8	11.0	11.9
Range	6-16	8-13	10-18	7-17	8-16	6-18
Years tenure* on job	23	14	7	27	30	20
	1-43	5-41	1-22	7-31	9-42	1-43
Payment type						
Paid hourly	38	29	18	39	n/a	124
Salaried	0	0	12	2	n/a	14
Other family members work? (yes)	35%	60%	41%	33%	70%	46%
Location	NE rural	Metro suburban	Metro urban	NE rural	MN rural	
Union representation?	Yes	Yes	No	Yes	No	
n =	38	29	30	41	30	168

(1) Heavy manufacturing
(2) Computer-related manufacturing

* A statistically significant difference exists between groups on this variable (significant at .01 or more).

plans, most of those surveyed wanted to find a job similar to the one they were forced to leave.

As part of the survey workers were asked about the need to improve their reading, writing and math skills. By and large workers were aware of the need to upgrade their skills. Sixty percent of the total group and 75% of lumber workers, who were in the lowest job skill group, thought more reading would be required in future jobs than in the current jobs they had held. All had used reading to a greater or lesser degree on their jobs. Of the total group more than 80% thought others they had worked with would benefit from reading and mathematics brush-up programs (See Table 3). Almost half were interested in taking some retraining program (54%) and most thought retraining would increase chances of reemployment (85%). How did this group feel about actually attending reading and mathematics brush-up classes?

Although 80% thought others needed to attend such classes, only 15% would admit that they themselves lacked the reading skill they needed to retrain. A slightly higher percent said they would be interested in a reading program (39%) if one were offered. More felt their math skills were inadequate (27%) and 47% showed interest in a math program if offered. It seems that most workers feel very reluctant to admit that their reading and math skills are insufficient. Although not ready to admit to the prob-

Table 3: Attitudes Toward Education and Training

(in percents)

	Lumber	Manufacturing (1)	Manufacturing (2)	Mining	Agriculture	Total
Will training improve your chance of a job?	86	85	66	90	97	85
Will you enroll in training? (yes)	56	71	66	41	34	54
Where would you be most likely to attend?						
Area vo-tech	29	42	23	34	40	64
High school	21	0	15	50	23	21
Community college	2	4	34	3	29	14
What type of learning situation do you prefer?*						
One-on-one vs. small group vs. classroom	47	68	55	65	--	58
Lecture vs. hands on	72	82	79	97	--	83
Technology vs. usual classroom	47	55	69	55	--	88
Teacher vs. self taught	72	65	80	78	--	74

(1) Heavy manufacturing
(2) Computer-related manufacturing

* Underlining indicates choice made in answering this question.

Table 4: The Need for Basic Skills Program

	Lumber	Manu-factur-ing (1)	Manu-factur-ing (2)	Mining	Agri-culture	Total
Do others need brush-up? (yes)	92%	85%	60%	73%	90%	80%
Would others bene-fit from such a program? (yes)	94%	96%	63%	85%	98%	87%
To be successful in training:						
Do you have the reading skills you need? (yes)++	77%	78%	90%	90%	86%	85%
Do you have the math skills you need? (yes)	66%	56%	83%	70%	86%	73%
Do you have the writing skills you need? (yes)	77%	72%	83%	87%	70%	79%
Would you be interested in a:						
reading program? (yes)	31%	33%	33%	39%	58%	39%
math program? (yes)+	50%	69%	34%	39%	46%	47%
writing program? (yes)*	25%	29%	30%	36%	65%	37%
How likely are you to attend? (numbers listed here are means)#*+	6.6	7.6	4.7	4.1	6.5	6.0

(1) Heavy manufacturing
(2) Computer-related manufacturing
Rated on a scale of 1-10, where 10 is definitely will attend.
* Significant differences exist between groups (significant at .05 or more).
+ Answers correlate with intention to seek training.
++ Answers correlate with years of education.

lem, more could be talked into attending brush-up programs if offered the opportunity (See table 4).

Age in this particular population seemed a strong predictor of willingness to enter retraining. Older workers were displaced from jobs that required less reading and math. They saw the job crisis as more severe, but were less likely to attend basic skills classes.

Did subsequent experience change peoples minds about retraining choices or entry into basic skills programs? Not altogether. When asked six months later in a follow-up telephone interview if they would have made different choices 77% said "no". Most likely to change their minds were

the low tech manufacturing workers where 37% said they would have made different decisions about school.

Examining existing literacy programs designed for Minnesota's dislocated workers

Alarmed by dislocation statistics and local realities and aided by the availiablity of government funds, many retraining programs initiated by the unions and the public and private sector have sprung up since 1985. Both the U.S. Department of Labor and the U.S.Department of Education have initiated model workplace literacy grant programs since 1987. The U.S. Department of Labor **Workforce 2000 Project** identifies workplace literacy and worker retraining as a major goal (U.S. Departament of Labor, 1987). The role of literacy training in government training programs for disadvantaged youth is discussed in the following chapter. One local Community Education agency, Bloomington, has been successful in getting a workplace literacy grant to help welfare mothers.

One of the first workplace literacy programs in the state is an American Crystal Sugar program in East Grand Forks Minnesota, which was specifically designed for employees tc upgrade their basic and technical skills in order to fend off layoffs caused by automating the plant. Control Data Corportion has long provided its workers, both employed and laid-off, with basic skills assisstance as have other large manufacturing corporations. As union layoffs occur thoughout the state, some locals have designed retraining programs.

The United Autoworkers' dislocated worker project

An example of a long-standing union administered program in Saint Paul, Minnesota, is the United Auto Workers former Donaldson Company dislocated worker project. The Donaldson project is unique in that it determines specific education needs of its clients, former assembly line workers, through testing, including basic skills tests. Counselors hold one-on-one conferences about the test results, offer basic skills instruction and vocational training often on the same campus. The program also offers specialized job search assistance and career counseling, also on the same site. This project was the first dislocated worker project to institute a workplace literacy curriculum geared around specific job training offered at the same time.

Despite the source of the assistance or the intentions of the project, basic skills retraining programs generally have experienced much difficulty in attracting and keeping students. This is true both nationally and locally. As previously mentioned in the Park et al. survey, workers cite time and money as major factors in their decision not to attend. This occurs even though their skills are measured to be in desperate need of upgrading ,or (as in the American Crystal Sugar program) even when retaining the current job depends on retraining.

It is a reality that adults, employed or not, are concerned about time and

Blending of instruction with clientele

money. It may, however, be useful to further investigate the basic skills programs in order to gain a deeper understanding about worker/student attrition. Two potential problem areas follow:

Of the operating dislocated worker programs in the state, most contract out to agencies which provide "literacy" instruction. This componant of the programs, therefore, is isolated from the original source of the program - union, corporation, or agency. Literacy services are usually contracted because the dislocated program staff assume that they lack sufficient expertise in literacy instruction. The contacted agency claims expertise in literacy instruction but rarely investigates and connects its instruction to the client and his/her dislocated worker developed goals and objectives.

Ensuring that literacy programs are work-related helps to close this gap but, even then, does not do so completely. Examples of these connections are specific training procedures on the previous job, work/learning strengths of individual employees, and past attitudes of employees and the company regarding the value of education.

We need to investigate the effect instruction styles, content, and materials have on dislocated wrokers from various industries and companies. An example of an attempt to resolve this problem can be found in a Toronto, Canada, union literacy proram where the instructors are all union members themselves (Report at the International Reading Association Convention, Toronto, Cananda, May 1988).

Selling programs

As competition for post-secondary students becomes greater among the state's universities, community and technical colleges, institutions are pursuing methods of attracting busy working and non-working adults. This effort involves careful analysis of adults' lifestyles and educational needs. We have often, up to this point, viewed dislocated workers much differently from other adult learners- especially in programs designed exclusively for them. Manyof the programs have offered only weekday hours of instruction and/or have made little attempt to "sell" their program. Workers may feel that literacy programs are punitive rather than addressing their personal needs. Needed are: first mini-lessons in needs assessment and marketing and second a more holistic view of workers and students.

References

Park, Rosemarie, Storlie, Rebecca and Dawis Rene **The Educational Needs of Dislocated Workers in Minnesota** . Center for Urban and Regional Affairs, University of Minnesota (CURA 88-4). Hubert H. Humphrey Center, 301 19 th, Ave.S., Minneapolis, MN 55455

Stoesz, Sarah, **Worker Dislocation in Minnesota: Selected Characteristics and Policy Implications** Minnesota Department of Jobs and Training Office of Policy Development, February 1989

The Current Workforce: Literacy, Job Safety and Product Liability

Rosemarie Park

Introduction

Many employers are aware of the problems that marginally literate employees pose both to their own safety and to that of others. Identifying illiterate employees brings employers face to face with a myriad of legal questions that surround the use of literacy tests to hire or screen workers whose literacy skills could put them or their fellow workers at risk. This chapter will explore the use of literacy tests in the workplace and discuss the possible implications of having a workforce unable to read crucial safety and warning information.

The workplace is not the only place where safety is an issue. Employees are not the only ones whose safety depends on reading safety and warning information. What if the users of potentially dangerous products are members of the general public? The second part of this chapter deals with some of the legal questions raised by the inability of a large segment of the general public to read product warnings and guarantees.

Literacy in the workplace: Hiring literate employees?

Most employers, if given an option might prefer not to hire employees whose reading skills are too low to properly perform on the job. However, such a solution is not as simple as it seems. A number of factors complicate the issue of insuring that future employees are up the literacy demands of jobs. First among these is determining the exact reading level needed to perform a job adequately.

What is the appropriate reading level required on any job?

How can employers determine the minimum necessary reading requirement for a given occupation? Once this level is identified, a reading test must be selected and validated to measure the reading level of employees or potential employees. Not all reading tests are suitable or even legal. The process for test selection poses several problems if the requirements of the law and the Uniform Guidelines on Employee Selection Procedures (Federal Register 1979) are to be followed.

There is little documented research as to what the minimum reading requirements for jobs are. Among the few available studies are those by Sticht (1960); Moe, Rush and Storlie(1980); and Mikulecky and Diehl (1980) who have studied the reading requirements in a number of occupations. In this research, readability formulas have typicaly been used to assess the reading difficulty of work-related reading material. However, the readability levels of such material are not necessarily the reading levels needed to complete job training successfully. Readability formulas tend to overestimate the difficulty of technical material. In addition

research has shown that workers can perform adequately with reading levels of one to two years below the estimated readability level of the reading material used on the job (Mikulecky and Diehl, 1980).

The **Uniform Guidelines** on Employee Selection Procedures require that tests used in employee selection relate directly to the tasks preformed on the job, and that their application not discriminate against women and minorities. As yet, there has been no published demonstration of validity for any commercially available reading test with respect to reading other than college student populations. Although a test has been validated for use with government civil service employees (Park, Dawis, Storlie and Rengel, 1985), the field is still very limited. Consequently employers have a problem in selecting a test that they can legally use.

The decline in the size of the workforce

Even if employers did have a test that might be safely used to screen employees, the dramatic decline in the numbers of young people entering the workforce may give them little option in hiring. From 1980 to 1985, 125,000 workers were added to the Minnesota labor force. Only 94,000 workers will be added between 1990 and 1995 (See Chapter 2).

Younger workers entering the workforce are likely to be less at risk for illiteracy than their older colleagues. The high school completion rate in Minnesota is now better than 90 percent. This is a dramatic improvement when compared to the overall population in the state which has only a 64 percent completion rate.

Employers are faced with having to retrain workers whose last experience of school might be twenty years ago. The high replacement costs and sheer difficulty of replacing experienced workers may make dismissing illiterate employees unfeasible.

Identifying workers with literacy problems

Hiring and promotion on the basis of measures of literacy skill presents a myriad of problems in complying with antidiscrimination law. However, **identifying** workers with literacy problems with **the intention of providing help** rather than a pink slip is far less problematical. A number of tests such as the Adult Basic Learning Examination (The Psychological Corporation, 1987) or the Tests of Adult Basic Education (McGraw-Hill,1987), can be used to screen for employees who are at risk.

Which employees can be considered at risk? Short of taking a reading inventory of each particular job for the reading required, there are some generally accepted levels of literacy that are regarded as minimum. Most frequently performance at an eighth grade level as an approximate yardstick for "functional" literacy in almost any beginning job below the college level or job training situation. Employers could use this level as

the one below which employees could be considered **at risk**. Once the required reading level is established, the use of any **adult** normed test should do the job. The Adult Basic Learning Exam or the Tests of Adult Basic Education are both suitable. A caution on using these tests is in order. It is more humane and efficient to select a half hour reading and math subtest from the several tests provided, than risk the trauma of giving the entire test which may take several hours.

Employers can also design job-related reading task tests that use the types of reading materials workers would use daily on the job. Developing such tests takes time and effort and some expert advice. These tests are popular with employees since they can be seen to relate directly to the job in question. They may also be a valid measure of the actual skills people need in order to perform the job. Once potential employees with low reading skills have been identified, the next task is to provide ways for employees to participate in work related literacy programs. These programs have been discussed in relation to dislocated workers in the previous chapter.

Reading and job safety

One major rationale for increasing the reading skills of the workforce has been a hypothesized decrease in accidents and errors on the job. Nearly all of the evidence cited for the relationship between increased reading and decreased errors on the job is anecdotal. For example, Forrest Chisman in the latest report on adult literacy in the United States quotes what he hopes is an "apocraphal story" of a secret visit by managers of a nuclear power plant. The manager had discovered that some of their maintenance crews could not read warning signals that might indicate the reactor was overheating (Jump Start, 1989 p.4). It should be pointed out here that no research evidence exists to back up what is a common sense assumption that literate workers make fewer errors on the job, whether safety related or otherwise.

Safety warnings and the general public

Not all safety hazards are confined to the workplace. There are large numbers of products used by the general public that are extremely dangerous if misused. Most of the issues come under the general question of the liablity of the manufacturer if the public is not clearly warned of the potential hazards. The following section raises some of the questions in laymans' terms without resorting to a precise legal analysis that only a legal specialist can give.

Are printed warnings sufficient to absolve a company of the harm caused by its product? Perhaps the most frequent discussion of this issue is in relation to cigarette manufacturers. Safety warnings are required on all packets of cigarettes. The wording of these warnings is carefully regulated by law so as to be clear and understandable. What if the warnings are difficult to read? Some warnings on quite commonly used products

contain chemical and technical information that make them very difficult even for literate members of society to understand. Take a common product used to unblock drains. The chemicals used are very hazardous, yet the warning of what to do if skin comes into contact with the chemicals reads at a college level.

Do courts recognize reading difficulty as an issue?

The difficulty of the reading in such products has not been litigated successfully in court. Generally the law has been more sympathetic to the arguement that some other factor such as type size or placement of the warning made it difficult or impossible to read. The earliest "plain language" legislation was initiated in New York requiring that consumer contracts be written in language that the general public could reasonably be expected to understand. However, the only case decided under the New York Law was New York versus Lincoln Savings Bank, (No 41526-80 Sup. Ct. of the State and County of New York, June, 1980). The judge decided that a set of printed warnings on the back of safety deposit slips to the effect that the bank was not responsible for the contents of bank safety deposit boxes in cases of theft were in violation of the law. The reason cited was the extremely small type size used, making it near impossible for people to read it.

In a similar case McCarthy Well Co. Inc. versus. St Peter Creamery Inc. (C6-85-1740 Minnesota Supreme Court, August, 1987) the Minnesota Supreme Court held that print size was the determining factor in deciding that one clause in a contract was unenforcable because it was "unreadable". Thus the issue becomes one of legibility rather than reading difficulty per se.

The general question of what the general public or any given individual can read and understand is difficult to answer. The claim that someone misread or failed to understand a key instruction is almost impossible to verify in any objective way. The courts however, have not been entirely blind to the concept of reading difficulty. The courts have at times relied on some general estimate of the reading ability of the person involved based on expert testimony and a readability measure of the written information concerned.

Many of the successful appeals that devolve around failure to read and understand a document have centered around welfare notices that have in the past been heavily loaded with bureaucratic and legal jargon. Welfare recipients have a high level of functional illiteracy and many do not have a high school diploma. Consequently the Minnesota courts (and the legislature) have been sympathetic to the arguement that welfare recipients are entitled to notices and forms that are at least below a seventh grade level of difficulty and conform to accepted plain language criteria Minnesota Statutes (Senate File 1912, 1988).

Farmers' Aid was able at a federal level to successfully block foreclosure of many family farms by the Farmers Home Administration by arguing that the notices informing farmers of their options in the face of foreclosure were impossible to read and understand by almost any measure according to expert tesimaony given in Coleman versus Block, U.S. District Court, SW Division, 1986. The FmHA instructions were extremely difficult to understand, but in more everyday cases, lack of understanding some written document is difficult to prove. The degree to which an individual can read and understand warning instructions, or any piece of reading for that matter, depends heavily on the knowledge or understanding that he or she has of the subject they are reading about. Trying to decide just how much individuals can be expected to "know and understand" about a specific subject is almost impossible to measure objectively in a legal situation when the individual concerned has every incentive to maintain that they were unable to understand the warning or instruction in question.

Complexity as a barrier to understanding

Recently this author undertook a study for the Internal Revenue Service as part of an annual research conference the IRS holds on taxpayer compliance. In preparation for the conference participants in a GED program were asked to fill out sections of the 1040A and 1040EZ forms to claim earned income credit and child care credit. The calulations were for a fictitous character, since information on their own incomes was private. Nearly all read above a 7th grade level as measured by the Tests of Adult Basic Education (TABE) test. Yet of thirty participants only two could correctly claim earned income credit and four the child care credit. Most made horrendous errors and several gave up entirely. These people could read. What they could not do is follow an extremely complex set of directions (Park 1989). Can this situation be remedied? What can be done to make such writing more accessable to the general public?

Rewriting in plain language as a solution

Most problems involving lay persons reading highly tehnical information — whether that information is legal, chemical, medical or from the field of electronic engineering — lie with an incorrect set of assumptions on the part of the writer. What is perfectly plain and simple to the engineer who designed the computer part is unintelligable to the beginning user. The rapid explosion of technical information puts the average person, not to mention those with margininal reading skill, at risk. Suddenly they are expected to read and understand all types of technical information that did not even exist when they were in school. Where possible this information has to be translated to a simple form where the uninitiated can understand it.

Recently the Minnesota Legislature has passed legislation that all notices and form that are issued by the Department of Human Services, the Department of Jobs and Training and The Health Department be written

below grade seven difficutly level. These forms must also conform to the criteria for plain language in the Minnesota Plain Language Contracts Act (Mn Statutes, 325G et seq, 1982). The requirement for plain language is clearly a step in the right direction. However, readability formulas do not necessarily measure the cognitive complexity of document. Requiring that readabilty formulas be used to reduce the level of documents is not necessarily helpful as noted in Chapter Three.

Despite this legislation, those who write technical information are only slowly coming to the realization that a substantial portion of the general public may not read and understand the written information they are receiving. Many of the less scrupulous may even have relied on the fact that legal and financial contracts involved a great deal of "fine print" information that the recipient did not really "need" to read. Unfortunately the need to read the information usually only occurrs when some untoward event, failure to comply with a financial contract or a law suit where actual harm occurs requiring that the "fine print" be called into question.

Why is plain language not more frequently used?

Manufacturers, bureacrats and others who generate the technical material are often extremely nervous about rewriting materials in "plain language". Lawyers are worried that the plain langauge translation may not fully cover all the subtleties that the old tried-and-true legal language that had been through the courts a number of times did.

Technical engineers worry that technical concepts can not be simplified to the required level. Can laws of physics be expressed at a sixth grade level? Medical personnel often do not have the time or resources to rewrite patient information for poor and indigent clients who are most at risk of illiteracy. But rewriting in plain language is absolutely crucial if the information gap is to be closed. It takes too long and if far too expensive to raise the reading ability required for the general public to cope.

Raising reading skill takes time because technical information requires an understanding of the field to really be assimilated. One of the major misperceptions in the field of Adult Literacy is that reading is some type of generic skill that once acquired and with sufficient practice can be transfered to any area. In order to read and understand one must have the background knowlege to interpret what is read. Most members of the public could not read and understand certain sets of contractual obligations without a freshman law course. Similarly, a computer user manual requires at least some specific knowledge of the technology involved. Not everything can be written in a way that everyone can understand.

References

Chisman Forrest P, **Jump Start:The Federal Role in Adult Literacy.** Final Report of Project on Adult Literacy. The Southport Institute for Policy Analysis, January 1989

Moe A., Rush T. and Storlie R. **The Reading Requirements for 10 Occupations.** International Reading Association, Newark, Del. 1980

Mikulecy L and Diehl W. **Job Literacy** Bloomington, IN. Indiana University Research Center, 1980

Park, R. Storlie, R. Rengel E. and Dawis R. "The validation of a reading test for civil service employees" **International Personnel Development Journal,** March, 1985.

Park R. and Harvey R. "The Plain Language Contracts Act." **Minnesota Bench and Bar** January, 1985 Vol 42,1, 15-21.

Park R. "A study of the comprehensability of IRS forms" for Internal Revenue Service Conference, Washington, D.C. November 1988.

Conclusions and Projections for the Future

Rosemarie Park

The Role of the Federal and State Government in Adult Literacy Education

What is the appropriate role for the federal government in adult literacy education? The trend since the 1970's and 1980's has been for the states rather than the federal government to take primary responsiblity for distributing funds and overseeing programs. Starting with a number of government supported initiatives in the Reagan era, the trend has been for the federal government to endorse efforts that focus primarily on raising public awareness and private funds. Such efforts have been exemplified by the formation of the Business Council for Effective Literacy headed by Harold McGraw of McGraw-Hill. (The role of the private sector will be discussed later in this chapter.)

The latest set of suggestions for the federal role come from the **Jump Start** Report from the Southport Institute. The Southport Institute for Policy Analysis is a private non- profit agency supported by grants from private foundations. Consequently the report is seen as a nonpartisan effort. Since these recommendations are all encompassing, the recommendations will be discussed in some detail in the following section.

Program Funding: Who Should Pay

How should the federal government be involved in funding of adult literacy programs? In the 1960's the major responsibility for funding rested with the federal government. However, state governments are now increasing their allocations to adult literacy programs. The bulk of the money spent in the majority of states is still federal, but in Minnesota the balance has now tipped to the point where the federal allocation for ABE is $1.5 million and the state $4 million annually. In addition, local school districts have been given the option to raise adult literacy funds through a local ABE levy. Some districts have already taken this option.

Is the federal role simply to provide more money? How proactive should the federal government be in deciding how funds should be administered and spent? Should the federal government help in private fundraising to augment state efforts? **Jump Start** stresses sharing of resources and use of matching funds rather than asking for increases in current funding. If the focus is to be squarely on workforce literacy then perhaps the major beneficiary of such efforts, businesses whose productivity is bound to increase, should pay some of the costs.

Research in Adult Literacy: Building an intellectual base.

Should the Federal government be actively involved in funding research in adult literacy? If so what type of research should be funded? It is the position of the Jump Start authors that "we have remarkably little re-

search-based knowledge about what works in basic skills education for adults" (Chisman, Jump Start, p.5). This lack of knowledge is attributed to a lack of effort to "collect, systematize, evaluate and disseminate the knowledge we have" (ibid. p 6). While there is some truth to this contention that what information we have is not well distributed, the implication that there is little good or documented research is plainly wrong. Many who are in the process of "discovering" adult literacy are unaware of the number of disciplines that are encompassed in the adult literacy field and the consequent scattering of relevent research articles throughout journals of various types.

A recent review of research in adult literacy for the American Educational Research Association by Thomas G. Sticht (1988) documents the current research base. In addition to the experience of the military with literacy education, he cites landmark research from the fields of cognitive psychology, applied linguistics, human resources development, reading, behavioral and social sciences, and adult education. In his conclusion he suggests directions that future research should take. He contends that "future research should explore more fully the implications and theory, policy, and practice that brings together childhood and adulthood literacy development". Sticht would agree that more could be done at the federal level to systematize collection and distribution of key research findings. Perhaps this could be done by expanding and facilitating use of the ERIC clearinghouse system. The need is to build on the research base that we have, not to develop a new one.

The need for good evaluative research

"Demand systems that produce large gains in basic skills and hold them accountable for achieving those gains"
(Jump Start p.17).

Research in adult literacy is not straightforward. Adult literacy research is by nature applied research. The most critical questions asked are not amenable to the type of empirical or experimental research currently in vogue in other disciplines. The theoretical cutting edge of adult literacy education in future will be in sociological and qualitative research. However, the major immediate questions are evaluative, that is, whether or not literacy education lives up to the sometimes exaggerated claims currently made for it. Do literacy programs increase workforce efficiency? What type of training works best? Jump Start recognizes the importance of evaluation. But, good evaluative research may cost more than the $7 million **Jump Start** suggests be earmarked for literacy program evaluation in existing Labor, Education and Health and Human Services budgets. This is proposed based on the condition that the agencies themselves would be willing to divert existing resources, particulary from Health and Human Services, to such an end. In the past, effective federal research projects were initiated at the National Institute of Education (NIE). Over the last decade the role of NIE has been diminished both in quality and

quantity. It should be revived with a mandate to oversee adult literacy evaluation. The demand for learning systems that produce large gains is seductive. However, some realism should be injected here. As pointed out in previous chapters, the knowledge base upon which the ability to read **with understanding** can not be built in a quickly. Literacy is a complex skill.

Evaluation at state level

The Minnesota legislature has also recognized the need for good evaluative research. In the 1987-88 session more than $100,000 was set aside for evaluation of current adult literacy programs. This research is still being planned.

A major difficulty has been deciding on an approach that is compatible with the variety of adult literacy providers. The type of evaluation appropriate for volunteer tutoring programs may not fit schemes designed to measure the effectiveness of large scale technical college or community college programs. In addition, the idea of evaluation raises fears in programs that have survived on little more than good will and marginal funding. To many of these programs asking for evaluation of projected results just adds insult to injury.

Some evaluation of programs has already taken place. A follow-up study at the University of Minnesota showed positive social impact, if less impressive academic results of ABE programs (Copeland, Ploetz and Winterbauer, 1984). A study funded by the St Paul Foundation illustrated some of the gaps in the current system and should provide a good basis for further evaluative efforts (Chase, R. ,Wilder Foundation, 1987). If current efforts are successful, they should be disseminated to other states, certainly with the aid of ERIC as suggested above. This would free other states from reinventing the wheel.

Impacting Job Training

Many of the Jump Start recommendations involve refocusing current federal programs on the needs of the marginally literate. Most of these recommendations involve little or no increase in funding. Should the federal government and state government target existing funds that are designed to meet the job training needs of the economically disadvantaged youth towards those with low literacy skills?

Targeting seems simple on the surface, but is not the simple solution it first appears. Targeting scarce resources inevitably means funds are diverted from one group of those in need to another. This sets up competition within programs and alters the client group. In job training programs targeting funds to the low literacy group means favoring clients who need long term programs to get them employed at jobs paying more than poverty level wages. Is it wise to spend more resources on a few clients who are most in need, or should many who need less in terms of becoming

employable, get the bulk of scarce resources? Federal programs in the past have been accused of ignoring those most in need and skimming off the most able. Certainly if future program funding depends on the number of clients placed successfully in employment, such practices are almost mandatory for continued program survival. Is it wise for administrators to cut back on employment programs for the multiply handcapped or pregnant teens to meet the needs of the newly targeted low literacy group?

Sharing resources

Several of the Jump Start recommendations deal with the need for coordination among agencies and sharing of resources. In an era when funds are limited, it makes sense to make better use of what we have. These "economies of scale" (**Jump Start** p.22) are only cost effective when under- utilization occurs. The committee charged with allocating Title 11 Dislocated Worker funds and JTPA 8 Percent Set Aside funds has the problem of picking which programs of the many who apply to fund. It is usual to fund less than 25 percent of the programs who need funds. Sharing in this situation is difficult. All of these proposals recognize the need for literacy help. The most pressing problem in this state has been to get the literacy service that is appropriate to job training.

Literacy education through community education programs in public schools alone may not be appropriate. As outlined in previous chapters, it is unrealistic to expect our current community education ABE programs to absorb welfare work-readiness clients, economically disadvantaged youth, and dislocated workers into programs that have no resources or full-time staff able to develop work-related curricula. Attention must be given to developing institutional programs that are not dependent on "soft money" for their survival. Many literacy programs are so strapped for funds that they will embrace any type of program that will fund teachers and administration whether they are suited to provide services or not. Thus volunteers are touted as the answer to workplace literacy problems which involves everything from parental literacy to reading for automobile repair.

Rather than have everyone working towards workplace literacy as Jump Start suggests (**Jump Start** p. 17), it makes much more sense for each institution to do what it does best. Thus public school adult community education should focus on those adults who need a GED or High School Diploma. They are also in a position to provide parenting and family literacy programs. They are uniquely suited to deal with those adults who are totally illiterate, who cannot literally say the words on the page. This type of initial literacy is also provided by volunteer tutors. The intial teaching of literacy requires, especially if combined with the need for English acquisition, help from experienced teachers: ABE programs have these. Volunteers, as **Jump Start** points out, cannot solve the problem by themselves (**Jump Start** p.10). They are best suited to working in conjuction with teachers in existing ABE programs. They can also reach adults

who are shut in and cannot travel to existing programs.

Who then should provide workplace literacy programs? If the need is for vocational or occupational training, then the vocational technical colleges and community colleges, in conjunction with the potential business employers, are in the best position to provide it. Their target group coincides with the vast majority of American adults who are functionally illiterate. Most targeted adults have basic decoding skill— they can say the words on the page. This group is best described in Sticht's terms as "marginally literate". If the goal of literacy training is the workplace, then vocational and occupationally oriented programs should deliver it. They are able to provide the type of model discussed in Jump Start, where institutions **will accept any adult at any level of skills and move him or her along a continuum to at least the level of basic skills required to function effectively on the job (Jump Start p.15).**

The Role of Educational Institutions

Developing professionals

Perhaps one conclusion of **Jump Start** where there is agreement, and where Minnesota itself has a jumpstart, is with the need for development of professionals in adult education. Since 1974 the University of Minnesota has had an Adult Education program with a sequence of courses available to train adult literacy teachers. In 1986 a university program became available where elementary or secondary licensed teachers could get a 15 credit optional endorsement in Adult Basic Education. By 1990 it is hoped that a separate adult licensure will be available on a graduate level for teachers who wish to specialize in teaching adult literacy and have no wish to teach or obtain elementary or secondary licensure. This program was developed in response to the original Federal Adult Education Act funding that set aside 10 percent of funds for teacher training.

The University of Minnesota currently supports this training program on institutional hard money (tenure track) funding. This releases the current Adult Education Act funds for inservice education workshops offered on a periodic basis to ABE/GED lead teachers.

Strengthening programs for the adult student

Institution of higher eduction already deal with large numbers of individual who are labeled as functionally illiterate. The fact is usually carefully disguised by a variety of program labels. The reason for this seeming deception is the sensitivity of post-secondary institutions to the charge that they admit substandard students in order to increase revenue. Many of these post-secondary institutions are in the process of upgrading their image. State Colleges have become "universities", technical institutes have become "colleges" and community colleges now see their role as feeder systems to the state university system. The push is on to upgrade images, and marginally literate students attend "developmental", "special needs" or "prevocational" programs, avoiding the dreaded **remedial** label.

The role outlined above for the vocational and community colleges can not be carried out unless the institutions themselves are willing to embrace it. The vocational colleges in particular have a major initiative in the area of workplace literacy. However, this initiative is ulimately dependent on institutional "hard" money and a committment of the workplace beneficiaries, workers and businesses alike, to fund such programs. Neither the community colleges or the vocational technical colleges can regard remedial or developmental programs as unrelated to their central missions.

The Role of Private Business and Non-profit Agencies

More and more the private sector, both the private corporations and the private nonprofit organizations, are being asked to bear the brunt of supporting social programs. Private-public partnerships are now heralded as the only way an increasing number of educational programs can obtain start up money. This type of linkage can be mutually beneficial to the public and the private organizations concerned. Public institutions are learning about efficiency and accountability concerns as they are applied to private ventures. In return businesses are learning some of the complexities of trying to impact social problems that do not respond to simple input-output solutions. Government agencies overburdened with bureaucratic restraints and multi-layered regulations find that private funding can provide a flexibility and creativity otherwise not available. In turn private businesses are beginning to realize that putting out a contract does not guarantee performance if educational gains are the intended outcome. School districts that have contracted with private agencies to increase gain scores in achievement of their students have been disappointed. From all of this should come some mutual respect from the private sector for the professional educator and vice versa.

Reliance on private wealth and altruism is not new in solving social problems. Is it wise? Essentially this problem is ethical and philosophical. What elements of social health and welfare are the preserve or the responsiblity of the government? What elements do we leave to individual or corporate giving? Corporations, no less than private individuals, are subject to fads and fancies. All corporations and non-profits like to think of themselves as giving to projects that they can call their own. They like to be the first to identify with a particular project. Consequently new projects find it easier to obtain funding than established projects which once seeded are intended to flourish on their own. Too often projects that are funded by private foundations, just as those funded by federal "soft money" find themselves unable to concentrate on ongoing program improvement because they are constantly fighting a three-year —or worse one-year — funding cycle. It takes at least three years for a program to have some impact. Too many die just as they begin to demonstrate that they make a difference.

The Role of the Individual

Within the limits of our circumstances, we all have some ability to make choices. Some literacy programs such as Project Plus in New York City have maintained that individual responsibility is best demonstrated by asking participants to pay a nominal fee for programs. Public funded Adult Basic Eduction programs can not by law do this. They hâve a tradition of voluntary free programs. People who attend these programs are motivated and willing. However, most clients fail to stay more that three to six months, a time span that is too short for the type of literacy improvement they would need to bring them to a level of functional literacy.

Chapter two discussed the changes in legislation that requires functionally illiterate welfare participants to attend literacy programs. Should programs be mandatory for those who need them? Employers may start programs, but then fret over fairly typical low attendance rates when the program is voluntary and without cost to the client. Should they then ask employees to attend as a condition of employment? Should they pay employees for attending? Should employees who successfully complete such programs be given raises? Individuals must be made aware of their own responsibilities for ongoing lifelong education. Not everyone has a confidence level or the life circumstances that allow easy participation in literacy programs. Making literacy training an integral part of welfare, job preparation and training in the public and private sector might enable those individuals who need help be more likely to get it. As responsible professionals in the field of adult education, we need to get across the idea that each adult learner is responsible for his or her learning.

References

Chase R. **Adult Literacy Services in Minnesota**, Wilder Foundation, Saint Paul, 1987

Copeland H, Winterbauer M, Ploetz G. "Assessing the Impact of Adult Literacy Education: A Pilot Study." Lifelong Learning Research Conference Proceedings, W.M. Rivera and S.M. Walker, Eds. College Park, MD: Department of Agricultural and Extension Education, The University of Maryland, 1985, pp.105-154.

Chisman F. **Jump Start: The Federal Role in Adult Literacy.** Final Report of the Project on Adult Literacy. The Southport Institute for Policy Analysis, Washington D.C. January 1989.

Kazemek F. Necessary Changes: Professional Involvement in Adult Literacy Programs, **Harvard Educational Review** 58, 4, November 1988, 464-488.

Sticht T. Adult Literacy Education, in Rothkopf et al. **Review of Research in Education, 15,** American Educational Research Association, Washington D.C.1988