

Teen Parents Get Education Push

■ **School:** Oxnard College program encourages young people from public housing developments to continue their studies.

By DAWN HOBBS
SPECIAL TO THE TIMES

OXNARD—Going to college just didn't seem like an option to teen parent Martha Arellano.

After all, she was an 18-year-old mother, and her 19-year-old husband held down two jobs to make ends meet.

So when Arellano found a flier about the Teen Parent Program at Oxnard College on the door of her Pleasant Valley Village apartment, she thought it would be too difficult an endeavor and set it aside.

"I kept telling her to go, but she was insecure about the program," said Jose Serrano, Arellano's husband.

It wasn't until a counselor from the program came knocking on her door that Arellano gave it some serious thought.

"I was pretty skeptical to begin with," she said. "But then the counselor got me to join."

The counselor helped her fill out applications and make an appointment for the assessment test. Arellano soon found herself enrolled in classes full time. And when Serrano realized the program wasn't just for women, he joined too.

Now both are heading for even higher education, and higher goals. Without the Teen Parent Program, Arellano said, she would have returned to clerical work, and Serrano would have stayed at the muffler shop.

"It's opened doors for us and has shown us different things we can accomplish," Serrano said. "They gave us a lot of support and encouragement."

Program officials work with the Oxnard Housing Authority to recruit parents from public housing developments. The program provides such

services as career and personal counseling, bimonthly workshops, child-care assistance, books, supplies, parking permits or bus tokens, and tutoring. The effort is paid for with a federal grant aimed at eliminating drug abuse in public housing complexes.

Arellano graduated from Oxnard College last year and is now a junior at Cal State Northridge, majoring in sociology. She hopes to graduate with a bachelor's degree, and is thinking about pursuing a master's, with which she could become a high school counselor.

Serrano, too, is interested in working at a high school. After he graduates from Oxnard College in May, he plans to study sociology at UC Santa Barbara. Eventually, he would like to teach at Channel Islands High School, where he graduated three years ago and now works as a tutor. Serrano said the program also helped him to get a spot as a counselor with the Oxnard Boys & Girls Club.

Students in the Oxnard program must take child development classes as part of their course work and attend bimonthly workshops on topics such as parenting skills, birth control, domestic violence, drug education, child abuse, and college success and personal growth issues.

Many of the teenagers dropped out of high school or came from homes where there was domestic violence, child abuse, gang activities or prison incarceration, said Guadalupe Moriel-Guillen, the Teen Parent Program coordinator and counselor. And many of their parents were teenage parents as well. "We try to break this cycle and enable them to learn a different way," she said.

Each participant's skills in reading, writing and math are assessed before a course of study is planned. Many need tutoring in remedial courses before entering the college-level courses.

They come in not knowing even how to dress or behave for a job interview, Moriel-Guillen said. "But over time, you see them change. It is beautiful to see their transformation."

The program accepts both teenage women and men, but most students are single mothers, said Rose Banuelos, resident services assistant with the Oxnard Housing Authority.

"Every day is a struggle for them because of child care, financial resources, domestic violence," Banuelos said. "We deal with almost every issue with these girls on a daily basis. We try to give them a lot of supportive services and help them overcome these barriers so they can continue with their education."

Another problem Banuelos finds herself dealing with is that sometimes the male partners don't want their girlfriends or wives to become educated.

"Our philosophy is that we try to make them better educated so that they can become better parents to their children and be better role models," Banuelos said.

Since the program began in 1993 with 13 students, it has enrolled 55 teenage parents—25 of those students enrolled in the spring semester. The waiting list has 10 names.

The retention rate was 55% in the program's first three years, but increased to 83% during the fall 1996 semester. Many of its students have entered the work force, completed certificate programs or transferred to the Northridge university.

"We're the only program in the county that serves teen parents from very low-income families by helping them to get an education," Moriel-Guillen said. "We focus on how to become independent, how to succeed in life through education and how to be better parents. If they improve their lifestyle, their children will also benefit."

School Conduct Codes

continued...

that the basic standards of civil conduct are eroding.

"We do have a lot more problems today with violence," said Gwendolyn Gregory, deputy general counsel of the National School Boards Association, "and there's a perception that it's because we're being too permissive and we've got to send a message. It's part of the same trend that created mandatory sentencing guidelines in the courts. It's sort of rubbed off on the schools, this idea that if you do something wrong, you should be sent straight to hell. Zero tolerance in theory is good, but I think there has to be some flexibility."

Bob Chase, president of the National Education Association, said that while he generally supported zero tolerance, there should be room for case-by-case decisions about whether a punishment was reasonable.

In Kameryan's case, the district policy left the principal no discretion. So she was subjected to a punishment that both the principal and Kameryan's parents saw as far too harsh for a young child, who had taken the watch from her father's jewelry box without permission in an effort to impress her teacher.

"They were studying Colonial times, and Kameryan thought her teacher would be interested in seeing something old," said her mother, Cheryl Lueng. "But when she took out the watch in the library last Friday, the librarian immediately called the principal, who called me. Kameryan cried when I told her she couldn't go back to her school Monday. She knows she broke a rule, but now she feels like a criminal. This is an example of too much decision-making by the board, and not enough left to the teacher and the principal."

But Sylvia Pearson, president of the Rapides Parish School Board, which adopted the zero-tolerance policy last year, said that flexibility would undermine the policy for the district, which has 25,000 students.

"We don't want to be making exceptions, having a principal say this is a good child from a prominent family so we'll overlook it, or this is a problem child from a poor family so we'll enforce it," Ms. Pearson said. "We adopted zero tolerance to make a safe environment for children. Most parents support it until it's their child who gets caught. I'm sure this child didn't plan to poke any-

body, but elementary schoolchildren are very active, and even a small knife can puncture an artery or go into an eye."

The Rapides Parish policy requires "expulsion" — actually, attendance at the Redirection Academy until the school board reconsiders the case at the end of the month — for having any knife at school.

"The way the policy is written, a knife is a knife," said George Lyon, the principal of Kameryan's school. "The board adopted the policy when there was a rash of kids, high school and middle school kids, bringing oversize knives into school. It's important for parents to know their kids are going to schools that are safe, so these policies can be good. But based on the two cases we've had here, I'd like to see some wiggle room."

Months before Kameryan was snared by the Rapides Parish policy, her father, Glenn Lueng, had gone to the school board and, as both president of Kameryan's school P.T.A. and the parental involvement coordinator for the parish, begged them to change the policy, which had just been invoked for the first time against another second-grader at Kameryan's school.

"I stood up at the meeting and said this is ridiculous, expelling a little girl whose school bus driver saw her take out of her backpack a knife her little brother had dropped in there after using it to cut his Play-Doh," Mr. Lueng said. "I said, please don't

embarrass Rapides Parish anymore with cases like this. We have isolated our children and taught them that once they have gotten into trouble, they're doomed. We don't need zero tolerance. We need to put our faith and trust and support in our principals."

The American Federation of Teachers is campaigning actively for zero-tolerance policies. In Texas, after a 1993 teacher poll found a high level of violence in the state's schools, the union persuaded the state Legislature to approve a measure requiring the removal from regular classrooms of students who took in weapons or drugs or who created frequent classroom disruptions. In California, the federation is backing legislation that would impose criminal penalties on principals who did not adopt, and regularly update, safety plans dealing with weapons, drugs, fighting and other threats to student safety.

Robert Nash, a spokesman for the Texas Federation of Teachers, said, "We're finally sending a message to

'Zero tolerance' for guns and drugs puts new anxiety into show-and-tell.

students that we mean business, that their actions have consequences."

As the first glimmer of evidence that the Texas law is having an impact, Mr. Nash cited a 1996 poll of the state federation's members that asked the same questions as in 1993 and found that the number of teachers reporting student-on-student assaults was down by 10 percent and that the number reporting that they themselves had been assaulted was down by 35 percent.

Others, however, doubt that zero-tolerance policies improve school safety.

"The zero-tolerance people have put their finger on where we want to be, which is to be able to say that violence in the schools is unthinkable," Professor Devine said. "But that's a long way from where we are now. When we had the killing in Bayonne, we saw again that our usual response when there's a knifing or a shooting in school is to talk about getting more metal detectors and security guards, which means violence is very thinkable."

School Codes Without Mercy Snare Pupils Without Malice

By TAMAR LEWIN

Kameryan Lueng, 8 years old, brought a family heirloom to show off to her second-grade class in Alexandria, La.: her grandfather's gold-plated pocket watch, complete with a chain, an engraving of a train and, on the fob, a one-inch knife he had used to clean his fingernails.

But Kameryan's contribution to show-and-tell ran smack into the school district's "zero tolerance" policy on knives and guns. On Feb. 28, she was suspended from the Phoenix Magnet School, where she is an honor student, and she is spending this month at Redirection Academy, a local school for problem students.

In the last three years, many school districts have tried to stop street violence from spilling into their classrooms by adopting "zero tolerance" policies that set manda-

tory punishments for students who bring drugs or weapons to school. Advocates of such policies say that they could help transform schools into such zones of safety that even such horrifying incidents like this month's fatal stabbing of a student at a Bayonne, N.J., high school by a non-student could be forestalled.

The Federal Gun-Free Schools Act of 1994 provides that every state receiving Federal aid for elementary and secondary education must require school districts to expel for at least a year any student who brings a gun to school. And President Clinton said in his State of the Union message that the nation must support schools that have "zero tolerance for guns and drugs."

Most such policies leave principals little discretion in handling infractions, and there is widespread agreement that strict punishments are appropriate in serious cases. But as zero-tolerance policies become more widespread, there is growing debate about whether mandatory punishment makes sense in cases like Kameryan's or other incidents this school year in which there was no intent to cause harm:

¶In Kingwood, Tex., Brooke Olson,

13, was suspended for a day for carrying a bottle of Advil in her backpack instead of giving it to the school nurse, as required by the district's zero-tolerance policy on drugs.

¶In Fairborn, Ohio, Erica Taylor, 13, was caught with Midol and suspended for nine days. Kimberly Smartt, 14, who gave Erica the Midol, was suspended for 14 days because the district said distributing drugs was more serious than possessing them.

¶In Indianapolis, Jenna Fribley, a 15-year-old honor student, was expelled for carrying a Swiss Army knife, which violated a zero-tolerance policy on weapons.

While some educators criticize such cases as ridiculous overreactions, others say the benefit of zero-tolerance policies in raising a school's overall standard of conduct outweighs the harm done to any child who inadvertently breaks a rule. Even if it seems extreme to suspend a second-grader for bringing her grandpa's pocket watch to class, they say, a policy of punishing every breach of school rules can play the same role in promoting order as Mayor Rudolph W. Giuliani's crack-down on "quality of life" offenders, like squeegee men and those who spit in public.

"I think the public should rally around these schools for sticking by their rules," said Jamie Horowitz, a spokesman for the American Federation of Teachers. "If you don't say no to 7- and 8-year-olds, will it get any easier later?"

"We have an alarming number of kids bringing weapons to school. There's a lot of emphasis on raising academic standards, and tied to that needs to be renewed emphasis on standards of conduct. We know this is what our members want, and what the public wants."

When students were asked in surveys whether they had been victims of a crime or had been threatened, the reports of such incidents re-

mained relatively stable from 1976 to 1993, the latest year for which statistics are available, according to the National Center for Education Statistics.

But the perception that schools are dangerous seems to be on the rise. In the center's surveys, almost twice as many teachers reported concern about possession of weapons by students in 1993, compared with 1990. And nearly 40 percent of the teachers surveyed in 1993 said that physical conflicts among students were a problem in their schools, up from 26 percent of those surveyed in 1987.

Many experts say that zero-tolerance policies have less impact on curbing violence than on addressing the perception of danger. Some see such policies simply as efforts to appease parents worried about school safety with tough-sounding measures that ignore the true source of the problem.

"If we had zero tolerance for guns outside schools, that would make more of a difference," said John Devine, a professor at the New York University School of Education and author of "Maximum Security" (University of Chicago Press, 1996), which is about violence in schools. "And we know that there is less violence at small humanistic schools, where all the teachers and counselors know all the kids, and all the kids know they are known, than at large schools, where kids feel alienated."

In many ways, the spread of zero-tolerance policies in schools parallels the criminal justice system's move to "three strikes" laws and mandatory sentencing rules. And no wonder, for school systems and court systems alike are facing pressure from a public fed up with violence and troubled by a pervasive sense

More...

...and the perception of many black students that whites consider the university to be their private domain, despite its status as the state's flagship public university. Before Mr. Meredith's enrollment at the university in 1962, which led to riots that left two dead and more than 350 injured, the university had a reputation as an elite boarding school for the children of the planter class.

Monique A. Brown, a senior from Hattiesburg, Miss., and the president of the Black Student Union, said the symbols reflected "a plantation mentality" on campus that made black students feel unwelcome. "This is a university," she said. "It's not a shrine for the preservation of the relics of the Civil War."

University officials acknowledged that the institution's history had made it difficult to change its image.

For more than 20 years, the state has been trying to convince the Federal courts that it has eliminated the vestiges of its dual system of higher education. But in 1988, a house on campus that was about to be inhabited by a black fraternity was burned in an arson that remains unsolved.

Just last fall during the football game between Ole Miss and Mississippi State, an Ole Miss alumnus, former State Senator Brad Lott, berated a black Mississippi State player with a barrage of racial slurs. The resulting publicity "was devastating for recruiting," said Tommy Tuberville, the Ole Miss football coach. "Racism is used against us," he said. "I don't think there's any doubt."

In 1983, Ole Miss disassociated itself from the Confederate flag, declaring that it would no longer be sold in the campus bookstore or waved by cheerleaders. But students, alumni and other fans still wave their flags at football games, just as they have since the 1940's.

"It's Pickett's charge all over again," said David G. Sansing, a retired history professor who argues that the reverence for the flag, and its connection to the martial sport of football, is linked in memory to the University Greys, a company of Confederate infantrymen from Ole Miss who led the charge at Gettysburg.

While many black students and faculty members are impressed with Mr. Khayat's courage in addressing the issue, the chancellor has yet to overcome their historic skepticism of the university's leadership. They contend that the university has simply concluded that it must attract more black students to maintain financial viability.

"I'm not going to deceive myself for one minute that this is about making black students happy," said Ms. Brown, the Black Student Union president. "It's about dollars."

MARCH 12, 1997 THE NEW YORK TIMES A18

Clinton Offers Economic Plan for Capital

By MICHAEL JANOFSKY

WASHINGTON, March 11 — President Clinton today unveiled details of his redevelopment plan for the nation's capital, a strategy focused on tax breaks for businesses, rather than individuals.

The major tax components of the Administration plan include \$95 million in tax credits for investors and lenders to District of Columbia businesses, a 40 percent tax credit on the first \$10,000 of wages in the first year of employment and a deduction of up to \$20,000 a year for certain equipment costs for small businesses.

As part of the Administration's overall plan to revitalize the District, announced in January, the economic package includes the creation of an Economic Development Corporation to coordinate projects, issue bonds and keep track of \$285 million in new Federal money for tax credits and tax incentives.

That money, Mr. Clinton said, would stop erosion of Washington's tax base and create programs that

A strategy to help Washington retain its tax base.

could be models for other distressed cities.

"Our challenge," Mr. Clinton said, "is to revitalize the city as the nation's capital, to improve the prospects of self-government to succeed, and to make it a place where people really want to live, to work, to do business."

The Administration plan does not cut the Federal income tax for the District's residents, a recovery strategy favored by many Congressional Republicans and the District's non-voting delegate to Congress, Eleanor Holmes Norton, a Democrat. Ms. Norton has introduced legislation that would cap Federal income tax for city residents at 15 percent, and some Republican lawmakers have predict-

ed that a tax cut will probably be in the recovery package that clears Congress.

The proposals that Mr. Clinton outlined today will not necessarily be part of that final package.

While praising the President's efforts as "adding value" to efforts to solve District problems, Representative Thomas M. Davis 3d, the Virginia Republican who heads the District subcommittee of the House Government Reform and Oversight Committee, said the tax breaks would prove beneficial only if the city also succeeded in driving down crime rates, improving public schools and simplifying business regulations.

Peter Hans, a spokesman for Senator Lauch Faircloth, the North Carolina Republican who heads the Senate Appropriations subcommittee that oversees the District, said that Mr. Faircloth had not seen the details of Mr. Clinton's proposal but that he favored "management reform first for the District before throwing good money after bad."

Lifelong Learning

Roger V. Salazar 11/18/97 12:24:24 PM

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Subject: VP announces new lifelong learning steps.

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cc:

Subject: VP announces new lifelong learning steps.

**THE WHITE HOUSE
Office of the Vice President**

**FOR IMMEDIATE RELEASE
Tuesday, November 18, 1997**

Contact: (202) 456-7035

**VICE PRESIDENT GORE ANNOUNCES
NEW ADMINISTRATION STEPS ON LIFELONG LEARNING**

WASHINGTON -- In a speech to a large conference on lifelong learning today (11/18), Vice President Gore highlighted the Administration's record and announced several

new steps to promote lifelong learning for all Americans.

"These new steps will ensure that every American worker can keep learning -- and earning -- for a lifetime," Vice President Gore said. "In this new economy, working Americans can look forward to the promise of a better life -- but only if we give everyone the tools they need to succeed."

The Vice President also praised the work of the Commission for a Nation of Lifelong Learners, an independent commission comprised of leaders from labor, business, higher education, philanthropy, and state government.

Citing the commission's finding that 75 percent of those currently in the workforce will need significant retraining over the next decade, Vice President Gore announced that:

A major summit on lifelong learning will be convened next year by the Clinton Administration. This summit will bring together leaders from business, labor, higher education and elsewhere to discuss how to better support lifelong learning for their employees, union members, and students. Vice President Gore pledged his personal participation in the summit, as did the commission's chairman, Morton Bahr.

An executive memorandum will be sent from President Clinton asking federal agencies to support the effective use of technology to promote lifelong learning. The memorandum will ask agencies to make better use of technology in training their own employees. It will also ask the National Economic Council to lead a government wide effort to explore how federal programs and initiatives could better support the use of technologies for lifelong learning nationwide.

The Department of Labor is launching "America's career kit" -- a series of four Internet-based tools to help workers find good jobs and the right education and training. This electronic career kit incorporates two existing Department of Labor websites, and it will include two new ones. The new websites are "America's Learning Exchange" providing on-line information about education and training opportunities nationwide and "America's Career Infonet" providing such helpful information for job-seekers as information on wages, projections of job growth by sector and region, and an extensive on-line library of resources ranging from job search tips to relocation guides. The existing websites are "America's JobBank" listing over 750,000 job vacancies each day and a large on-line resume service called America's Talent Bank.

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Lifelong Learning Summit -- VP really cares about this issue. Wants to make substantive progress on it, and make it a more visible issue. How best to do this -- partly by making use of the summit that the Vp announced?

Major planning questions:

- 1) What is purpose of summit? How can this summit create the most value -- especially in substance, but also politics and message? -----
- 2) How does it support -- and fit in with -- the Administration's overall agenda on lifelong learning, job training, and possibly free trade and welfare-to-work?
- 3) What happens at the summit?
 - sharing of best practices?
 - feeding of ideas and issues into policy development for FY 2000 budget?
(model after child care conference?)
 - agreeing on commitments from business, labor, and others on promoting lifelong learning? (model after service summit? what lessons from service summit on success of focusing on commitments)
 - taking credit for accomplishments on tax cuts, job training increases?
- 4) Who are sponsors, and who are participants?
 - Does Labor, Education, and Commerce organize this? What role for WH: NEC, DPC, OVP, etc., Who takes the lead on it?
 - commission on lifelong learners already wants to be involved, as does chamber of commerce.
 - downlink sites?
- 5) What is date and location?
- 6) Make sense to model after welfare-to-work partnership?

Other questions for discussion today and soon:

- 1) What are relevant legislative vehicles? What are other relevant substantive/political issues in the coming year?
- 2) What are substantive problems/issues/ needs in lifelong learning and training?
- 3) What are good vehicles for addressing those needs?
 - convening?
 - policy?
 - action groups -- bus, labor, etc?
 - info campaign?

Executive Summary

Without a commitment to comprehensive lifelong learning:

- *America cannot maintain its leadership in the global economy.*
- *America puts at risk its democratic way of life and erodes the fundamental values of a civil society.*
- *America cannot provide its individuals and families with a higher standard of living, assured employability, safe communities and a better future.*
- *America cannot fully benefit from its people's capabilities.*

Today, America falls short on this commitment.

— *The Commission for a Nation of Lifelong Learners*
November 1997, Washington, DC

The emergence of adult learners as a major constituency has been one of the most dramatic changes in American higher education in the past 25 years. As a result, several major commissions have examined lifelong learning, but these commissions were comprised primarily of leaders from higher education. The Commission for a Nation of Lifelong Learners represents a unique and unprecedented partnership of business, labor, education, government and philanthropy who have joined forces to prepare all adults for productive work, active citizenship and rewarding life in the 21st Century.

The project for a Nation of Lifelong Learners found that despite a recent sense of well-being, America is worried that its future prosperity is at risk. At a time when America is rapidly changing — demographics are shifting, new technologies are burgeoning, and a global economy is altering the workplace in the most dramatic fashion since the Industrial Revolution — there is widespread doubt and deep-seated cynicism about the nation's ability to compete in the 21st Century.

American workers have felt firsthand the painful consequences of economic restructuring and the erosion of long-term secure employment. Many are concerned by the growing gap between those who have advantages of high skills and education and those who do not, and they fear growing division along ethnic, gender, and age lines. Americans are uneasy about their own life situations and fearful about their children's futures.

The Commission for a Nation of Lifelong Learners found that the future of this nation is increasingly tied to the need for continuous learning across all levels and all groups of people. Most adults — over 80 percent — believe they need more education to advance their careers and they recognize their responsibility to achieve this. To prepare for this new environment, business, labor, government, higher education and philanthropy must forge partnerships to reform America's post-secondary educational and training systems to meet these challenges. In particular, America must recognize lifelong learning as a national priority and develop policies, programs and practices supportive of that priority.

Interest in the Commission and its work has emerged at the highest level of government.

President Clinton pointed to lifelong learning as a priority in his State of the Union address in January 1997. Vice President Gore, meeting with Commission Chair Morton Bahr in February 1997, indicated his intention to establish a liaison committee to work with the Commission on its recommendations following its report.

The Commission presented its recommendations at a national conference, entitled "Creating A Nation of Lifelong Learners," in November, 1997. The Commission, established in late 1995 under a grant from the W.K. Kellogg Foundation of Battle Creek, Michigan, derived its conclusions from a thorough investigation of adult learning initiatives nationwide, including a comprehensive study, four public forums and a special meeting of college presidents.

It is time for a new vision for lifelong learning.

Five Assignments for the Nation:

- **Honor** the quality, diversity and initiative of the American people and their potential for growth and educational development.
- **Recognize** that the future well-being of the United States and its individual citizens is inseparably tied to the continual renewal of the people through learning.
- **Reaffirm** equality of opportunity and inclusion of all people in access to lifelong learning opportunities — learning that prepares people to be productive contributors to the economy, responsible participants in civil society, and personally enriched human beings.
- **Create** a comprehensive lifelong learning system that encourages, supports and recognizes learning for all age groups and at all levels, both formal and informal, and helps people achieve the goals they set for themselves. At a minimum, extend learning opportunities beyond the current level of secondary education and encourage whatever learning an individual can achieve.

- **Collaborate** with institutions and groups at all levels to encourage aspiration, remove barriers and facilitate opportunity. Support cooperation among government, business, labor, higher education and philanthropy. Involve organizations and groups — churches, civic organizations, voluntary groups and families — to build a "learning society."

Commission Findings

The Economy and Employability:

In the next decade, 75 percent of the current workforce will need significant retraining. The majority of new entrants into the workforce will be women, people of color, and immigrants. Over half of the new jobs in the future will require higher learning and training. Voluntarily or not, workers will change jobs and careers many times in their lives.

Access and Social Justice:

Despite current lifelong learning efforts, the gap between the "haves" and "have nots" remains wide. Although lifelong learning has been growing in an absolute sense, rates of participation vary widely. About five percent of adults with the lowest educational levels participate in some form of adult and continuing education, compared with 15 percent of high school graduates, about 35 percent of college graduates, and about 50 percent of adults with master's degrees or more.

Education and Training:

Many current higher education practices are ill adapted to the needs of employers and adult learners. These pose barriers to participation which include a lack of flexibility in calendar and scheduling, academic content, modes of instruction and availability of learning services, among others. In other cases, a lack of communication has led to misunderstanding of each other's needs and resources among educators and their clients.

New Tools and Technology:

Technology offers the potential to reinvent the relationship between learner and teacher, the ways in which education occurs, and the kinds of learning experiences in which people engage. The new tools of the computer and telecommunication industries can alter the barriers of time, distance,

origin of learning, and mode of delivery, thus allowing higher education to reach populations of learners and workers heretofore excluded.

Resource Commitments:

Higher education ranks fifth or sixth among state priorities for support, behind building new prisons, providing health care services, reforming welfare programs, rescuing K-12 schools, and cutting taxes.

Commission Recommendations

America's political, business, labor, educational and civic leaders must champion lifelong learning as a national priority, articulate its importance to the economic prosperity and security of the nation, document the benefits to corporate productivity, individual well-being, family preservation and the quality of community life, and build a lifelong learning infrastructure with appropriate tax policies and supportive programs to sustain it.

Opinion leaders, education providers, policy makers and the public must recognize lifelong learning as a national priority by:

- ***Acknowledging and promoting the link between universal lifelong learning and America's position in the global economy. Education provides the critical margin of competitiveness in a worldwide economy.*** Preparation for today's work and maintenance of employment requires the development of the ability for continuous learning. Further, the health of the economy and society depends on providing opportunities for all to hone such skills and their application.
- ***Ensuring equity of access to lifelong learning.*** A key goal should be to reduce barriers to lifelong learning through a reconsideration of social and governmental policy at all levels. Such reconsideration must encompass programs and resources and their availability to all.

- ***Optimizing new technologies for lifelong learning.*** New information technologies, and their potential for almost universal availability, offer opportunities for lifelong learning never before imagined.
- ***Advancing lifelong learning by rethinking and reorganizing the delivery of education and training.*** Educational institutions have been the site and source of new knowledge for centuries. But the growth and rapid dissemination of information have challenged this monopoly. Alternative learning options will increase, and demand for recognition of learning and competence obtained in new ways will grow.
- ***Making resource commitments to lifelong learning commensurate with its national importance.*** If the United States is to continue to develop and prosper, lifelong learning must be seen as a critical part of the entire educational enterprise, encompassing all levels and all ages. Sufficient resources must be generated or reallocated for this purpose.

The challenges that face the United States today are ones that a commitment to lifelong learning can and must address.

The Commission calls upon business, labor, government, philanthropy and higher education to take responsibility for the larger agenda established by the Commission and provide the leadership, energy and dedication to realize it. Reform of the educational and training system will take time and unwavering commitment. It is time to make lifelong learning a national priority.

**Communications
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Morton Bahr
President

December 9, 1997

The Honorable Albert Gore, Jr.
Office of the Vice President
Old Executive Office Building
Washington, D.C. 20501-0263

Dear Mr. Vice President:

On behalf of the Commission for a Nation of Lifelong Learners and all those connected with our recent conference, **Creating a Nation of Lifelong Learners**, I want to thank you for taking time from your busy schedule to address the group on the importance of the topic at hand. Your keynote speech was the high point of the conference and contributed measurably to a stimulating discussion and consideration of the crucial issues of lifelong learning confronting our nation as we move into the 21st Century.

Your statement that you will hold a national summit next year on lifelong learning was energizing and crucial to assuring that the important recommendations of our Commission do not sit on the shelf and gather dust, but rather will be implemented to the benefit of our population and the nation as a whole.

I know that staff who have worked on our project to date are in close touch with your office to develop plans for the future. I pledge my support and that of my Commission colleagues to assist in every way in helping to realize important national goals in regard to lifelong learning.

All good wishes.

Sincerely,



Morton Bahr
President

~~Don~~ Jonathan
please draft
response
for VP

Drafted by NEC
for White House
Working Group on
Education, Training
& Reemployment.

| Analysis section
applicable |

(Policy response section
no longer relevant)

The President's Workforce Policy: Executive Summary.

I. What has happened to the workforce?

We find that the genesis of the current "jobs problem" looks very different depending upon whether one looks back 5 years, 20 years or 50 years. We find that each perspective stresses important issues which cannot be ignored. Furthermore, the Administration is already producing initiatives to respond to the entire range of problems. In Section I, we provide a brief, objective snapshot of job problems from a short, medium, or long-term perspective.

- **5-year view highlights unemployment.** The recovery which is well underway is putting many Americans back to work. However, prior to the Clinton Administration the recovery was extremely slow. We are not yet up to full employment levels. In particular, certain communities and disadvantaged groups continue to face double-digit unemployment rates.
- **20-year focus emphasizes slow growth in our paychecks, greater inequality, and instability for family incomes.** The typical family has seen little increase in their standard of living for 20 years. Families with high incomes saw substantial increases. Families at the bottom of the income distribution have actually gotten worse off. With wider gaps between high wages and low wages, changing jobs becomes riskier and more likely to devastate families.
- **50-year perspective shows the transformation to a new American workforce** driven by advancing technology and greater unification of world markets. In 1940, nearly 70 percent of the workforce performed primarily manual labor; today only 40 percent of us do routine work with our hands. New technologies and more trade are leading to jobs which either pay higher wages for knowledge work or lower wages for routine tasks. Although many blue collar jobs are disappearing, more new jobs in management, design, distribution, and marketing are being created. In this section the changes shaping the "new workforce" are characterized.

II. What is likely to happen to the workforce in the future?

We find that accelerating the adjustment of workers and firms to the new economy is the critical factor for achieving sustainable growth while simultaneously raising living standards and lowering poverty. This conclusion is not derived from the traditional approach of extrapolating from past behavior. Simple projections presume that "more of the same" is a sustainable course. Instead, we use three alternative scenarios of the future to show turning points or potential deviations from the trends. This method of inquiry accents the choices we have as a nation: to take advantage of historic opportunities, to avoid dangerous pitfalls, and to shape the society in which we live. The critical factor for our future prosperity is rapid adjustment to a more highly skilled, globally competitive workforce through enhanced skills and flexibility.

III. What should we do about it?

Embracing Change by encouraging more workers and firms to adjust to change and compete successfully in the new economy is the President's workforce strategy.

As explained in Section I, many workforce problems exist in addition to structural change, including cyclical unemployment, stagnating income growth, and falling real incomes at the bottom. While the Administration has tactical policies to alleviate these problems, the President's workforce prescription focuses on the strategic challenge: How are we going to enable American workers to meet increasing demand for new skills and increasing competition from workers and companies around the world?

Only a swift and sustained response to these fundamental economic changes can ensure greater prosperity, equality, and opportunity for all Americans over the next few years as well as the next generation. The President's workforce strategy--*Embracing Change*--has three critical elements:

- **LIFELONG LEARNING.**

Helping workers stay ahead of the shift from blue collar work to the information/service jobs of the future means better access to high quality education from pre-school to retirement. Not only does the quality of K-12 education need to improve dramatically, but more investment is needed before kids start school and after high school graduation. It matters more today that most Americans finish high school and a year or two more. Furthermore, everyone in the workforce should be adding to their skills and updating their education on a regular basis. In the new economy, a minimal education is more than it used to be.

- **JOB CHANGING TOOLS**

Today, the best safety net is career planning, work experience, and job mobility. Workers who plan ahead to obtain new skills or change jobs will get more promotions, avoid layoffs, and minimize periods of unemployment. In Wayne Gretzky's parlance, don't move to the puck, move to where the puck will be. Those who find themselves out of work need to get back in the labor force as quickly as possible or try to improve their skills through training to avoid slipping further behind while others gain valuable work experience and on-the-job training. We need to remove barriers and risks that increasingly impede the traditional mobility and flexibility of the American workforce.

- **COMPETITIVE COMPANIES AND GOOD JOBS.**

To ensure that the U.S. gets its share of new high value industries, we need a coordinated policy to promote the development and growth of new industries outside the military sector. That policy must recognize the interrelatedness of science, trade, labor market, and regulatory policy. At a minimum, the policy framework should try not to impede innovation in work practices, companies, or industries.

Section I.

What has happened to the workforce?

We find that the genesis of the current "jobs problem" looks very different depending upon whether one looks back 5 years, 20 years or 50 years. Observers frequently disagree about which workforce policies are the highest priority because their historical time frames differ. We find that each perspective stresses important issues which cannot be ignored. Furthermore, the Administration is already producing initiatives to respond to the entire range of problems as described in the conclusion to Section I. **However, as we will show in later sections, it is our success or failure in stepping up to the long-term challenges which will shape our future.** In this section, we provide a brief snapshot of each historical perspective.

A. THE JOBS PROBLEM: a five-year focus highlights unemployment

From a very short-term perspective, unemployment resulting from the last business cycle downturn is the most salient workforce problem. Although the recovery is finally well underway, unemployment still haunts many skilled and unskilled workers alike.

After dropping from its peak of 7.7% in 1992, unemployment remains above 6%.

This level of unemployment is consistent with the unusually slow recovery of GDP growth in 1991 and 1992. The GDP increased only 7.7 percent during the first eleven quarters of the recovery compared with an average increase of 14.3 percent in previous post-war recoveries. While more rapid growth in 1993 is creating new jobs in substantial numbers, we are still below a full-employment level of output. In particular, certain communities and disadvantaged groups continue to face double-digit unemployment rates.

B. THE JOBS PROBLEM: 10 to 20 year focus emphasizes slow income growth, increasing inequality, and less income stability

If one focuses on major workforce changes which have emerged in the last two decades rather than the last business cycle, three key workforce issues take precedence. These changes intensify the short-term effects of business cycles:

- (i) slow growth of incomes
- (ii) inequality of wages and
- (iii) more fluctuations in each family's income.

(i) SLOW GROWTH OF INCOMES

Pay for workers stagnated. Average total real compensation for workers in the U.S. has remained virtually flat since 1986 (figure 1). Although real compensation grew between 1973 and 1986, it was at a much slower pace than prior to 1973. Since the cost of benefits has been rising--especially healthcare costs--changes in hourly earnings look even gloomier than

total compensation figures. Non-management workers fared especially badly. The real average hourly earnings of private, non-supervisory, non-agricultural workers (over 80% of all employees in the private sector) is now at its lowest level since 1967. Even during the economic recovery period from 1983 to 1989, the purchasing power of these wages fell every year (figure 2). Slow wage growth has resulted in correspondingly flat growth in family incomes.

Family incomes stagnated. The typical family today has virtually the same income as the typical family two decades ago. This is a marked departure from the substantial income growth that occurred across the previous generation. From 1973 to 1992, the income of the typical American family was essentially stagnant, rising by only 0.1 percent (or \$52) a year after adjusting for inflation. By contrast, from 1947 to 1973, the real income of the median American family increased by a robust 2.8 percent (\$700) a year and in total it more than doubled over a single generation. At the pace of income growth from 1973 to 1992, it would take centuries for median family income to double (figure 3).

(ii) **INEQUALITY**

Wage differences increased. Underneath the averages, some people have made tremendous progress while others have lost ground. Even within narrow groups of "similar" people, wage differences have gotten bigger. A review of the research indicates that inequality in the U.S. labor market has increased regardless of the choice of data set, sample, or wage measure. *These changes represent a substantial break with historical trends.* Figures 4 to 7 plot relative hourly wages for full-time workers from 1963 to 1989. From these charts four conclusions emerge:

The gap widened between high wages and low wages. Upper-income workers have experienced some earnings gains while lower-income workers have experienced the largest earnings losses. This is particularly true for men. This pattern was not offset by changes in fringe benefits favoring the less skilled nor by improvements in their chances of holding a job relative to those of more educated workers. It marks a real decline in economic well-being for many American workers.

The value of education and experience rose considerably. The college wage premium doubled in the 1980s for young workers (figure 4). Most of the relative shift represented losses to the uneducated rather than raises for the educated: the real hourly wages of young males with twelve or fewer years of schooling dropped by approximately 20 percent from 1979 to 1989. In addition, the average wages of experienced workers increased relative to those of younger workers (figure 5). At the same time gender became a less important factor in pay differences (figure 6).

Even people with similar education levels and backgrounds faced greater pay differences. If we examine the wages of individuals of the same age, education, and sex working in the same industry and occupation, we find greater inequality at the end of the 1980s than 20 years earlier (figure 7). Much of this rise in inequality involved

greater wage differentials for "similar" workers across establishments in the same industry. The identity of one's employer mattered more in earnings in 1990 than in the past.

Differences between earnings for black and white workers increased even when college education is taken into account. Black/white earnings gaps had narrowed substantially by 1975 for all groups, except non-college educated men. However, in the 1980s the black/white earnings gap increased 50%. The black/white gap for earnings of college graduates jumped the most: from 2.5% to 15.5%.

Family incomes diverged. The share of total national income accruing to the top 5 percent of families increased dramatically during the expansion of 1983 to 1989 (figure 8). As a result of increasing pay differences, incomes at the top have increased smartly, incomes at the middle have essentially stagnated, while incomes at the bottom have fallen. Figure 9 shows the different rates of real income growth between 1973 to 1992:

- Incomes for the upper 20 percent of families rose a healthy 19 percent.
(For the very wealthy, the increase was even more substantial.)
- Incomes for the middle 20 percent of families rose a paltry 4 percent.
- Among the bottom 20 percent of families, incomes fell by 12 percent.

(iii) **INSTABILITY**

Fluctuations in earnings increased for men during the 1980s. Since Americans change jobs frequently, increasing inequality of wages leads to more uncertainty about future income. Changing jobs has become more of a financial roller coaster than it used to be.

A full-time job with employer-based benefits may be becoming a less typical model.

- The *temporary help* industry has grown from less than 0.25% of total employment in the early 1970s to nearly 1.3% today. Thus, while growth has been explosive, the total fraction of the workforce employed on a temporary basis is probably less than 3%. While there is little cause for concern that we will all become temporary workers, it may have considerable impact on the lives of certain groups such as low-income workers. *Involuntarily part-time* jobs as a proportion of the workforce seems to be trending upwards (figure 10).

- *Longer hours and longer work weeks* in manufacturing may indicate a tendency to hire fewer full-time workers in order to minimize overhead costs.

- *A smaller proportion of jobs have non-portable pension benefits or any health benefits.*

Although the proportion of jobs with pension coverage remains stable, defined contribution plans--which are more portable from job to job--are becoming more common. A smaller proportion of jobs today include employer-provided health insurance compared to 1985. This represents a reversal of the trend toward more jobs with employer-provided health coverage.

C. THE JOBS PROBLEM: 50 year perspective highlights structural change

Why take a longer term view than the last recession or the last two decades? Some problems arise not from sudden swerve in history but from slow, creeping changes which remain almost unnoticeable until too late. There is an old saying: if you throw a frog in boiling water it will try to jump out; but if you put it in warm water and raise the temperature slowly, it will be boiled before noticing it's in hot water. We must watch not only for sudden changes, but also for long term, sweeping changes which could overwhelm us if we do not react swiftly. Two such long term transformations affecting the workforce are described below: (i) Technological change and (ii) Globalization of the economy.

(i) TECHNOLOGICAL ADVANCE DEMANDS NEW SKILLS AND FLEXIBILITY.

Just as labor-saving devices have dramatically reduced the hours needed for farming and house work, labor-saving technologies have reduced the proportion of the workforce required for routine, manual work in manufacturing and service industries. The majority of the workforce has slowly shifted away from manual jobs such as farming and factory work into jobs requiring literacy, numeracy, communication, and problem solving abilities.

- **Rapid expansion of white collar jobs has offset the declining growth of blue collar jobs.** In 1900, over 80 percent of the workforce held jobs for which reading was not a necessity--manual jobs in factories or on farms (figure 11). Today, almost 60 percent of the jobs are white collar jobs in sales, administrative, technical, or professional occupations. Manufacturing in particular has seen an explosion of productivity which allows fewer and fewer people to produce more and more output (figures 12 and 13).
- **Blue collar jobs are becoming less different from white collar jobs.** Computer controlled production equipment, for example, requires math and computer skills.
- **The transition to new kinds of jobs has already exacted sacrifices from many families.** While technological progress creates new industries and new jobs, it also increases productivity in existing industries and causes job dislocation and adjustment difficulties for workers and their families.
- **We are not becoming a nation of "Burger flippers."** Although essential service jobs provide dignified entry level employment for young people, parents, new immigrants, and others, no one wants to see low skill jobs as a majority. They are not. Over the last 30 years, the share of the workforce in service occupations such as waitressing, janitorial, or hairdressing has remained virtually unchanged at 14% of the workforce. Employment growth in this sector has not outpaced the growth of the workforce, even though the actual number of service-occupation jobs has risen.

Our transformed workforce looks qualitatively different from our old conception of "normal work." *Most of us don't use our hands to make things anymore.* People frequently ask, where will the jobs be? The fifty year perspective gives a clear answer: Jobs involving

routine work are disappearing. Job growth will be in occupations that add value to the product or service before it is produced (market research, design, testing, etc.) or after it is produced (sales, service, distribution, advertising, etc.). In fact, more than ever before Americans are paid for what they enjoy such as community service, sports, the arts, etc.

(ii) RISING GLOBALIZATION ALSO DEMANDS NEW SKILLS AND FLEXIBILITY.

The U.S. has changed from a relatively closed economy with few equals to an open economy with many strong competitors. We can compete for export markets in other countries; other countries can compete in America. Like technological advance, globalization has been increasing steadily for many decades:

Merchandise exports as a share of total goods output rose from about 4 percent in 1945 to 8 percent in 1960, and reached 19 percent by 1993. (figure 14).

Globalization has affected the workforce in the following ways:

- ***U.S. Workers Increasingly Must Compete With Those in Other Countries.*** In the absence of international trade, the laws of supply and demand for labor operate only within a country's borders. As trade increases, highly skilled workers in the U.S. must compete with highly skilled workers in other countries. Our less skilled workers must compete with those in other countries as well. In the world market, highly educated labor is scarce and less educated labor is abundant. Consequently trade can be expected to add to other pressures which are causing increasing disparities of income in the United States.
- ***Our standard of living is higher because of the traded goods sector.*** If we had to produce things we now import in lieu of our exports, we would be worse off. Because we produce more of what we are good at producing and less in areas where we are less efficient, our nation has an overall higher standard of living. For example, if we produced our own shoes instead of exporting machines, we would lose wages or shoes would be more expensive.
- ***Domestic labor policies are more interdependent with the domestic policies of our trading partners.*** The effects of stimulus policies for full employment, minimum wage levels, and labor law become more complex in an open economy.

One thing has not changed:

- ***U.S. Workers are still the most productive in the world.*** The productivity of the U.S. workforce is unequalled by any other nation (figure 15). In a global economy, a highly skilled workforce can raise living standards by not only producing more but also by increasing our share of global markets for high value industries.

D. Unemployment, inequality, slow income growth, and structural adjustment problems have been exacerbated by other trends:

Less progressive tax policy. At a time when the rich were already getting richer Reagan's tax cut on upper income-Americans exacerbated the problem.

Stagnating productivity growth. Figure 16 illustrates productivity trends in the non-farm business sector over the postwar period. In the 1980s as incomes diverged rapidly, productivity growth stagnated. People at the bottom actually had less food, clothing and shelter by the end of the decade, not just less relative to the top end.¹

Demographic changes. U.S. firms had increasing access to world labor markets and a growing domestic labor force. Women entering the workforce and immigration swelled the workforce by more than 2 percent per year in the 70s and 80s (figure 17).

Deficit spending and military build up. Under Reagan and Bush the federal deficit grew by an average of about 12 percent annually, from \$74 billion to over \$290 billion. Although defense spending may have been necessary to win the cold war, it left the U.S. less well prepared to compete commercially.

Declining unionization. Union membership as a percentage of non-farm employment rose from less than 15% in the 1930s to its peak of about 35% in the 1950s. From 1960 onward, unionization of the workforce has been in steady decline returning to 15% of employment in 1992 (figure 18). In Europe and Japan, union membership as well as manual work have declined dramatically (figure 19).

Declining real minimum wages. The falling value of the minimum wage allowed low wages to get lower relative to high wages. If the value of the minimum wage were to have the same purchasing power in 1994 as it averaged in the 1970s it would need to equal about \$5.55 an hour. Instead it equals \$4.25 an hour, or nearly one quarter less than it was two decades ago (figure 20).

Declining enforcement of anti-discrimination laws. Under the Reagan and Bush Administrations, lax enforcement contributed to the reversal of increasing racial equity.

Inequality reinforces inequality. High concentrations of low-income students decrease average attainment levels and thus sentence the children to a future of lousy jobs. For example, an "A" student in a poor neighborhood performs at about the level of a "C" student in a better neighborhood (figures 21 and 22).

¹ Some argue that the lack of productivity growth is an overstatement because the deflator does not properly incorporate increases in quality of products and services. However, even this might not explain the growing gap between rich and poor families in America. Increased quality of goods has possibly had a greater impact on the incomes of upper income people who drink cappuccino instead of coffee and enjoy more expensive, designer shoes.

Conclusion: What has happened to the workforce? What is the jobs problem?

As we have shown above, the answer frequently depends on whether one focuses on the short, medium, or long term. In practice, however, these historical factors are interrelated. Problems like inequality and unemployment are worsened by creeping structural change. Yet, some people will try to emphasize only one period in history to highlight particular policy issues--and to avoid the systemic issues. Some examples of how historical emphasis can set the workforce issue agenda are shown below.

From a short term perspective, sustaining the recovery and reducing unemployment through demand management are the critical issues. Demand management, some say, can make most of the workforce problems go away. One can argue that employers raise their skill requirements when applicants are plentiful, but will recruit and train less skilled workers when labor markets are tight. Thus, it can be argued that demand management will address the skills problems. With policy priorities shaped by this short term perspective alone, some argue that deficit reduction goals should be tempered. For someone who tends to focus primarily on recent history, reaching full employment is the only important policy issue.

In fact, short term issues provide only a partial picture of the jobs problem. Overall economic growth during the 1980s did not make most families much better off--and some became substantially worse off. Thus, one can argue that demand management alone will not be enough to benefit most Americans who work for a living.

Some commentators will use these issues from the 1970s and 80s to press for particular solutions to address inequality and stagnating incomes. Increased income redistribution and expanded support for the working poor could, for example, combat inequality and vulnerability of low-income families. Improving the investment climate--through deficit reduction and low interest rates--could jump start higher productivity growth and thus raise income growth. With rising incomes and greater equality of wage increases, all families would be less vulnerable to changes in fortune when they change jobs. But these, too, are only partial solutions.

Those who focus on long term, workforce changes would argue that demand management, income redistribution, and investment incentives are still not enough to fix the deeper problems which have arisen in the last fifty years. Prolonged recessions, rising inequality, and stagnant family incomes, in this view, are symptoms of the difficult transition to the new economy. The key issues are how to deal with the forces of technological change and globalization. To compete in the global economy the workforce needs to be more skilled and more adaptable to new technologies. In addition, "stimulating investment" needs to be defined more broadly than low interest rates and buying more machines. To be competitive, innovations are needed not only in machines, but also in organization of firms, and in the ability to utilize more fully the potential of workers. From the long-term view one can see that addressing structural adjustment would help solve the more visible problems like inequality, stagnating productivity growth, and weak recoveries.

In fact, the Administration has already taken action on the entire range of issues. Demand management and the slow recovery have been closely monitored. Deficit reduction has led to an immediate reduction in interest rates and an increase in private investment levels. An expanded tax credit for poor, working families will help full-time workers to support a family. Many initiatives are underway to deal with structural change: a new reemployment system, technology policy, health care reform, welfare reform, school reform, a new school to work transition system, and trade-expanding international agreements. Both macro and micro policies are being pursued. We are investing in both humans and technology. The overall policy mix is balanced.

The question for the next section is: how will these policy decisions today, based on changes in the past, affect our path into the future? Which strategies lead to the biggest benefits for the workforce? Which courses of action pose the biggest risks?

Section II.

What is likely to happen to the workforce in the future?

In this section we examine the future for American workers. We find that accelerating the adjustment of workers and firms to the new economy is the critical factor for achieving sustainable growth while simultaneously lowering poverty, crime, and the associated costs.

This conclusion is not derived from the traditional (and often uninformative) approach of extrapolating from past behavior. Simple projections presume that "more of the same" is a sustainable course. Instead, we will use alternative scenarios of the future to show turning points or potential deviations from the trends. This method of inquiry accents the choices we have as a nation: to take advantage of historic opportunities, to avoid dangerous pitfalls, and to shape the society in which we live.

This section is organized in the following manner. First, we briefly cover the underlying forces of change that inform all the scenarios. Secondly, three distinct scenarios are discussed. For each scenario we consider the immediate consequences as well as the four to eight year repercussions. Finally, our choices as a nation are summed up. How we work, who we are, and the nature of our society will be determined by which path we choose.

UNDERLYING FUTURE TRENDS: It should be clear from the historical trends we have examined in Section I that the workforce is undergoing a metamorphosis. Regardless of our policy strategy, the "typical" American worker in the future will look very different. What will work be like in 2005?

- *Jobs will look different.* Blue-collar jobs and white-collar jobs are likely to be less distinct. Manual jobs will require more problem solving ability; design and engineering jobs may require more hands on experience. The size of the gap between high and low wages will depend on the relative scarcity of knowledge workers and routine workers.
- *Companies will look different.* Organizational structures will be flatter, leaner, more decentralized, and integrated by consensus goals rather than top down authority. For many companies alliances between groups of companies, supplier relationships, and customer relationships will become strategically more important than vertical or horizontal integration because these quasi-mergers are more flexible and adaptable. Some Fortune 500 companies will be more like alliance brokers with a recognized name brand and a credit rating to offer lesser known, up and coming lines of business.
- *Careers will look different.* People, like major corporations, need to be prepared to sever relationships with declining businesses and establish new relationships with growing, profitable businesses. Security of income and career progression will depend less on strong attachment to any one organization and more on career planning, smart choices, and continuous skill development. Unions will take on additional roles in helping workers to plan and navigate career moves.

Advantages for the workforce in the year 2005.

High pay for marketable skills. Those who have more marketable skills will benefit from higher pay and more autonomy to set the pace and direction of their work. Marketable skills are more likely to include teamwork, writing, reading, technical aptitude, speaking, or solving problems—not heavy lifting.

Work is more flexible, less de-humanizing. The industrial revolution provided the average American with affordable cars, T.V.s, phones, air travel, and freedom from dawn to dusk hours with no weekends. In the next wave of technological advance we are likely to see new products like interactive T.V., custom cars, and virtual reality. In addition, we will trade the mind-numbing, assembly-line style of work for jobs with more creativity and more control over the pace and direction of our day.

More time for leisure, community service and personal growth. In 1776, the need to use three-fourths of our workforce to produce food meant limited participation in education, sports, family, art, or community activism. Although the industrial revolution freed up many of us, by 1930 more than half of our workforce remained trapped in mind-numbing, repetitive or physically exhausting jobs. Today, more than ever before, people get paid to think, to interact with other people, to use valuable experience or training, to serve the community, to be creative, to be entrepreneurial, or to seek the limits of their potential in sports, art, and music. This upward trend is likely to continue.

More entrepreneurship. As mass production becomes less profitable relative to niche markets and specialized customer needs, there will be more opportunity than ever for the American entrepreneur to succeed based on a good idea and hard work.

Disadvantages for the workforce.

Lower wages for fewer skills. While those with the most marketable skills are likely to benefit from global competition, those with the fewest salable skills will find their prospects dwindling. The basic BLS occupational model predicts that high school drop outs or non-english speaking immigrants in the workforce in 2005 will find intense competition for unskilled jobs such as gardeners or janitorial labor.

Career predictability may not return to the stable patterns which characterized the mass production economy in the 1950s and 1960s. Income growth may remain more volatile as workers move in and out of declining firms and industries. Rapid international movements of capital also may decrease career predictability.

If less equality remains a permanent feature of our economy, it could change the American way of life. The stability of our democratic, capitalistic society is, in part, based on a certain degree of equality and social mobility. Today, inequality has

rapidly reached levels not seen since before World War II. Hard-working, law abiding citizens could become increasingly divided into the high-wage haves and the low-wage have nots. If the majority of our children grow up without hope, quality education, or a stake in society, "The American Dream" and the "Land of Opportunity" becomes a mockery.

THREE SCENARIOS: CHOICES AND RISKS FOR THE FUTURE

Our policy choices today will have a tremendous impact in the next five years on whether the advantages of the new economy outweigh the disadvantages. Will high wage work, low wage work, or poverty be the defining characteristic of the workforce in the future? Depending on which lessons we learn from history and how we respond to them, we will determine whether our economic pie expands, how fast, and how it is divided up.

Scenario 1: Inertia or "Policies of the Past." In this scenario, the U.S draws lessons primarily from recent history and ignores the longer term trends. The government continues to do what it did in the 1980s: borrow and spend. Families and firms who are succeeding in the new economy would continue to ignore those who are unable to compete. In the short run, demand management could lead toward a successful recovery with GNP growth returning to levels seen in the 1980s. However, with health costs continuing on the trend line, budget deficit would soar to new highs keeping interest rates high and investment levels low. Productivity growth and thus income growth would continue to flounder. We would expect to see more of the same from the 1980s: substantial GNP growth accompanied by little improvement for the typical American family and worsening fortunes for those at the bottom. Some families would see their incomes grow, while others would continue to lose ground. This is a better outcome than a failed recovery, but hardly satisfactory.

Results of inertia in 4 to 8 years: Such a strategy may not be sustainable. Lack of investment in technology as well as people sets up a vicious cycle of spending and decline. An abundant supply of high school dropouts, immigrants and cheap foreign labor would likely put downward pressure on their wages and increase poverty, unemployment, and crime. Despite booming growth and rising wages for the highly skilled, public expenditures would be rising for unemployment, welfare, housing subsidies, food stamps, and health care. This spending hemorrhage would spur greater budget deficits and interest rates, thus further stifling private investment. This downward cycle of low-wage work would be exacerbated by low levels of physical investment, which further reduces the availability of high-paying jobs for low-skill workers.

One might argue that market incentives--higher wages for higher skills--would naturally lead to training investments and thus reverse the increasing wage differential. However, numerous failures in markets for human capital make it unlikely that individual actors would adequately rise to the challenge. For example, the inability to resell or repossess

human capital discourages many employers and bankers from investing in it. In addition the lower paid, less skilled individuals who need training most find it difficult to borrow in order to finance their own skill investments. Because of these well known market failures, the government routinely provides funding for primary, secondary and some college education. While the existing system of government support was adequate for a farm- and factory-based domestic economy, it is not preparing enough of our workforce for jobs in a knowledge-based, highly competitive economy. Free markets or old education systems will likely fail to meet the increasing demand for workers who can read, write, use computers, and solve problems.

Ultimately the growth of US-based businesses would be curbed not only by the high price of skilled workers, but also high interest rates and high taxes for supporting those who do not have the skills to compete for good jobs. In the not so distant future, prosperous workers and firms in the U.S. may find that they simply cannot afford the cost of abandoning their fellow citizens. The Republican legacy could be a 1980s and 1990s boom that fizzles out under mounting costs of a class of workers who are left behind.

Scenario 2: "Buying off the poor." If we take our lessons primarily from the 1970s and 80s, but once again ignore long term changes, we may end up treating the symptoms without affecting the disease. This strategy involves a major shift from consumption to investment--but the investments are only in technology and trade, not people.

We can imagine a political compromise involving more redistribution of income to the poor in exchange for advantages to business such as more open trade, deficit reduction, and lower interest rates. Firms invest in technology which de-skills work and increases the productivity of less skilled workers in the U.S. or overseas. While growth is more sustainable in this scenario, the divide between the "knowledge class" and the others continues to widen. As the pie grows, incomes rise and so does inequality. Technological progress and global competition moves full speed ahead, while the poorly educated find it harder and harder to catch up.

In this scenario, like the first scenario, America does not deal with the growing problem of the increasing demand for skilled workers and the lagging skills of our workforce. To return to the analogy of the frog in hot water: the temperature is slowly rising and we aren't even trying to get out of our predicament. In the first scenario, "policies of the past," we are boiled before we realize anything has changed. In the second scenario, "buying off the poor" we forestall the boiling point while the way out gets increasingly difficult.

Nothing is done in either scenario to help the low skill workforce adjust. As a nation, we increasingly feel the heat of crime, welfare, and lost productivity. The human skill deficits in our workforce--and the cost of fixing them--loom larger and larger as technological change and global integration move forward.

Scenario 3: Coping with Long-term Change. If we decide we can no longer ignore the slowly rising temperature, we will try to invest not only in machines, but also the people who must use them. It is worth presenting two variations on a strategy to confront long-term change: Retrenchment v. Embracing Change.

Scenario 3-Variation A -- Retrenchment. Beleaguered firms and workers could mobilize political support for slowing down the forces of change to allow more time for the necessary training and restructuring. It would be argued that protection for uncompetitive industries would facilitate restructuring. Similarly, we could increase tariffs on trade with countries whose wages are lower than ours to offer more breathing room for workers with low skills. We could follow the European example and try to induce companies to invest more in their labor force by increasing the restrictions on firing workers. By slowing down the changes in trade and technology, firms and workers would have more time to adjust, to train, and to become more competitive. In the next few years, such a strategy could reduce layoffs, raise wages for manual labor, and favor U.S. based companies over foreign based operations.

Results of Retrenchment in 4 to 8 years: Where would such a strategy lead? Experience suggests that protecting industries does not lead to improved competitiveness. When financial pressures for change are alleviated, firms and workers tend to resist and avoid change. Furthermore, any increase in our tariffs significant enough to help workers or industries would be likely to cause increased prices, trigger retaliations, and eliminate more export jobs than jobs gained by holding our domestic markets captive. Restrictions on firing would also create a disincentive for firms to expand competitive industries in the U.S. Other countries able to quickly adjust to higher skill and higher tech work could gain a competitive advantage in emerging, more profitable industries. Thus, retrenchment could actually lead to a slow (or rapid) decline of GNP growth. Unemployment and declining income growth might return with a vengeance when global market forces overwhelmed our barriers to technology and trade. By the end of a decade, poor and less skilled workers might find that their real earnings had declined more than would have been the case in the inertia scenario! The effort to find shelter from the winds of change could turn the U.S. into a second class, uncompetitive nation in which all of the workforce suffers...more equally.

Scenario 3-Variation B -- Embracing Change. Where would we be in the next century if the federal government acts immediately to provide incentives and leadership to hasten adjustment rather than fighting change or letting us drift?

If both the winners and the losers in the new economy pull together and invest in the workforce today, we can avoid any of the dismal fates described above. A substantial investment in workforce skills is needed to get ahead of the long term demand shift away from manual work and to compete in the global economy. Not only does this require better schools and healthier children, but also a major investment in the current workforce who will be the majority of workforce in the year 2002. *Never before has public policy been aimed*

directly at increasing the skills of the whole workforce.

However, a shift toward workforce skills investment would not be successful at raising incomes if it caused a significant reduction in R&D or physical capital investment. Technology investment contributes to wage growth by increasing the productivity of the workforce as well as the competitiveness of firms.

Increasing public spending on skills and technology at the same time (without raising taxes or deficits) can only be accomplished by reductions in other forms of government spending. Government spending on consumption--welfare incomes, unemployment incomes, defense outlays and subsidies to uncompetitive industries--must be directed toward supporting investment spending for skills, equipment, and research. Increasing the efficiency of government and reducing its overall operating cost could also contribute to the shift of public expenditure toward investment. In particular, greater efficiency in government training programs--cutting red tape, increasing accountability, and seeking private sector matching--would improve the impact per billion dollars spent.

By pulling together and directing as much money as possible into investments which improve the productivity of the workforce, we can leap ahead of the long-term shift instead of being dragged forward involuntarily.

Results of Embracing Change in 4 to 8 years: Firms in the U.S. would be more competitive with an abundant supply of skilled workers, civilian research and investment capital. The U.S. would attract more leading-edge firms that respond to specialized customer needs with flexible technologies and empowered workers. With reduced costs for basic literacy training and less incentive to dumb down the work, these firms will offer more challenging jobs with higher pay. Median wages would rise as more people obtain these higher-wage jobs. Expenditures on welfare, crime and other social problems would decrease in proportion to our ability to help people at the bottom become more productive. More Americans would be able to begin the transition toward the knowledge-intensive jobs that pay higher wages in a globally competitive economy.

Although achieving high literacy levels and thinking skills for 100% of the workforce by 2002 is unrealistic, workers with fewer skills would still be better off in this scenario. Jobs for workers with the least skills would pay more if fewer workers were competing for those openings, particularly in non-tradeable sectors like child care, food service, or cleaning.

Tying social benefits for individuals to work and training rather than non-work, cements the compact between the rich and the poor to pull together. Investing in companies which are competing and winning rather than subsidizing the uncompetitive ones sends a similar signal to firms. As a society, we should reward work and innovation--not non-work and uncompetitiveness. If we pull together now, the whole economy can prosper in the century ahead.

Conclusion: What is likely to happen to the workforce in the future?

The most dangerous path over the next few years is the myopic, short-term approach. "Policies of the Past" --not reacting to long term changes, not investing in the future--is likely to lead to a vicious spiral of crime, welfare, and more low-wage work. A second strategy, "Buying off the Poor," entails investing more in machines, but not people. Although it may be more sustainable than inertia, such a strategy may transform our society into a deeply divided one. The battle between the haves and the have-nots could undermine the American way of life. Thus, while recent history points up a range of important jobs issues to be dealt with, we will not get ourselves out of hot water without dealing with the longer-term structural changes.

If, however, we face up to structural change by fighting it (as in the "Retrenchment" scenario above), America may turn into a second rate economic power in which families suffer declining fortunes equally.

Only by "Embracing Change," making a rapid shift toward investment in people as well as machines, can we achieve a future in which most working people experience the full promise of the new economy. We need all three key elements: 1) a rapid response, 2) investment in technology and competitiveness, and 3) most importantly, an investment in people and skills. To leave out any of these three elements is to choose low wages, declining growth, poverty, and crime instead of more interesting jobs, higher wages, and opportunity for all.

The American workforce--the whole American workforce--has an extremely bright future ahead if we are willing to seize it.

Section III.

What should we do about it?

Encouraging more workers and firms to adjust to structural change and compete successfully in the new economy is the highest priority for the President's workforce policy.

As explained in Section I, many workforce problems exist in addition to structural change, including cyclical unemployment, stagnating income growth, and falling real incomes at the bottom. While the Administration has policies to alleviate these workforce problems, they are not the primary focus of the President's workforce strategy. The logic behind this preference is explained in Section II: Only a swift and sustained reaction to *structural change* can ensure greater prosperity, equality, and opportunity for all Americans over the next year and the next generation. Thus, the President's strategy focuses on rapidly shifting our federal workforce policy framework in line with the new, knowledge-intensive, globally competitive economy.

The President's workforce strategy, **Embracing Change**, has three critical elements:

- **Lifelong Learning**
- **Job Changing Tools**
- **Competitive Companies and Good Jobs**

This framework for workforce policy represents a significant paradigm shift from the policies that were appropriate in the 1930s or the 1960s. Meeting the challenges of the new economy requires that we question fundamental policy assumptions and, in places, start from scratch on new problems. Moving federal workforce policy into harmony with the post-Cold War economy is like turning a battleship...it takes a great deal of patience.

To help us step back and assess our progress in transforming the federal role, this section of the paper outlines each of the three elements of our workforce policy framework in the following manner. First, old economy policy assumptions are contrasted to new economy imperatives. Secondly, we present the objectives, the strategy for tackling these new imperatives, and the 4 to 8 year expected results. Thirdly, we list the key hurdles we must overcome in each area to achieve the desired results.

What should become clear after reading this overview of our policy framework is that various components of our policy agenda are at very different levels of development. Some pieces of the framework are closer to the implementation stage. For example, pre-school investments do not require a major new program design, but rather, increased funding and improved implementation. Other areas of the framework require major new authorizing legislation and reforms as well as funding and implementation. For K-12 education, employment assistance, or healthcare portability, we have a host of legislative reform initiatives either in Congress already or poised for transmittal. Finally, there are

components of our policy agenda which are so new, so different from our old postwar economic workforce policy, that little institutional foundation exists and thus, initiatives are not yet ready. Education and training programs for *employed* workers and high performance workplace policy are examples of these cutting edge policy areas.

While the entire range of policy initiatives deserves our full attention and support, it is the last category, the least developed and the least institutionalized policies, that are in danger of being overlooked in the midst of chaotic Washington calendars. Yet, it is these policies which are perhaps, the most important for shifting our paradigm, meeting the challenges of the new economy, and choosing prosperity over poverty.

From a basic K-12 public education to

...Lifelong Learning

Old strategy: Providing an education from kindergarten through twelfth grade used to be enough to prepare every American to support themselves and participate in the democratic process. Scholarships, loans, and grants which produced an elite corps of nobel prize winners, college graduates, scientists, and educators were all that we needed.

New economy imperatives: Helping all workers stay ahead of the shift from blue collar work into the information/service jobs of the future means better access to high quality education from pre-school to retirement. Not only does the quality of K-12 education need to improve dramatically, but more investment is needed before kids start school and after high school graduation. It matters more today that most Americans finish high school and a year or two more. Furthermore, everyone in the workforce should be adding to their skills and updating their education on a regular basis. In the new economy, a minimal education is more than it used to be.

POLICY OBJECTIVES.

Objective 1: By 2000, all children start school ready to learn.

Strategy: Expand proven programs (Headstart, Immunization,
Women Infants and Children).
Evaluate new programs such as Family Preservation.

4 to 8 Year Results: Objective 1 above will essentially be met if full funding for Headstart, Women, Infants, and Children and Immunization are achieved by 2000.

Hurdles:

- Relative to challenges facing K-12 or workforce learning policy, the hurdles for pre-school investment policy are relatively smaller.
- Approval of Administration's budget requests to phase in full funding.
- Achieving consistently high quality in Headstart and other programs.
- Funding and evaluation for newer programs.

Objective 2: By 2000, 90% of students will graduate from schools with high standards.

Strategy: Systemic reform of current K-12 institutions. (e.g. GOALS 2000: Educate America Act, Elementary and Secondary Education Act Reauthorization, School to Work...)

4 to 8 Year Results: A high school degree becomes proof of achievement in America and is earned by a higher proportion of American students.

Hurdles:

- Passing and implementing the suite of reform bills.
- Winning accountability measures that provide sufficient impetus for real reform.
- Finding new funding for capacity building investments like teacher training, technology investment, or reorganization.
- Redirecting funds from old to new programs (e.g. more targeting of federal funds to the most needy students and shifting vocational education funds toward a new, comprehensive School to Work system).
- Building consensus and collaboration (e.g. State & Local governments, parents, business).

Objective 3: By 2000, entire workforce with literacy and basic skills for new economy jobs.

Strategy: Create new systems for lifelong learning. (e.g. School to Work, National Service, Reemployment Act's retraining programs and one-stop shop)

4 to 8 Year Results: Measurable, universal improvements in workforce literacy and skills.

Hurdles: The hurdles in this area are greater than in the K-12 or pre-school arena.

- There is no tradition of national responsibility for providing predictable access or quality in post-secondary education and training--especially for incumbent workers.
- We have no major training initiatives in Congress addressing all incumbent workers.
- The needs of adults are highly varied; we know less about what works.
- Existing post-secondary policies are fragmented. Implementation responsibility spans many departments and is not well coordinated which undermines the effectiveness of local administrators with workforce investment responsibility.

From the safety net to

...Job Changing Tools

Old strategy: The manufacturing economy used to provide good jobs for most people who were willing to work hard. Large scale, stable employers took care of employees and provided retirement, health benefits, and training. A minimal social safety net for those who were down on their luck (unemployment insurance, welfare) was enough to help American workers through occasional hard times between good jobs. Little career planning was needed to move from one assembly line job to another.

New economy imperative: Today, the best safety net is career planning, work experience, and job mobility. Workers who plan ahead to obtain new skills or change jobs will get more promotions, avoid layoffs, and minimize periods of unemployment. In Wayne Gretzky's parlance, don't move to the puck, move to where the puck will be. Those who find themselves out of work need to get back in the labor force as quickly as possible or try to improve their skills through training to avoid slipping further behind while others gain valuable work experience and on-the-job training. We need to remove barriers and risks that increasingly impede the traditional mobility and flexibility of the American workforce.

POLICY OBJECTIVES.

Objective 1: Reduce risks of job changing.

Strategy: More portability of health benefits, skill qualifications, and pensions.

4 to 8 Year Results: Healthcare is universal; job lock from healthcare disappears. Skill standards reduce the loss of income associated with job losses. High school graduates get better jobs and move up faster. Plans for pension portability are under negotiation.

Hurdles:

- Building consensus is a long process since everyone is affected by healthcare and pension policy.
- Passing the health reform bill and the skill standards bill.
- Planning for pension reform in second term.
- Implementing skill standards in a flexible, agile style.

Objective 2: Encourage smarter job changes and career planning.

Strategy: Universal aid for career planning and job hunting.
(One-stop shopping, school-to-work, welfare-to-work, and work-to-work)

4 to 8 Year Results: Every state provides convenient, customer-oriented career assistance to everyone who needs it. Shorter spells of unemployment, reductions in the loss of income associated with job loss. Instead of waiting until disaster strikes more people plan ahead. More people choose training as a preventative measure.

Hurdles:

- Getting the major initiatives in this area passed and funded.
- Changing attitudes will be critical. Few Americans are accustomed to planning ahead for career decisions.
- Shifting from a focus on the poor and unemployed to employment assistance for all will not be easy. The truly universal programs--one stop shop and school to work--will take time to ramp up.
- Coordinating the implementation of welfare to work, school to work and work to work is crucial. As these systems are overhauled, we should be building compatible systems for career planning that are flexible and customer-oriented.

From a focus on defense and regulating business to

...Competitive Companies and Good Jobs

Old strategy: Science and regulatory policies had little to do with each other or with the economic growth of the nation. Much federal scientific research was aimed at developing state of the art defense systems. Regulation of business primarily limited abuses of market power with, for example, anti-trust laws and collective bargaining laws.

New economy imperative: To ensure that the U.S. gets its share of new high value industries, we need a coordinated policy to promote the development and growth of new industries outside the military sector. That policy must recognize the interrelatedness of science, trade, labor market, and regulatory policy. At a minimum, the policy framework should try not to impede innovation in work practices, companies, or industries.

POLICY OBJECTIVES.

Objective 1: Promoting the High Road to Competitiveness.

Strategy: Stimulate innovative technologies and best-practice production methods through R&D and outreach. Encourage U.S. businesses to adopt employment practices and technologies which fully utilize the talents of all workers. (e.g. Clean Car Project, Conference on the Workplace of the Future, National Information Infrastructure, New Office of the American Workplace at the Department of Labor, Dunlop Commission's Labor Law Reform, Technology Reinvestment Program, Manufacturing Extension Program, Baldrige Award, other public-private partnerships.)

4 to 8 Year Results: More consistent use of best practices and highly skilled workers. Create a climate of research, innovation, and investment which is more attractive to high wage employers.

Hurdles:

- Wider range of best to worst practices in the U.S. than other countries.
- Limited budget for new R&D or investment incentives. Shifting from old investment priorities (Defense) to new (Civilian) is slow and difficult.
- Antiquated regulatory concepts and regimes.
- Integrating a human resource strategy with the strategy for technological innovation and dissemination of best practice production methods is not easy.
- Long term investment in technology and workers demands sustained political support as well as R&D resources.

Objective 2: Blocking the Low Road.

Strategy: Ensure that workers and the majority of law-abiding, U.S.-based employers are protected from the minority of firms that will try to cut costs by ignoring the employment laws or health and safety regulations.

4 to 8 Year Results: By targeting more enforcement resources on workplaces with a track record for hazards, we will achieve healthier, safer workplaces on average and reduce the regulatory burden for workplaces with better health and safety performance.

Hurdles:

- Building consensus on reform of the Occupational Health and Safety system.
- Identifying other areas for labor law reform.
- Gaining acceptance for creative alternatives like worker management committees.

CONCLUSION

By the year 2000, our Embracing Change strategy--Lifelong Learning, Job Changing Tools, and Competitive Companies/Good Jobs--will encourage the development of a more highly skilled, more agile, workforce as well as the demand for such workers in competitive companies. Without the courage and conviction of these choices, we will be missing opportunities for greater prosperity and growth in the U.S. and abroad. As explained in Section I, there are many workforce problems in addition to structural change, including cyclical unemployment, stagnating income growth, and falling real incomes at the bottom. While the Administration has tactical policies to alleviate these problems, the President's workforce prescription focuses on the strategic challenge: How are we going to enable American workers to prosper in the new globally competitive economy? Only a swift and sustained response to the new economy can ensure greater prosperity, equality, and opportunity for all Americans over the next few years as well as the next generation.

Figure 1. Real Hourly Compensation of All Persons in the Business Sector

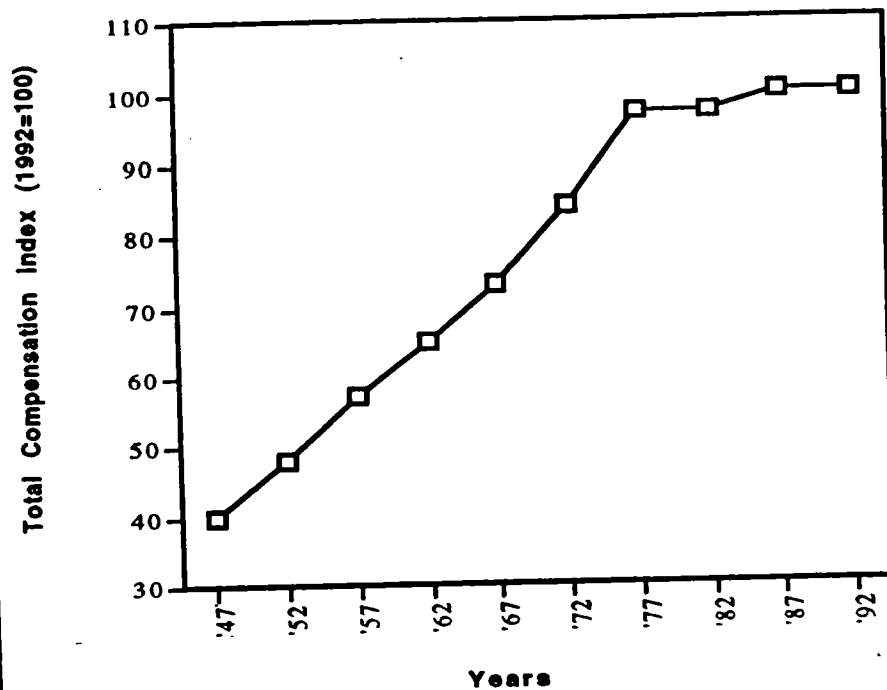
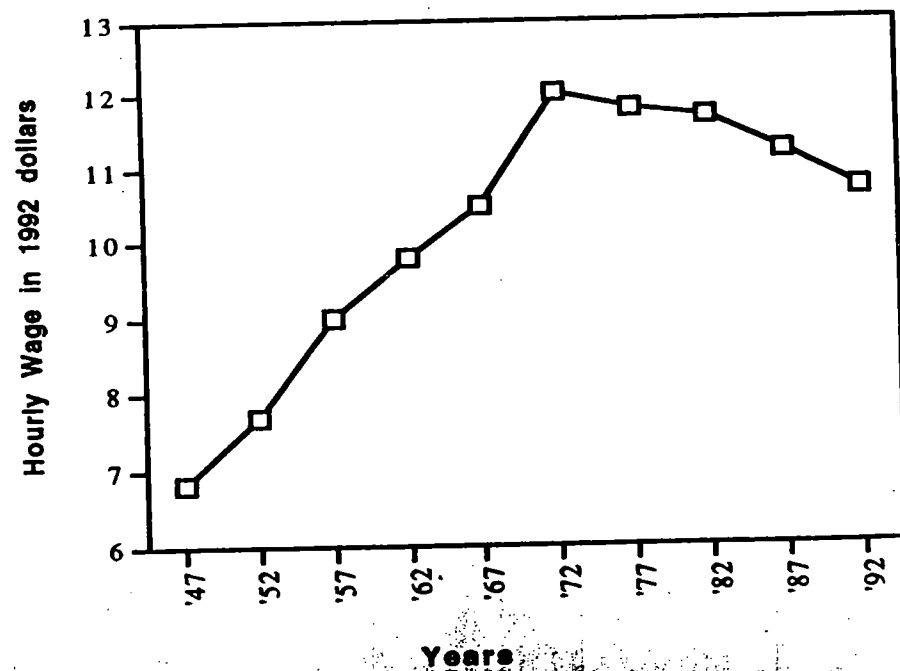
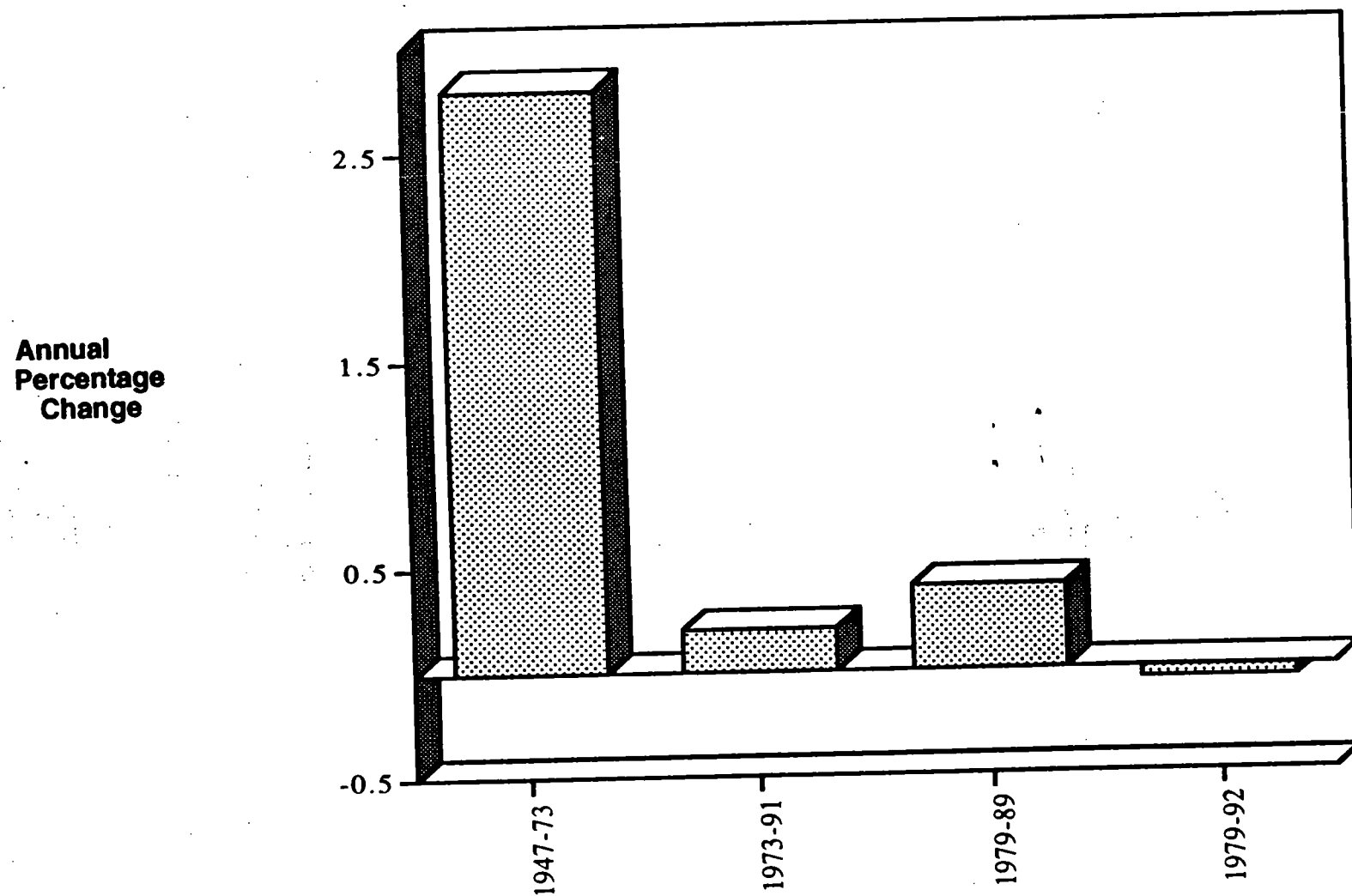


Figure 2. Real Hourly Wage of Private Non-supervisory Workers



Source: Bureau of Labor Statistics

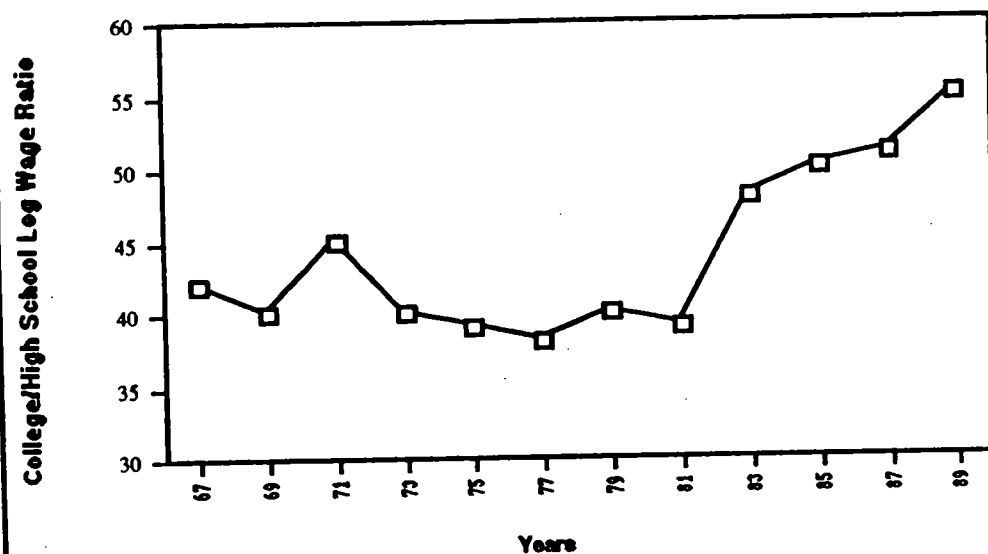
Figure 3. Annual Growth in Real Median Family Income



Source: Bureau of the Census

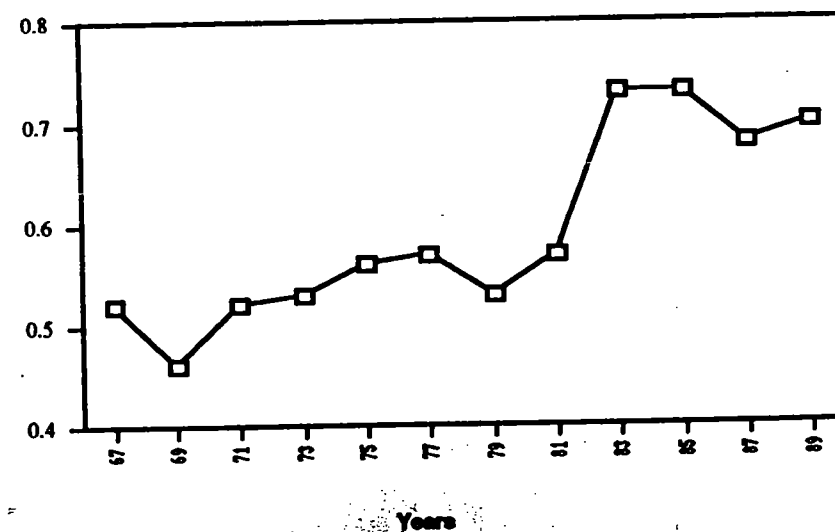
**Figure 4. US Hourly Wage Changes
1967-1989**

Returns to College for Males. All New Entrants
all experience levels



**Figure 5. US Hourly Wage Changes
Returns to experience for
High School Males 1967-89**

Log Wage Ratio: 26-35/1-3 years of Experience



Source: Katz, Loveman, and Blanchflower (1993). "A comparison of changes in the structure of wages in four OECD countries." NBER Working Paper No. 4297

Figure 6. US Hourly Wage Change
1967-89

Gender Differentials by Education
(0) High School (1) College

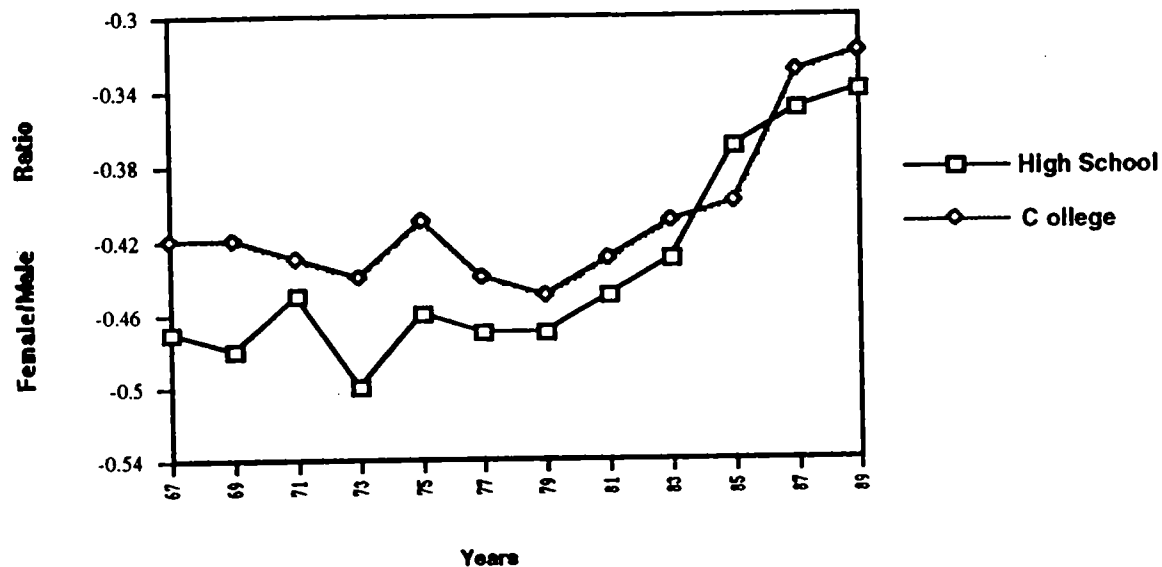
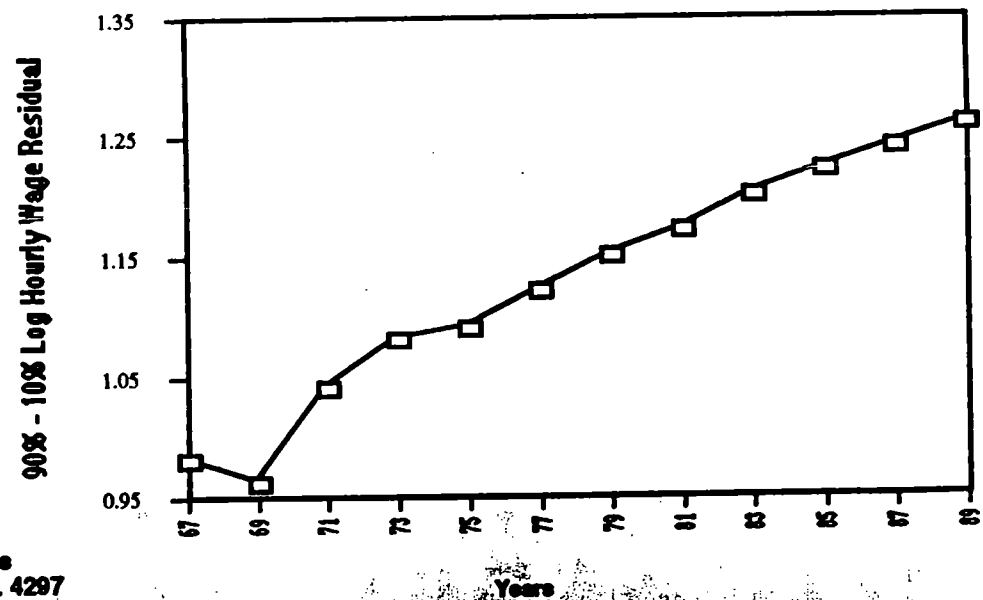
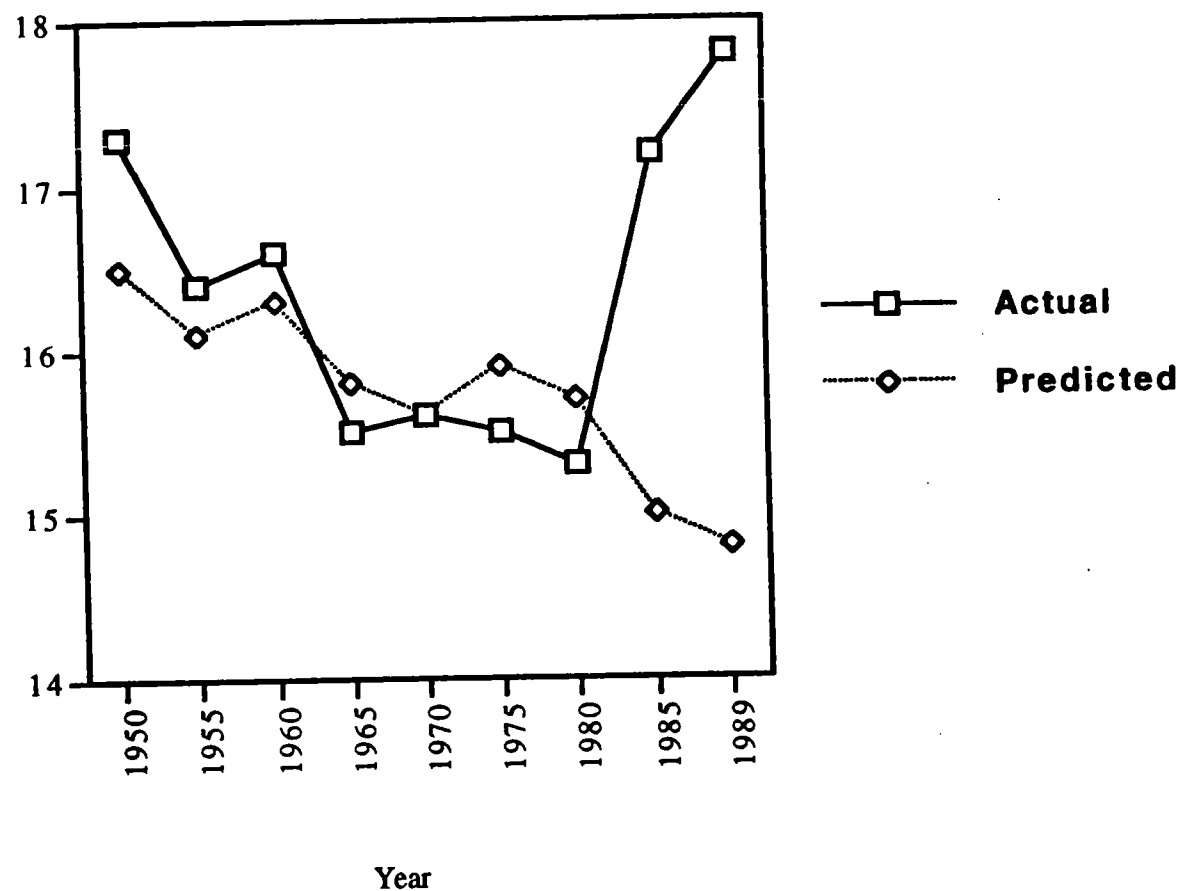


Figure 7. US Hourly Wage Changes
Residual Wage Inequality
Males 90-10 Differential 1967-89



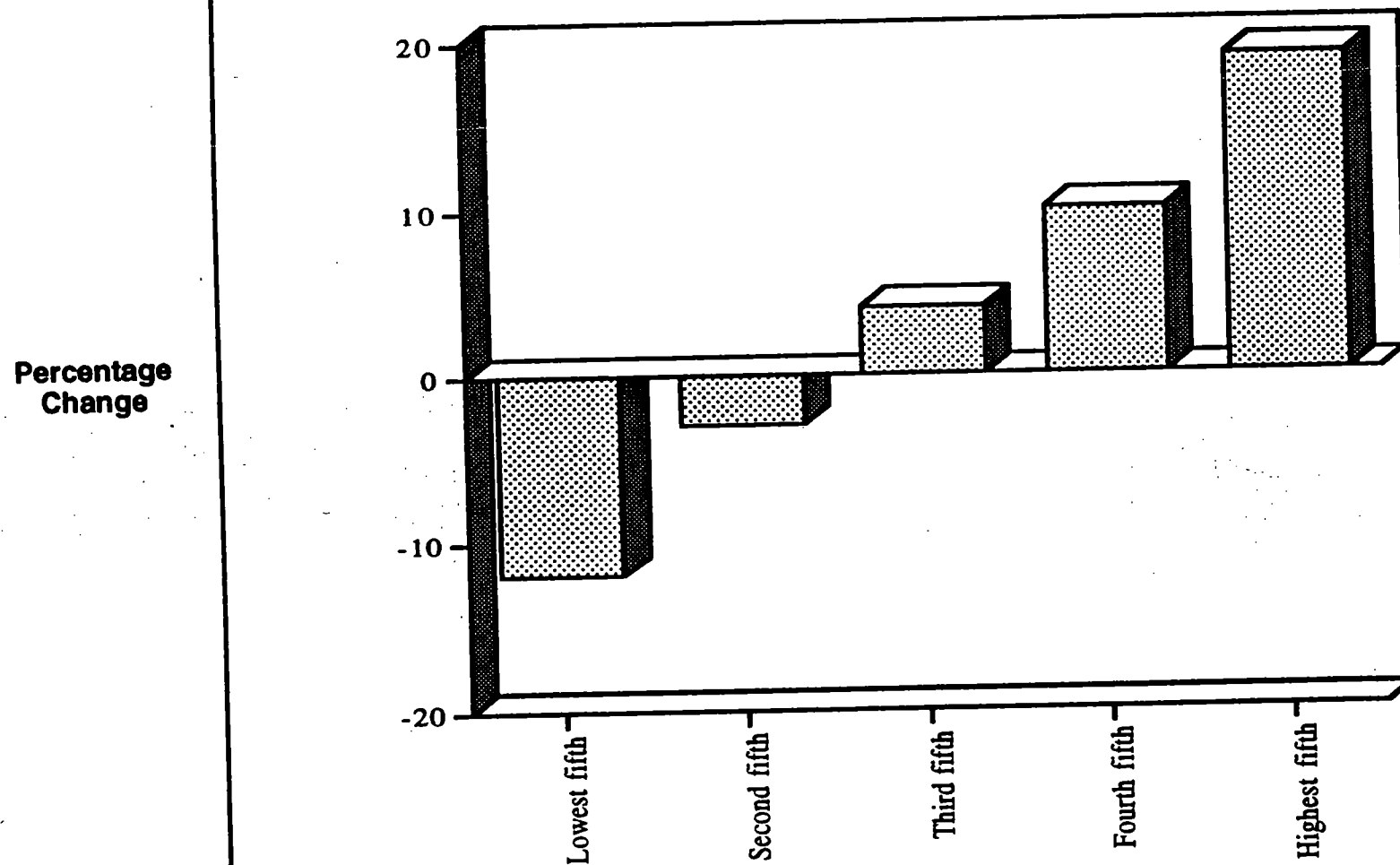
Source: Katz, Loveman, and Blanchflower (1993). "A comparison of changes in the structure of wages in four OECD countries." NBER Working Paper No. 4297

Figure 8. Share of total income to top 5% of families in U.S.



Source: David Cutler, and Lawrence Katz. "Macroeconomic Performance and the Disadvantaged." Brookings Papers on Economic Activity, vol. 2, 1991, pp. 1-74

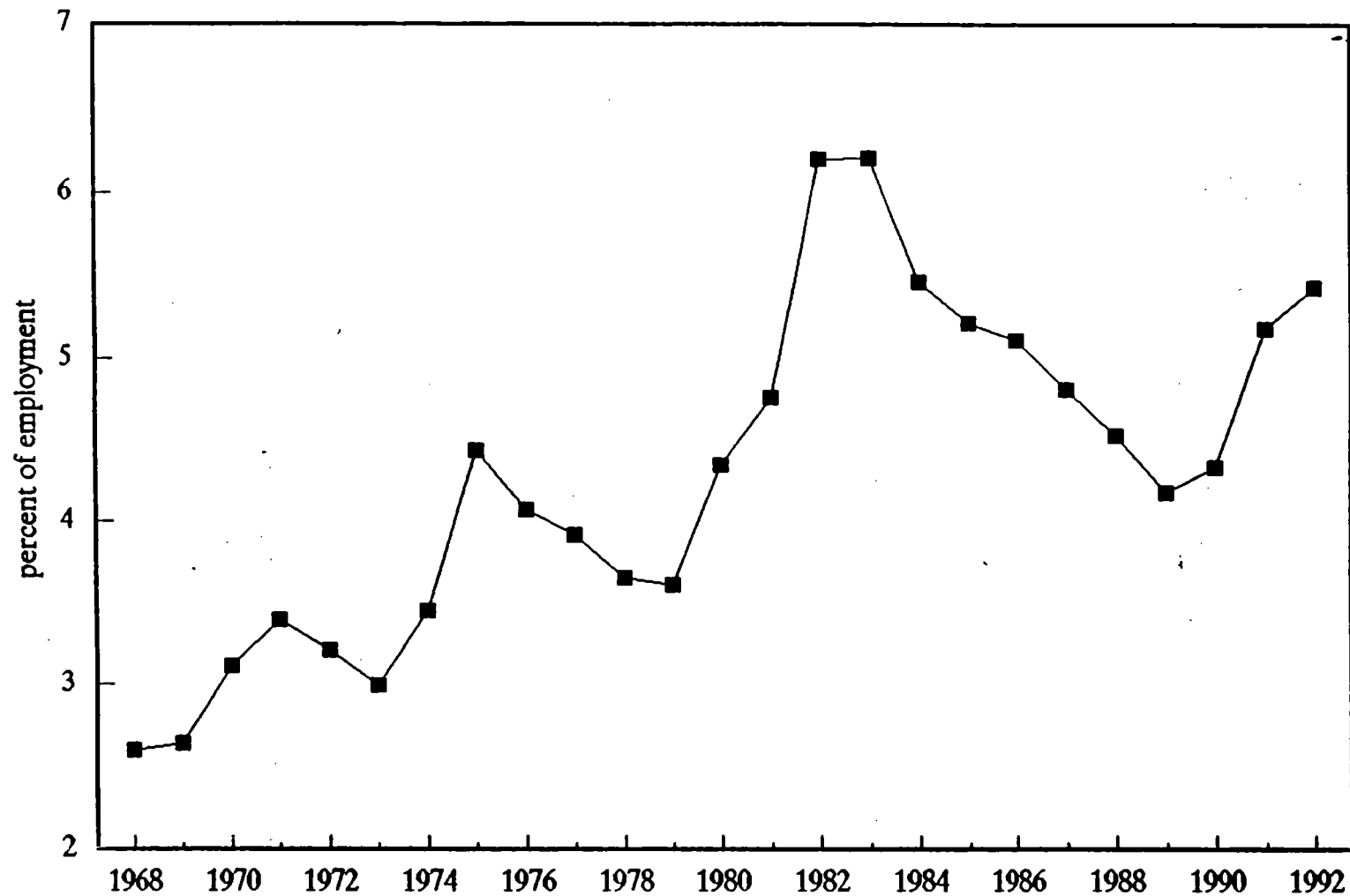
**Figure 9. Growth in Real Median Family Income
(1973-1992)**



Source: Bureau of the Census

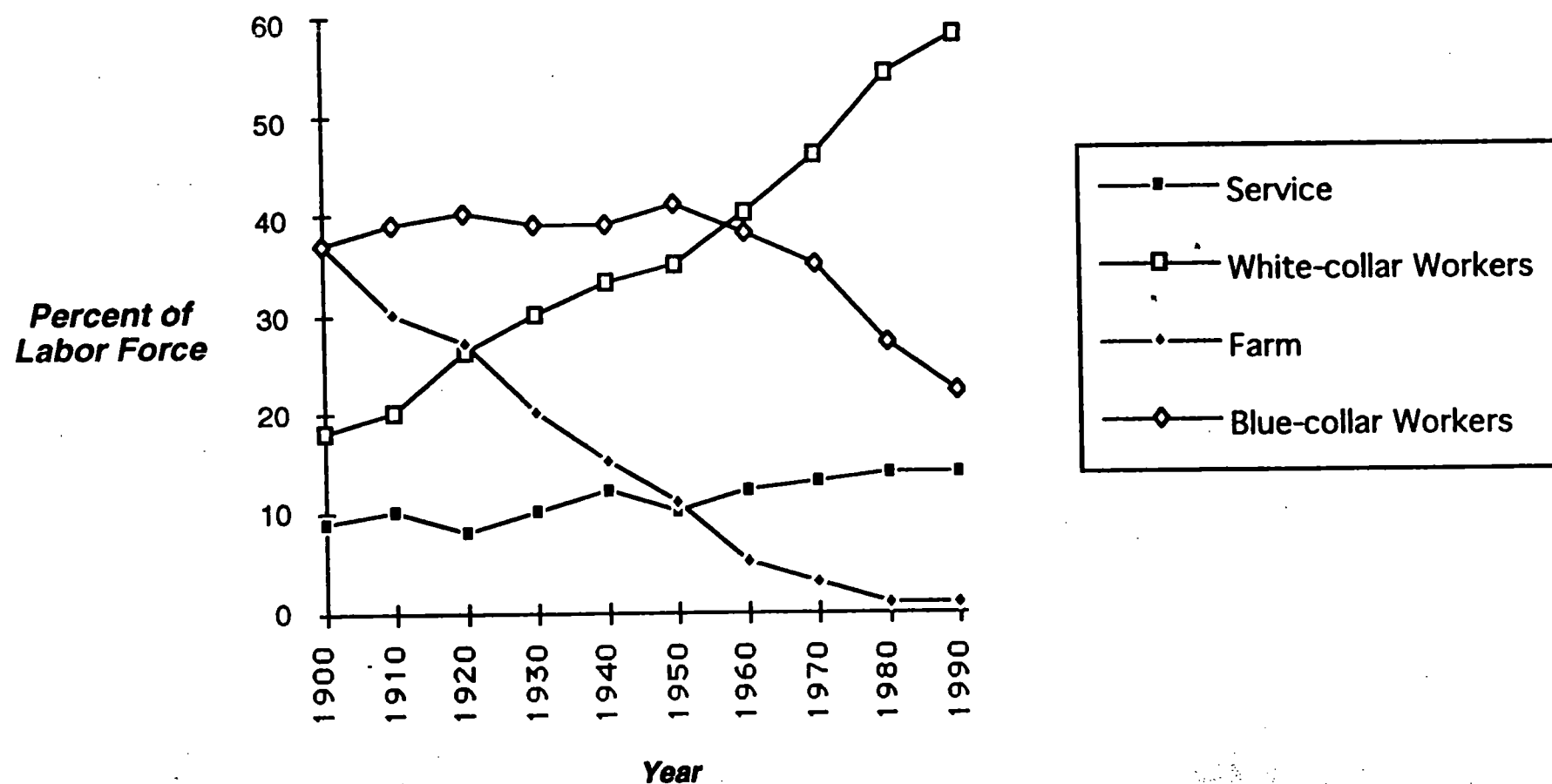
Figure 10

Persons at Work Part Time for Economic Reasons



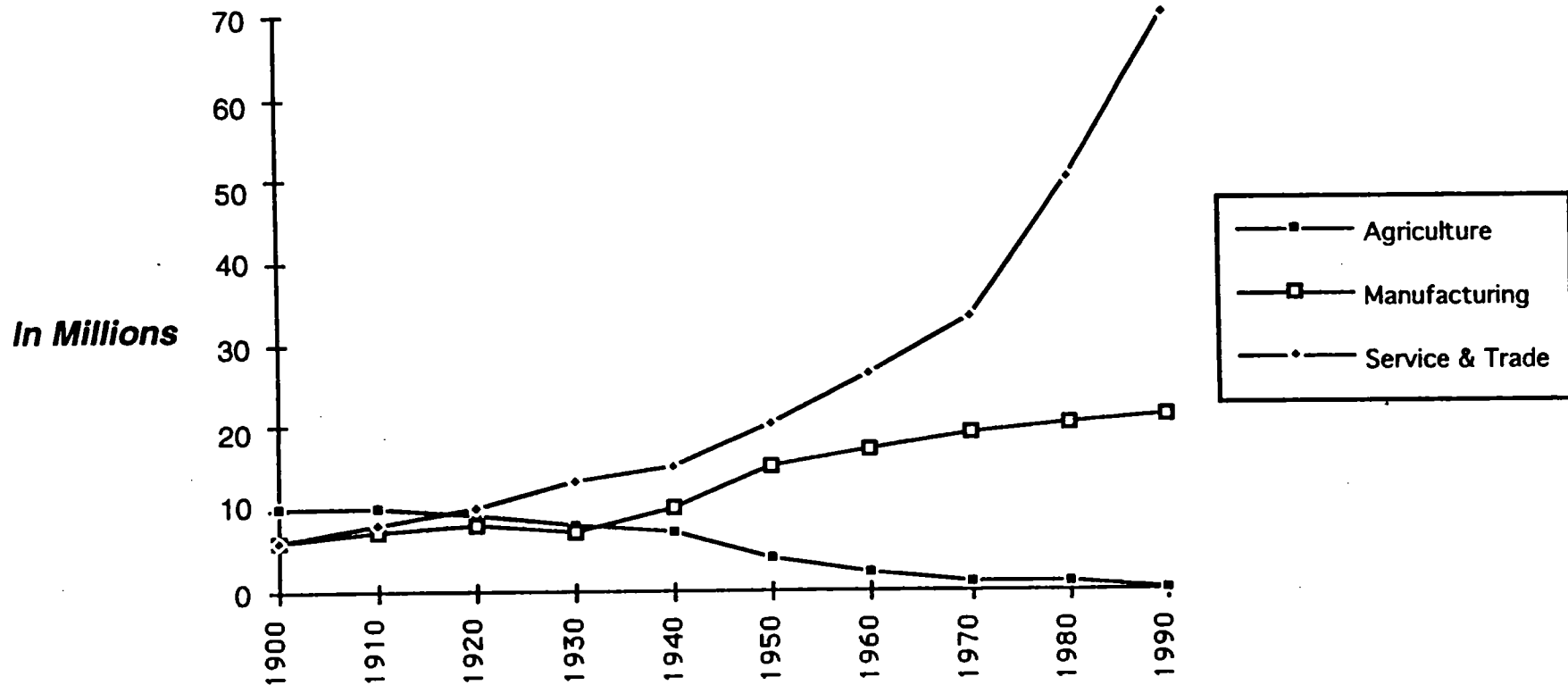
Source: Bureau of Labor Statistics

Figure 11
Occupational Composition of
the U.S. Labor Force
(1900-1990)



Source: Statistical History of the United States from Colonial Times. Employment and Earnings

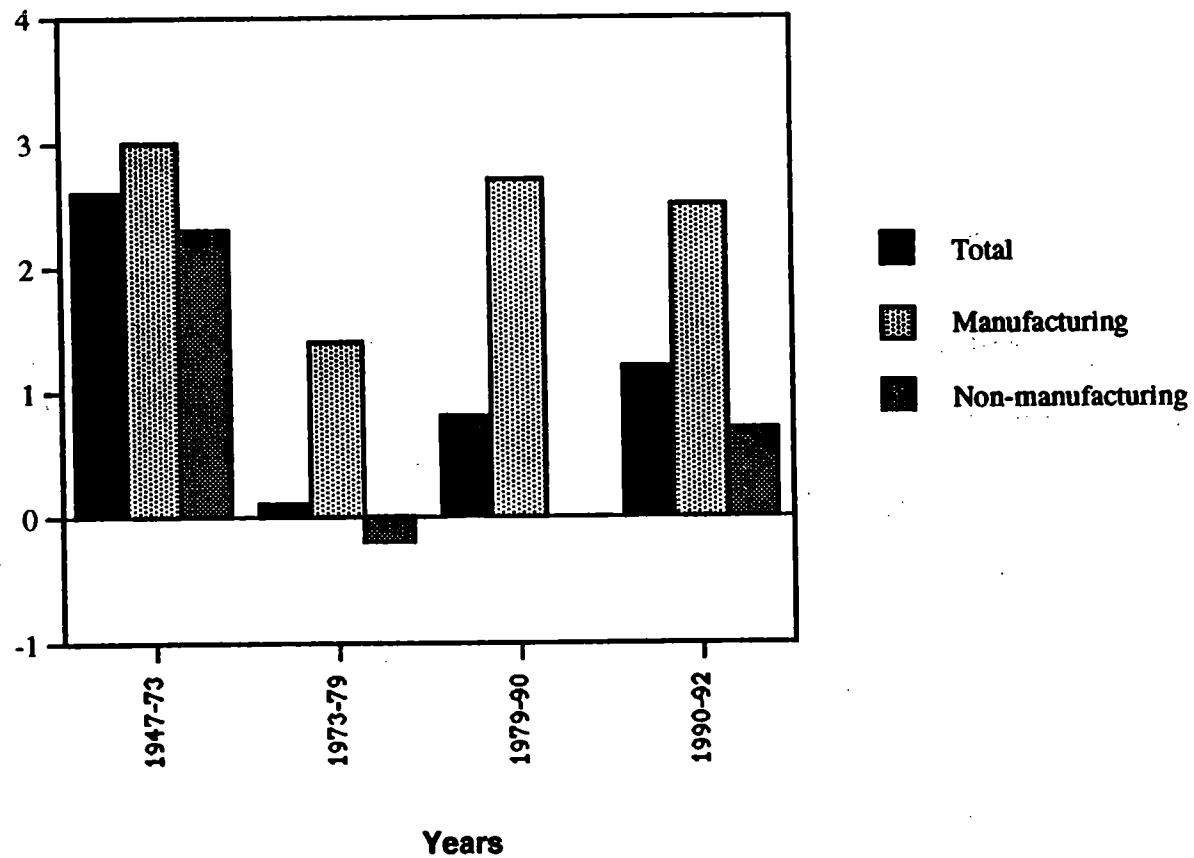
Figure 12
Employment by Industry
(1900-1990)



Source: Statistical History of the United States from Colonial Times. Statistical Abstract of the United States; Employment and Earnings; Monthly Labor Review.

Figure 13

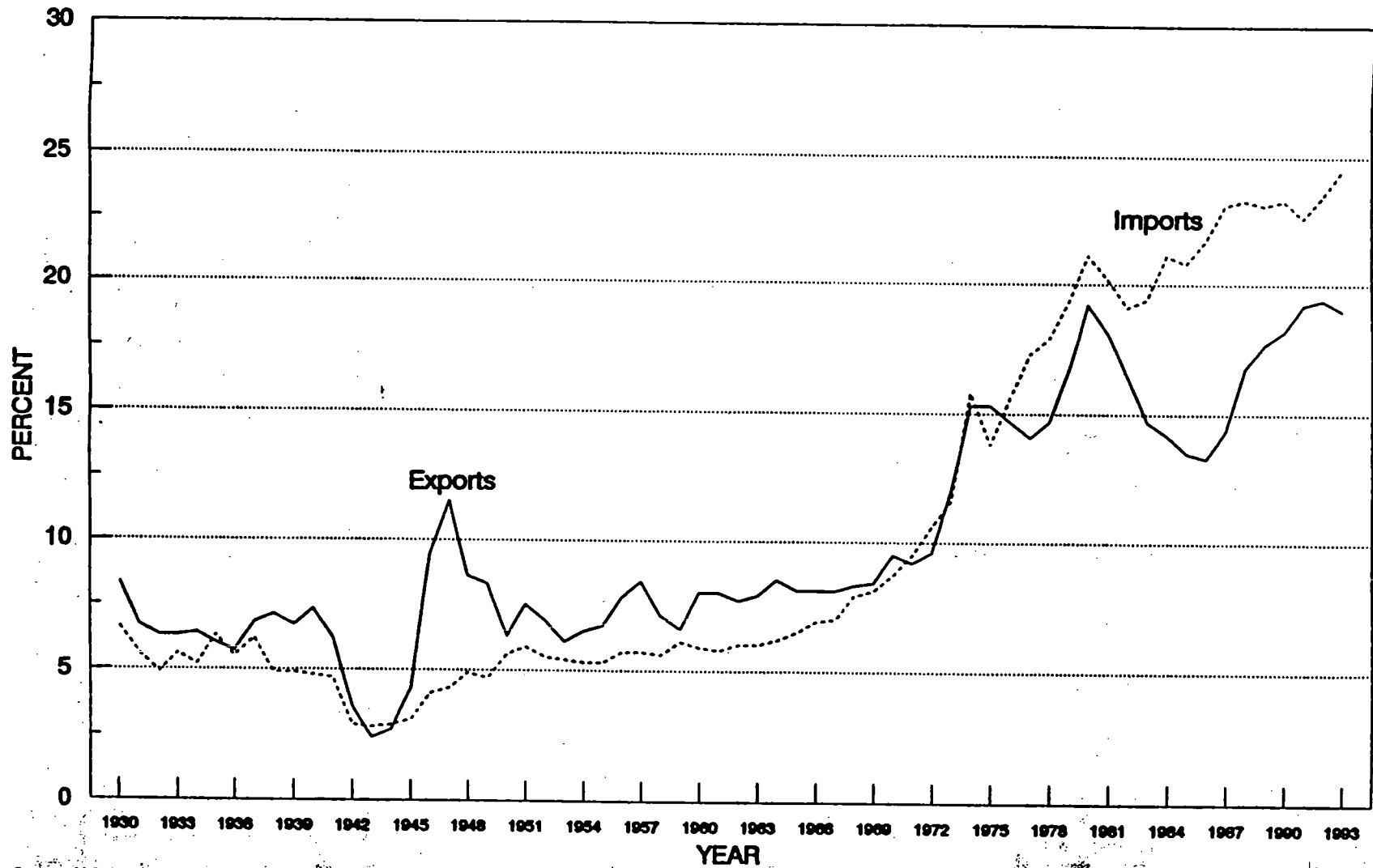
**Average Annual Growth Rates
for non-farm Labor
Productivity (percent per year)**



(Source: Frank Levy "Education and Skills for the U.S. Workforce." Based on Bureau of Labor
Statistic data and author's estimates)

Figure 14

Merchandise Exports and Imports As A Share of Total Goods Production



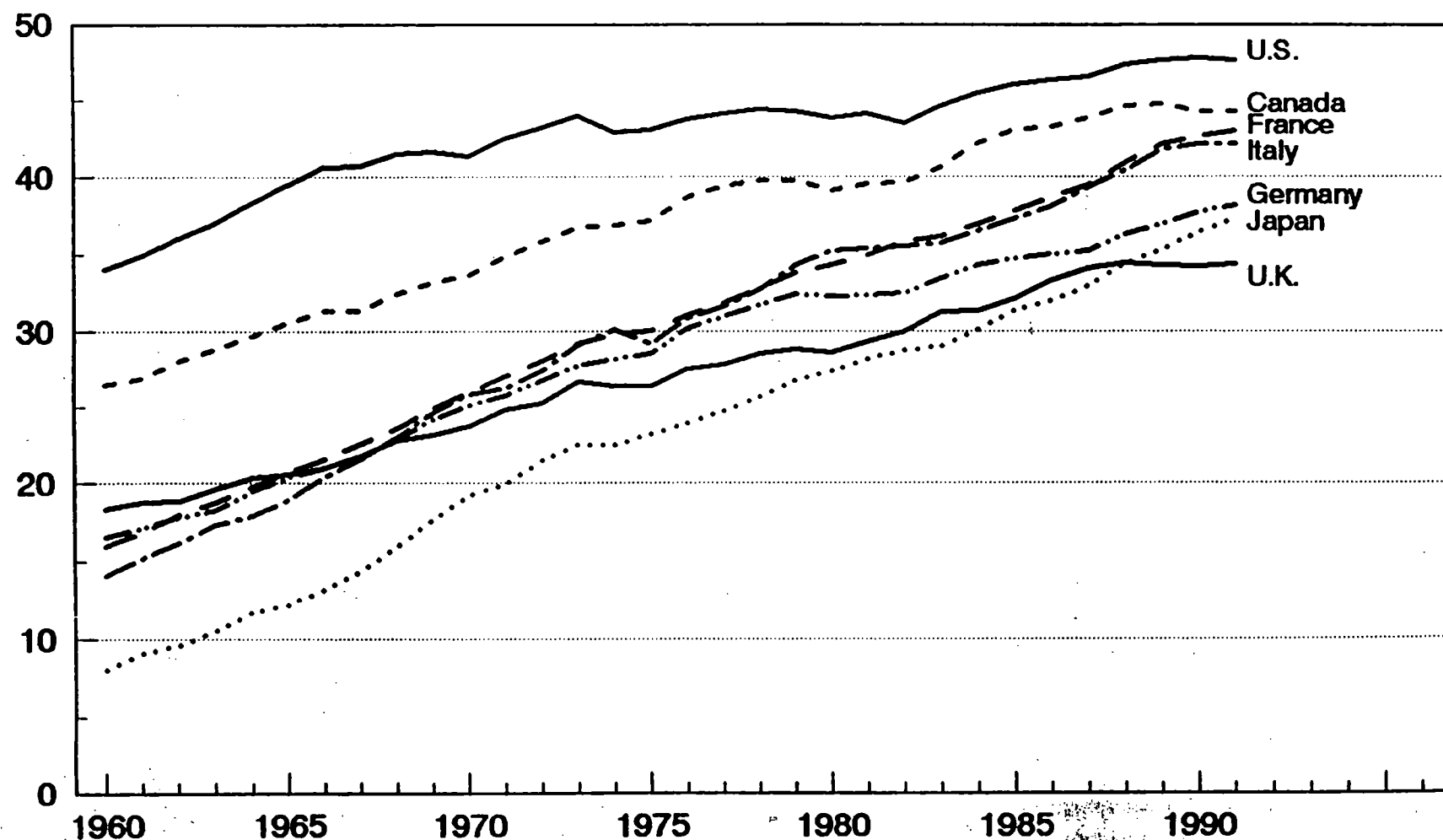
Source: U.S. Department of Commerce

Figure 15

Real GDP Per Employed Person

1985 Purchasing Power Parity

Thousands of 1991 U.S. Dollars



Source: Bureau of Labor Statistics

Figure 16

**Labor productivity growth in the nonfarm business sector,
selected periods**

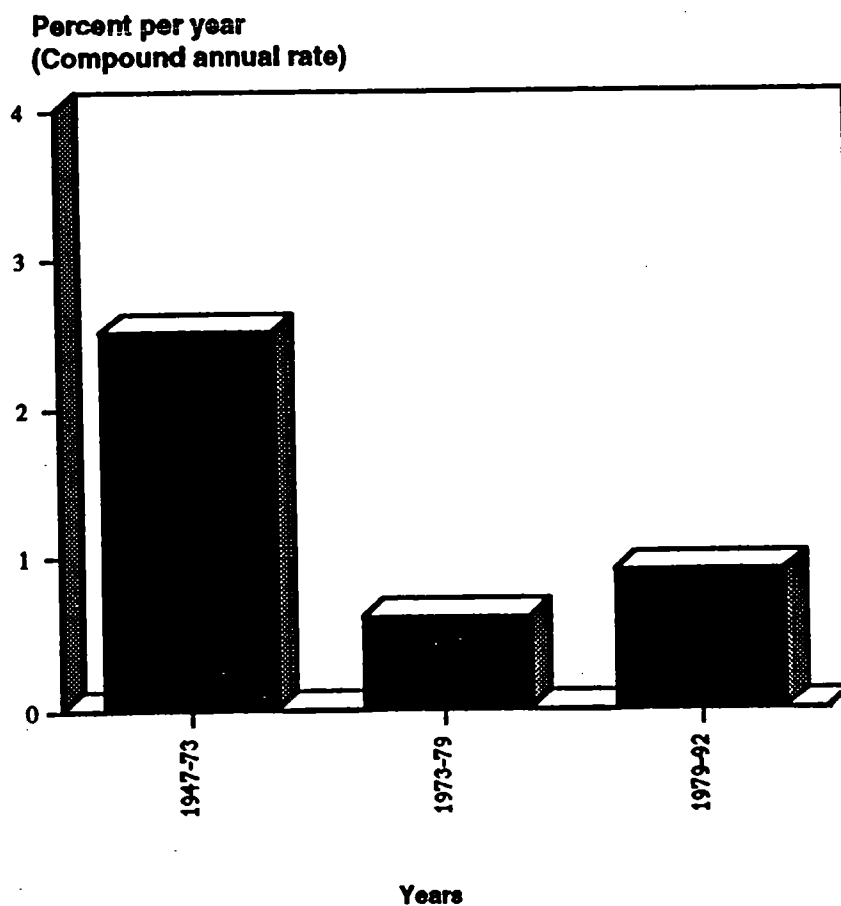
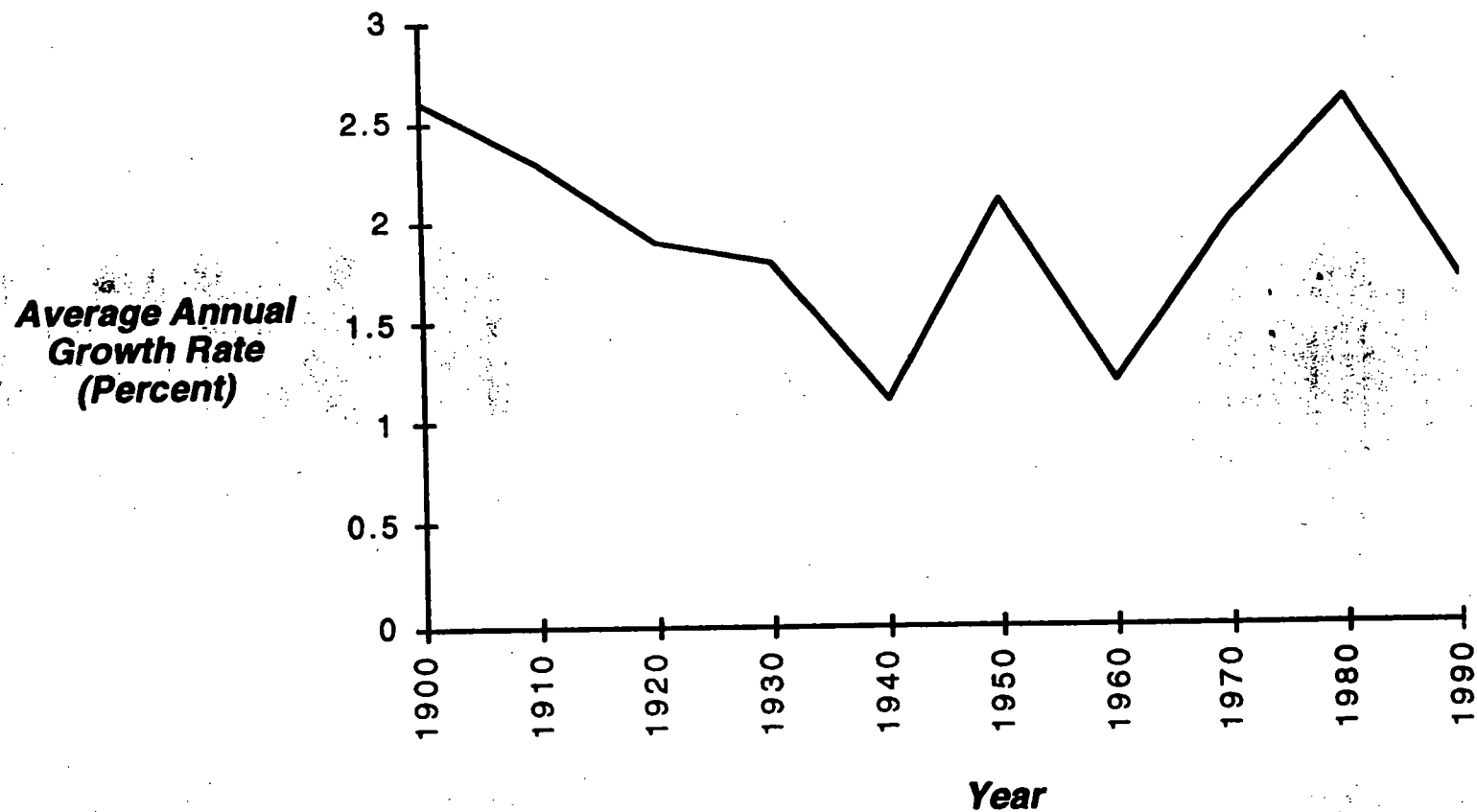


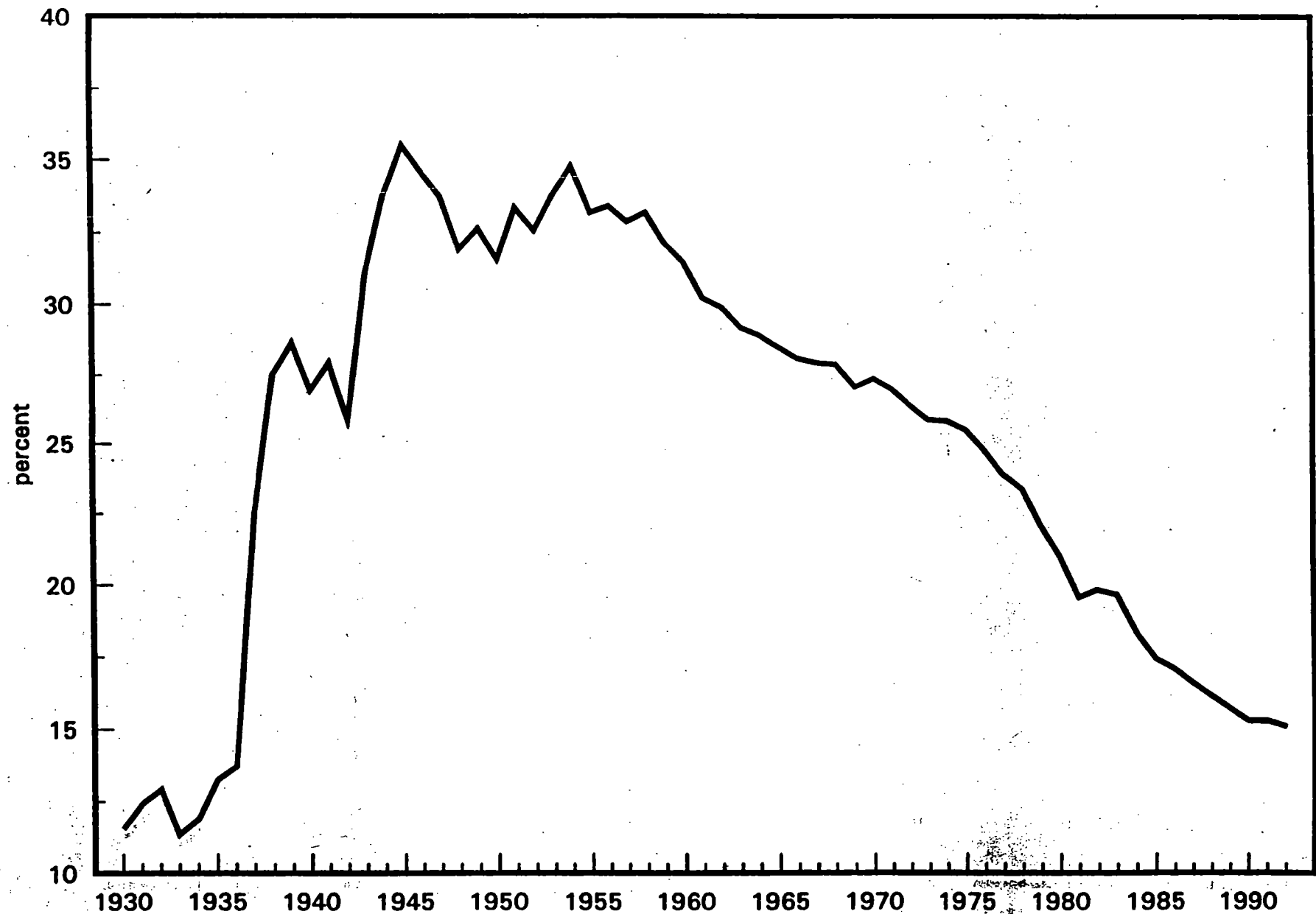
Figure 17
Growth Rate of Labor Force
(1900-1990)



Source: Statistical Abstract of the United States; Statistical History of the United States from Colonial Times

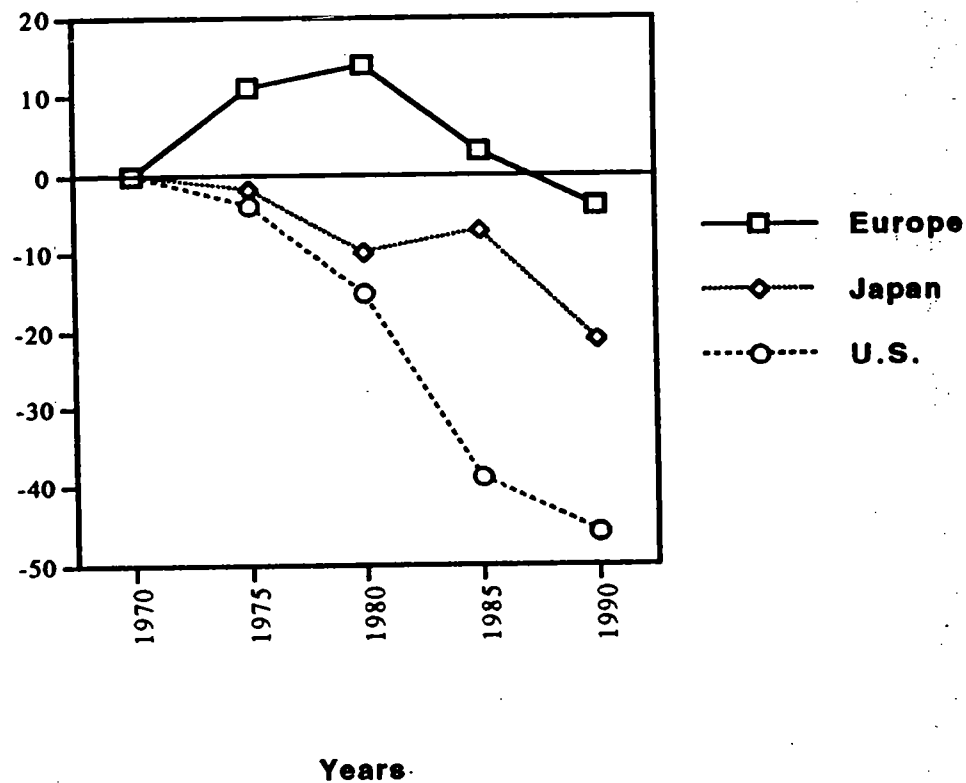
Figure 18

Union Membership as Percent of Total Nonfarm Employment



Sources: Bureau of Labor Statistics and Bureau of National Affairs

Figure 19. Trends in Unionization, 1970 to 1990: Europe, Japan, and the United States



Source: OECD, 1991; OECD, 1992c; U.S. Bureau of Labor Statistics, union membership data gathered from various sources; 1992; The Economist, Book of Vital World Statistics (NY: Times Books (Random House), 1990.

Figure 20

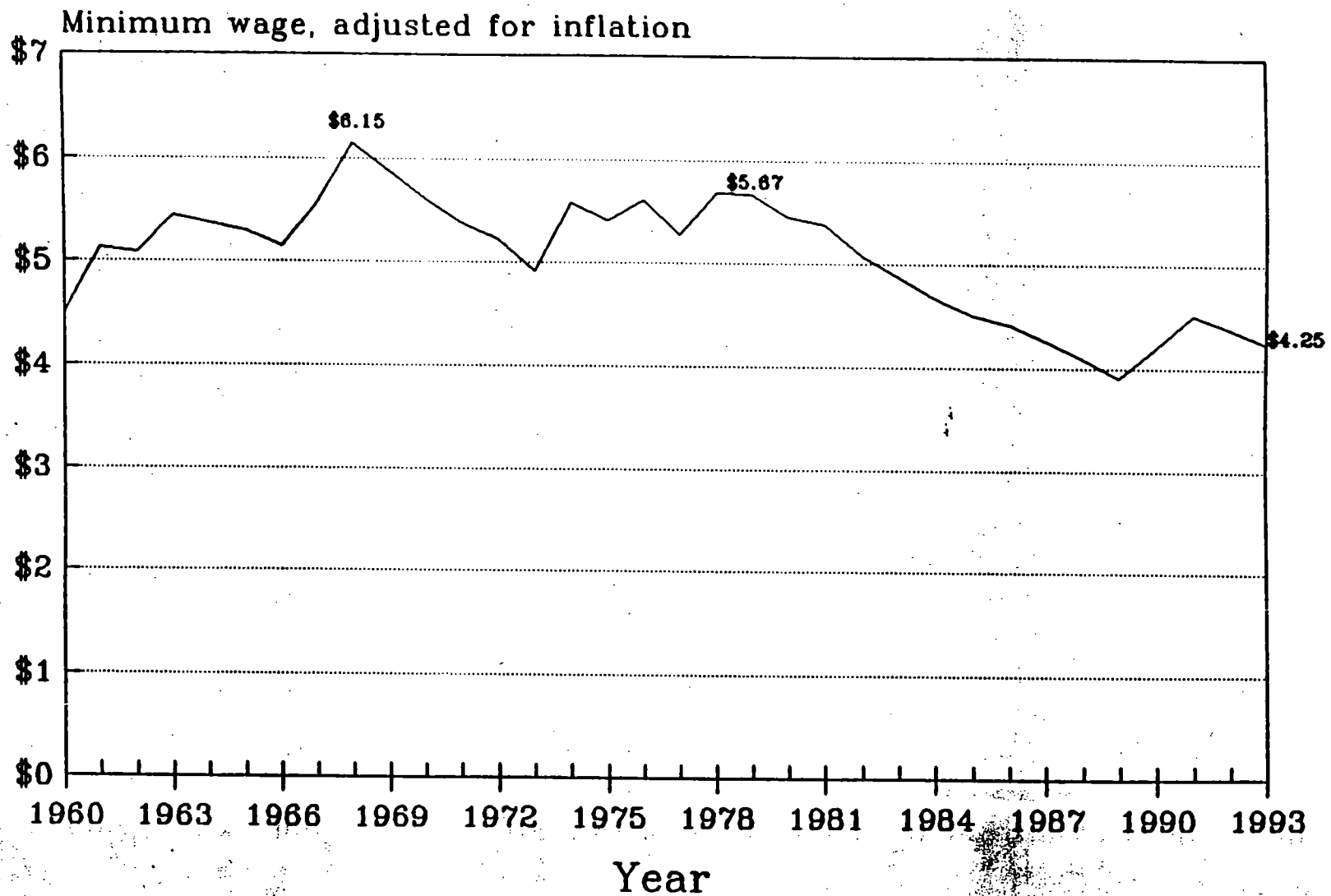
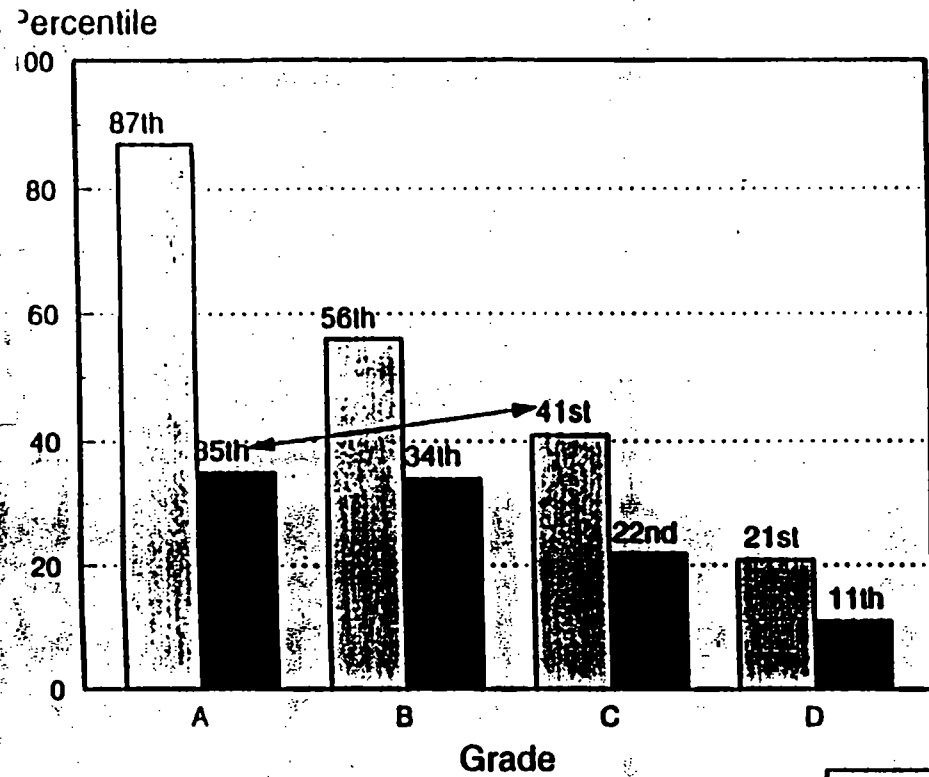


Figure in 1993 dollars

Figure 21-22
Low- and High-Poverty Schools, 1991

Math, Seventh Grade



Reading, Seventh Grade

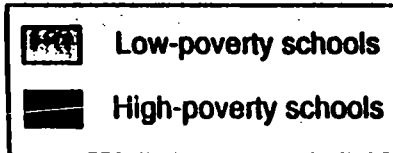
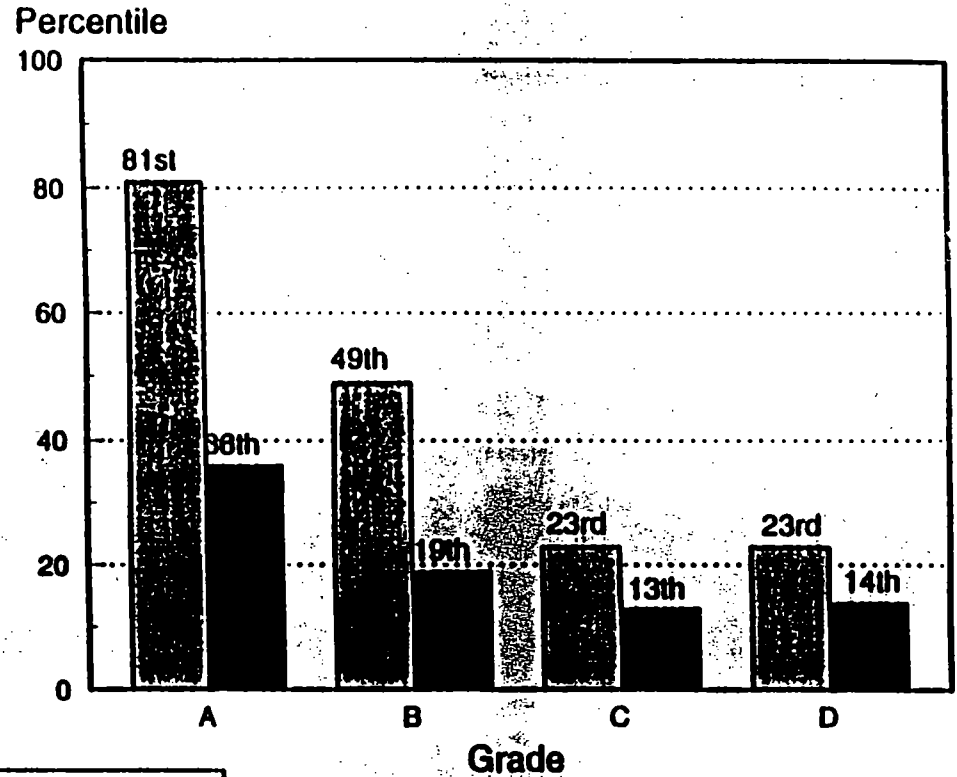
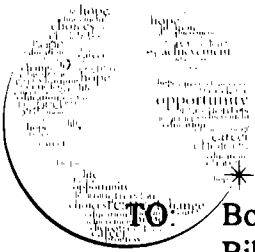


Exhibit reads: An A student in a high-poverty school would be about a C student in a low-poverty school when measured against standardized test scores.

Source: Prospects (Abt Associates, 1993).



L I T E R A C Y

IT'S A WHOLE NEW WORLD

TO: Bob Shireman

Bill Kincaid

FR: Carolyn Staley, Deputy Director

Subject: Follow-up on our discussion about a presidential announcement on National Literacy Day, September 8, which is proposed to occur at the White House with remarks by the President relating adults to America Reads and connecting to the release of the report: "State of American Literacy"

It was very good to speak with you yesterday following the America Reads plenary. As you requested, I have attached the research report by Steve Rader on the state and Congressional district report of literacy profiles, based on the census and 1993 National Adult Literacy Survey. The report is currently being reviewed and prepared for presentation to policymakers and the press by our campaign contractor. The report will be released on September 8 along with the second phase of campaign messages aimed at increasing awareness about the link between literacy and policy.

The opportunity and challenge we are facing is that we have submitted a scheduling request for the President to speak at a White House event on September 8, a date annually observed as Literacy Day. We have been advised that the request is being viewed optimistically, but needs clarification about what we are asking the President to announce in conjunction with the day's event. We appreciate your willingness to help us seize this challenge--a chance for both adult literacy to gain awareness and support, and for the President to communicate the administration's view that adult literacy is critical to America's promise.

September 8 is being planned by a very large group of literacy programs and organizations who see this year as a key opportunity for literacy groups to come together with a unified message. NIFL is the planning coordinator and joining us are DoEd initiatives including America Reads, America Goes Back to School, Read*Write Now* as well as the Office of Vocational and Adult Education; HHS and Labor department representatives, American Library Association, Library of Congress, AFL-CIO workplace literacy education, Reading is Fundamental, PBS, and others. Literacy is enjoying a major resurgence as an issue due to a number of factors including the President's announcement of America Reads, the National Institute for Literacy's national literacy public awareness campaign launched in March 97, and Miss America Tara Holland's naming of literacy as her focus issue for the year. Many corporations and national non-profits have made literacy a priority. Literacy is also getting attention within the context of welfare reform and the limitations imposed on education and training for low literate adults.

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To help catch you up on some ideas for presidential announcements which have already been floated and might stimulate further thinking, here are some notes from electronic discussions on this issue:

(Carolyn): The discussion on how to give the President an announcement on Sept. 8 Literacy Day "State of American Literacy" event is a unique opportunity. One idea is to use this day to announce the President's America Reads initiative for adults which Gene Sperling, Alice and I discussed following the December radio address announcing the America Reads work study policy. The new program to increase literacy opportunities for adults could be called "America Reads for a Lifetime" and would allow tutors (except in work study) in the America Reads program to work with adults/families as well as children.

We wonder if there might be some executive order the President could issue--as with the work study program. I also learned that the Hope Scholarships might possibly be accessed by adults who don't have a high school credential. We had assumed that this grade 13-14 program required a grade 12 to be eligible and feared it gave the appearance that the WH was not connecting to the millions of adults with low literacy; yet the President needs a way to demonstrate the administration's concerns that every adult has the knowledge and skills to be equipped in their roles as workers and family members and citizens. The President believes this and his writings, speeches and policies as governor indicate the same.

I know that Carol Rasco and America Reads communications director Diane Jones are looking at some ideas Diane has developed about how to hook our report to a presidential challenge for states to increase literacy levels by ____%.

We are all aware that we need to close this gap with a meaningful announcement that could cement the Administration's commitment to adults. The overwhelming number of comments in the final plenary session at yesterday's America Reads meeting focused on the need for America Reads to include literacy skills for adults.

Reactions:

1. (Kerri Morgan) One thing you might suggest (and something they usually like to do) is that IF the President announces an initiative such as "America Reads for a Lifetime" and issues a challenge to states to increase literacy levels by x%, he could also announce that he is appointing "State Task Forces" to address the problem. Of course, they could use the network NIFL has created for the campaign. And, best of all, they could then invite the "new" State Task Force members to the White House ceremony. Maybe each state could bring one or two adult learners as well

2. (Alice Johnson) I like the idea of him appointing state task forces -- and using the ones already in place for our campaign!

In terms of an executive order, in order to generate participation of college students in America Reads, the President issued an executive order that waived the 25 percent match colleges pay for their work study students for the students who tutor as their work study project. Over 500 colleges have signed on so far. I am trying to think of something parallel he could do for adults -- maybe something along the lines of expanding Hope Scholarships for not just college, but also for GED's, or a tax credit for businesses that allow employees upgrade their skills on company time...It would be nice if it could be something by order -- not just a new proposal -- so we wouldn't have to deal with Congressional approval.

We are eager to get your thoughts on this policy announcement opportunity. Let us know how we can assist. I've talked with Andy Hartman, director, about this and he's excited about the chance to do something substantive for adults and is giving the executive order idea some thought.

I'm in the office the remainder of the week, and out Aug. 6-10, but Alice and Andy expect to be in all next week. We look forward to your comments.

Thanks in advance!



*Thanks for your
help!*

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**SYNTHETIC ESTIMATES OF LITERACY PROFICIENCY FOR SMALL
CENSUS AREAS**

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INTRODUCTION

Adult literacy is increasingly seen as indispensable to the social and economic health of the United States. The *Goals 2000: Educate America* legislation (P.L.103-227) recognizes the importance of adult literacy as one of eight national education goals. Goal 6 states that "every adult will be literate and have the skills to compete in the global economy and participate in American democracy." The National Education Goals Panel, authorized by this legislation to monitor progress toward the goals, has adopted a specific set of adult literacy proficiency measures as the yardstick by which to judge progress toward meeting the adult literacy and lifelong learning goal (National Education Goals Panel, 1993a). These measures, developed by the Educational Testing Service (ETS), have been used in a number of state, national and international surveys of adult literacy over the past decade. In 1992, the measures were used to assess the literacy capabilities of the nation's adults age 16 and over. This National Adult Literacy Survey (NALS), carried out by ETS under contract to the National Center for Education Statistics, profiled the literacy abilities of the nation's adults on three scales: Prose, Document and Quantitative literacy (Kirsch, Jungeblut, Jenkins & Kolstad, 1993).

NALS surveyed a random sample of nearly 25,000 adults age 16 and over across the country.³ Individuals were interviewed in their homes, providing rich background information about demographic characteristics, languages spoken, educational and occupational experiences, and their perceptions of and uses of literacy. The NALS also directly assessed respondents' abilities to perform everyday literacy tasks such as interpreting graphs and charts, extracting needed information from prose materials, completing forms, and so forth. Performance of these simulated tasks, which generally required constructed as opposed to multiple choice responses, was used to estimate individuals' Prose, Document and Quantitative proficiencies, each reported on a 0 to 500 scale. Five performance levels were designated on each scale: Level 1 (225 and under), Level 2 (226-275), Level 3 (276-325), Level 4 (326-375) and Level 5 (above 375). (Kirsch et al, 1993).

The National Education Goals Panel adopted these three proficiency scales - Prose, Document and Quantitative - as the indicators of progress toward meeting Goal 6. Both the mean proficiency of the adult population and the percentage performing at the two lowest levels are seen as useful indicators. Individual states have been utilizing these measures to monitor and report their own progress toward meeting Goal 6 (National Education Goals Panel, 1993b).

To obtain useful information about the literacy abilities and needs of their adult populations, a number of states contracted with ETS to conduct concurrent state adult literacy surveys (SALS) as part of the NALS.⁴ A few other states have conducted related efforts.⁵ To assist states that did not have SALS or SALS-like surveys, the Office of Vocational and Adult Education contracted for the development of techniques for estimating adult literacy proficiencies from 1990 U.S. Census data (Reder, 1994b).

Those methods provided reasonably accurate estimates of state-level literacy proficiencies.

Although these synthetic state-level estimates were useful for characterizing overall state needs and progress in relation to adult literacy goals, state and local programs have found themselves in need of more locally focused data as decision-making, priority-setting and allocation of limited programmatic resources are increasingly taking place at the state and local levels. The present work is thus the outgrowth of the increasing demand for information about adult literacy proficiencies and needs in more geographically focused areas. Techniques are developed and implemented in this paper which produce relatively accurate estimates of adult literacy proficiency at the level of individual counties, congressional districts, and cities, towns and places having at least 10,000 inhabitants.

METHOD

Approach

The approach used here is similar to that used in the earlier synthetic estimation work of Reder (1994b). The previous work involved using regression models to predict *individual* NALS literacy proficiencies from individual background variables that are closely aligned with the 1990 U.S. Census long-form questions. These regression models were then applied to the 5% sample of Public Use Microdata Samples (PUMS) from the 1990 U.S. Census. The individual records in PUMS are sampled at random from within Public Use Microdata Areas (PUMAs), and so the literacy predictions that can be generated by applying the regression models to the PUMS records can be aggregated at the PUMA area. Unfortunately, the PUMA areas for which such synthetic literacy estimates can be generated are often not well aligned with the service areas or geographical units of interest to adult literacy programs.

The present approach utilizes a related but variant technique to produce synthetic estimates for a wider variety of Census areas. Rather than developing regression models that predict *individual* literacy proficiencies from individual PUMS records, the present approach develops statistical models which predict the literacy proficiencies of *populations* of individuals from their *aggregate* characteristics (i.e., from their collective profile in terms of demographics, educational experiences, occupations, etc.). Such models are then applied to published summary tabulations of long-form Census data for a variety of Census areas, generating estimates of literacy proficiencies for those areas.

To develop such models, individual records in the NALS data set are first aggregated into counties (the only local geographic identifiers available in the NALS records) whose aggregate literacy characteristics can be modeled in relation to background variables that can be closely aligned with 1990 U.S. Census long-form variables. The regression models can then be utilized to predict literacy proficiencies for other aggregates in the summary Census tabulations.

Details of these methods, of their validation, and of the results they produce are described below.

Data Sources

Two data sets were used to develop the synthetic estimates, one from the National Adult Literacy Survey (NALS), and one from the 1990 U.S. Census. A data tape for the NALS, provided by the Educational Testing Service, was utilized to develop regression models for predicting county-level NALS literacy proficiencies from aggregated responses to NALS background questionnaires. These regression models were then applied to summary tables of corresponding variables in the 1990 U.S. Census (long form) to generate predicted values, standard errors and confidence intervals for literacy proficiencies at the county, town/city and congressional district levels. The Census data used were extracted from the CD-ROM versions of Summary Tape File 3C for counties, cities and towns and Summary Tape File 3D for the congressional districts of the 103rd Congress.

Variable Alignment

The valid application of regression models predicting assessed NALS literacy proficiencies to predicting literacy proficiencies from Census data requires the use of a set of common predictor variables that are closely aligned across the two data sets. By design, the NALS included numerous variables common to the long-form of the 1990 Census. The information the NALS background and Census long-form questionnaires collect in common describe such demographic characteristics as age, gender, place of birth, and educational attainment. Each questionnaire further collected information about labor force participation, employment and occupational status, income from various sources, languages spoken in the home (and ratings of oral English proficiency if other languages are spoken), marital status, household composition, and so forth.

Despite this rich potential overlap of information between NALS and long-form Census, there are several factors which limit the variables that can be closely aligned between the two data sets. Some information common to the two data sets cannot be used because the pertinent questions were not asked in a parallel fashion or recorded in terms of sufficiently similar response alternatives across the two data sets. Marital status, for example, cannot be used as a common predictor for this reason. Household poverty status, as another example, is not reported comparably in the two studies. Household-level as opposed to individual-level variables are generally difficult to align because of definitional and procedural differences between the Census and NALS.

Some variables could be made parallel across the two data sets by recoding them according to a common scale or set of response alternatives. *Age*, for example, is recorded as a continuous variable in NALS, and can thus be categorized into subranges that match the age categories in the summary Census tables. Another example is

provided by the *recent immigrant* variable, which was recoded so that responses on both NALS and long-form Census questionnaires could be aligned; a person not born in the United States was defined as being a recent immigrant if he or she had immigrated to the U.S. within a 5 year period preceding the NALS interview or 1990 Census-taking; the 5 year cut off point was one of a limited number of alignment points between the alternative response categories in the 1990 Census and NALS. Educational attainment, as a third example, was recoded into a set of discrete response categories that could be aligned. Some distinctions made in one questionnaire were not made in the other. For example, distinctions among advanced degrees (e.g., master's level versus doctoral level) were made in the Census but not in the NALS, whereas distinctions among small numbers of years of education are made in the NALS but not in the Census. The GED is distinguished from a high school diploma in the NALS but not in the 1990 Census. A set of six categories of educational attainment was constructed into which all responses on both NALS and Census could be unambiguously and uniquely mapped.

There are other limitations on aligning NALS and STF variables. Because the NALS includes only individuals age 16 and above, for example, some Census variables could not be closely aligned because they are tabulated in the STF files only for a different age range. For example, place-of-birth data in the STF files is tabulated for all persons regardless of age, whereas the same information in NALS is available only for persons 16 and above. This could potentially bias the alignment of this variable across geographical aggregates (e.g., 89.4 % of the NALS population - age 16 and above - were born in the United States, compared to 90.7 % of the cradle-to-grave Census population). Another subtle population difference between NALS and Census is that for many variables, STF tabulations include military, institutionalized, and "group quarters" individuals whereas NALS includes only household residents and not these other subpopulations. Other relatively small population differences are differences in whether college students living in dormitories are included and whether adjustments have been made for apparent undercount in the 1990 U.S. Census (Census of Population and Housing, 1992; Reder, 1994b).

Despite these and other relatively minor limitations identified in Table 1, the overall alignment of the two data sets proved satisfactory as evidenced by the modeling and validation studies presented below. Details of the common variables, their coding and their alignments across the two studies are presented in Table 1. Notice that these aligned model variables are organized as sets of proportions that sum to one; the variables that are grouped together in this way are boxed together by heavier horizontal lines in the table. For example, there are seven educational attainment variables, each measured as a proportion of the population that has a certain level of educational attainment (less than high school, some high school, ..., graduate school). The variables listed in each set are non-overlapping and their corresponding proportions always sum to one.

TABLE 1 - ALIGNED MODEL VARIABLES

PREDICTOR	NALS VARIABLE	STF3 TABLE(S)	COMMON CODING OVER POPULATION AGGREGATES
Educ less than high school	BLB0101	P57	Proportion of persons age 18 and above with less than high school education
Educ-some high school	BLB0101	P57	Proportion of persons age 18 and above with some high school education
Educ-high school diploma/GED	BLB0101	P57	Proportion of persons age 18 and above with a high school diploma, GED or equivalent
Educ-some college	BLB0101	P57	Proportion of persons age 18 and above with some college education (no degree)
Educ-2 year college degree	BLB0101	P57	Proportion of persons age 18 and above with a 2 year college degree
Educ-4 year college degree	BLB0101	P57	Proportion of persons age 18 and above with a 4 year college degree
Educ-graduate school	BLB0101	P57	Proportion of persons age 18 and above with graduate/professional school education
White	BNF0901	P14A,B	Proportion of persons age 16 and above identifying race as White
Black	BNF0901	P14C,D	Proportion of persons age 16 and above identifying race as Black
Native American	BNF0901	P14E,F	Proportion of persons age 16 and above identifying race Native American
Asian/Pacific Islander	BNF0901	P14G,H	Proportion of persons age 16 and above identifying race as Asian or Pacific Islander
Other race	BNF0901	P14I, J	Proportion of persons age 16 and above identifying race as "other"
Age 16-24	DAGE	P13	Proportion of persons age 16 and above of age 16-24
Age 25-34	DAGE	P13	Proportion of persons age 16 and above of age 25-34
Age 35-44	DAGE	P13	Proportion of persons age 16 and above of age 35-44
Age 45-54	DAGE	P13	Proportion of persons age 16 and above of age 45-54
Age 55-64	DAGE	P13	Proportion of persons age 16 and above of age 55-64
Age 65 & above	DAGE	P13	Proportion of persons age 16 and above of age 65 & above
Hispanic	BG10701	P15A,B	Proportion of persons age 16 and above of Hispanic origin
Not Hispanic	BG10701	P15A,B	Proportion of persons age 16 and above not of Hispanic origin
Work disability	BLB1301	P66	Prop. of civilian noninstitutionalized pop. age 16& up with a work disability
No work disability	BLB1301	P66	Prop. of civilian noninstitutionalized pop. age 16& up without a work disability
Speaks English very well	DLANGBS BLA1501	P28	Proportion of persons age 18 and above who spoke language other than English before starting school who now speak English "very well"
Speaks English well	"	P28	" " " ... who now speak English "well"
Speaks English not well/not at all	"	P28	" " " ... who now speak English "not well" or "not at all"

TABLE 1 - ALIGNED MODEL VARIABLES (Continued)

PREDICTOR	NALS VARIABLE	STF3 TABLE(S)	COMMON CODING OVER POPULATION AGGREGATES
Recent immigrant	BNA0201	P36	Proportion of persons who immigrated to United States within preceding 5 years
Not recent immigrant	BNA0201	P36	Proportion of persons who did not immigrate to United States within preceding 5 years
U.S.-born	BLA0101	P42	Proportion of persons born in the United States
Not U.S.-born	BLA0101	P42	Proportion of persons born outside of in the United States
Did not work previous year	DWKSWRK	P76	Proportion of persons age 16 and above who did not work in previous year
Worked 1-13 weeks previous year	DWKSWRK	P76	Proportion of persons age 16 and above who worked 1-13 weeks during previous year
Worked 14-26 weeks previous year	DWKSWRK	P76	Proportion of persons age 16 and above who worked 14-26 weeks during previous year
Worked 27-39 weeks previous year	DWKSWRK	P76	Proportion of persons age 16 and above who worked 27-39 weeks during previous year
Worked 40-52 weeks previous year	DWKSWRK	P76	Proportion of persons age 16 and above who worked 40-52 weeks during previous year
Laborer	BLD1001	P78	Proportion of employed persons 16 and above in occupational class
Service	BLD1001	P78	Proportion of employed persons 16 and above in occupational class
Sales/administrative support	BLD1001	P78	Proportion of employed persons 16 and above in occupational class
Professional/technical/managerial	BLD1001	P78	Proportion of employed persons 16 and above in occupational class
Not in labor force	BLD01xx BD03901	P70	Proportion of persons not currently in labor force
Unemployed	" "	P70	Proportion of persons not currently working and looking for work
Employed	" "	P70	Proportion of persons currently employed (part-time or full-time)
Family income 0 - \$4,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$ 5,000 - \$9,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$10,000 - \$14,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$15,000 - \$19,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$20,000 - \$29,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$30,000 - \$39,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$40,000 - \$49,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$50,000 - \$74,999	BNF0701,02	P107	Proportion of families with previous year's income in specified range
Family income \$75,000 & above	BNF0701,02	P107	Proportion of families with previous year's income in specified range

TABLE 1 - ALIGNED MODEL VARIABLES (Continued)

PREDICTOR	NALS VARIABLE	STF3 TABLE(S)	COMMON CODING OVER POPULATION AGGREGATES
Female	BG12401	P14A .. J	Proportion of persons age 16 and above who are female
Male	BG12401	P14A .. J	Proportion of persons age 16 and above who are male
Household size = 1	HHSIZE	P16	Proportion of households of given size
Household size = 2	HHSIZE	P16	Proportion of households of given size
Household size = 3	HHSIZE	P16	Proportion of households of given size
Household size = 4	HHSIZE	P16	Proportion of households of given size
Household size = 5	HHSIZE	P16	Proportion of households of given size
Household size = 6	HHSIZE	P16	Proportion of households of given size
Household size >= 7	HHSIZE	P16	Proportion of households of given size
Northeast	CENREG	REG	1 if in Northeast Census region else 0
Midwest	CENREG	REG	1 if in Midwest Census region else 0
South	CENREG	REG	1 if in South Census region else 0
West	CENREG	REG	1 if in West Census region else 0

County Aggregation

Standard federal state and county identifiers are provided in the NALS data set along with population sampling weights for each person in the survey sample. The sampling design of NALS sampled persons in households at geographically random points within a selected hierarchy of geographical strata (Kirsch et al, forthcoming).⁶ For analytical purposes, the 24,944 NALS household survey respondents were aggregated into 417 unique counties; the number of survey respondents per county ranged between 3 and 902.

NALS data were aggregated over these 417 counties, including the predictor variables described in Table 1 and the mean values of the dependent variables of interest for this study: the mean combined NALS literacy proficiency; the proportion of individuals having combined literacy proficiency at Level 1 (i.e., 225 and below); and the proportion with combined proficiency at either Level 1 or 2 (i.e., 275 and below).⁷ NALS case weights were used in calculating all aggregated values. This aggregated data file, now with 417 cases in it, one per county, was the analytical data set for the regression modeling described below.

Regression Modeling

Multiple linear regression techniques were used to predict the mean literacy proficiency for the county aggregates, the proportion of county scores at Level 1, and the proportion of county scores at Level 1 or 2. Separate regression models were developed for each of these dependent variables. Preliminary analyses indicated that better fitting and more robust regression models were obtained when county aggregates based on relatively small subsamples of respondents were excluded from the analyses. This should not be particularly surprising, since there is much more variability in the mean values of both independent and dependent variables aggregated over small subsamples. Analysis of regression residuals indicated that a reasonable threshold was 50 cases or more per county. Therefore, the models were developed and fitted to counties having 50 or more respondents in the survey. Of the 417 counties in the aggregate file, 178 met this criterion, whereas 239 had fewer than 50 cases and were excluded from the modeling process.

Weighted least squares (WLS) regression models yielded considerably better fits than ordinary least squares (OLS) models. Weighted least squares techniques are appropriate in cases where the dependent variable is heteroscedastic, i.e., does not have uniform variance at each point. Because the aggregates -- which were the units of analysis for these models -- were themselves based on varying numbers of observations, it seemed reasonable that the variance of the dependent variable being predicted would vary with the number of cases upon which it is based. Reasonable approximations to these variances would be proportional to $1/N$ for the mean literacy (where N is the number of cases in the given county subsample) and to $p(1-p)/N$ for the fraction of individuals with

scores below a certain value, where p is the population proportion, estimated by the observed fraction in the sample of size N . If these formulas are reasonable approximations (up to a multiplicative constant) of the variances of the dependent variables, then the appropriate WLS weights should be inversely proportional to the variances, i.e., a weight proportional to N for the mean literacy equation and to $p(1-p)/N$ for the fraction of cases below some threshold literacy value, where N is the county subsample size and p is the sample proportion of cases below the target literacy value.

Using these regression weights, highly predictive equations for the dependent variables were identified using common WLS regression techniques.⁸ A number of transformations were applied to the dependent variables that were proportions, i.e., the proportion at Level 1 and the proportion at Level 1 or 2. Logit, probit, arcsin and square root transformations were applied to these dependent variables in an attempt to normalize their distributions and improve the fit of the regression models. But the best fitting models for these dependent variables turned out to be ones which directly predicted the simple proportions rather than some transformation of the proportions.

RESULTS

The variables appearing in the final (i.e., best-fitting) WLS regression equations are indicated in Table 2. Significant predictors are marked with an "x" in Table 2 in the column(s) corresponding to the equation(s) in which they play a statistically significant role. For example, each variable representing a different level of educational attainment is a significant predictor of mean proficiency. Notice that within each set of related variables, one (e.g., educ less than high school) is preceded by an "*" and is followed by a shaded row; this indicates that the variable was not included in the regressions, since it is a perfect linear combination of the others in the set (variables in a set always sum to 1).

Some variables listed in Table 1 -- age, gender, family income, household size, U.S. birth place -- do not appear in Table 2. That is because those variables are not statistically significant predictors of any of the three dependent variables. The fact that these variables do not appear predictive of the *aggregate* literacy data does *not* necessarily indicate mean they are not important predictors of *individual* literacy. For example, although age is a strong predictor of individual literacy (Kirsch et al, 1993; Reder, 1994b), it does not predict differences here among literacy scores at the county level. Apparently, existing differences in the age distribution of county populations are not strongly associated with differences among those counties in adult literacy.

TABLE 2 - Significant Predictor Variables in the Regression Models

PREDICTOR	MEAN PROFICIENCY	% AT LEVEL 1	% AT LEVEL 1 OR 2
*Educ less than high school			
Educ-some high school	x		x
Educ-high school diploma/GED	x	x	x
Educ-some college	x	x	x
Educ-2 year college degree	x		x
Educ-4 year college degree	x		x
Educ-graduate school	x	x	x
*White			
Black	x	x	x
Native American			
Asian/Pacific Islander			
Other race			
Work disability	x	x	x
*No work disability			
*Speaks English very well			
Speaks English well	x	x	x
Speaks English not well/not at all	x	x	
Recent immigrant	x		x
*Not recent immigrant			
*Did not work previous year			
Worked 1-13 weeks previous year	x		
Worked 14-26 weeks previous year			
Worked 27-39 weeks previous year			
Worked 40-52 weeks previous year			
*Laborer			
Service			
Sales/administrative support	x		
Professional/technical/managerial			
*Not in labor force			
Unemployed		x	
Employed	x	x	x
Northeast			x
Midwest	x		
South			x
*West			

The WLS regression models using these variables fit the county-level data extremely well, as shown in Table 3. For each equation the multiple R, adjusted R², and degrees of

freedom (for the regression and residuals) are shown. With R values over .9 for each of the equations, we see that these regression models account for 81 to 91 % of the variance among counties in the literacy measures, by all accounts an excellent fit. The bottom row of the table displays the *maximum* value assumed by Cook's Distance over the 178 points being fit; Cook's D is an indicator of how influential a given data point is on the regression equation, that is, how much the fit of the equation is influenced by a particular value. The small maximum values shown for Cook's D in the table (Cook's D is not bounded above by 1) is further evidence of a good-fitting model (Cook, 1977).

TABLE 3 - Summary of Fit of Regression Models

	Equation for MEAN PROFICIENCY	Equation for PROPORTION AT LEVEL 1	Equation for PROPORTION AT LEVEL 1 OR 2
Multiple R	.958	.904	.946
Adjusted R ²	.911	.808	.886
Degrees of Freedom	15 & 162	9 & 168	13 & 164
Maximum Cook's D	.099	.263	.078

Table 4 displays the unstandardized regression coefficients for the three equations. The complete regression equation is specified in each column, including the constant term displayed in the bottom row. Numerical coefficients shown in the table occur where the "x"s appeared previously in Table 2. Each is statistically significant (from zero) at the .05 level or better; blank cells in the table indicate that the corresponding coefficient is not statistically different from zero. As noted above, other variables considered in the modeling process that do not appear in the table were not significant predictors of any of the three dependent variables. Notice that negative signs on the coefficients in the mean literacy proficiency equation are associated with lower levels of average literacy, whereas negative coefficients in the other two equations are associated with higher levels of literacy (i.e., with smaller proportions of adults scoring at the lower levels of literacy). The corresponding coefficients for standardized independent variables (β s) are listed in Appendix A.

TABLE 4 - Unstandardized Coefficients for Regression Equations

PREDICTOR	MEAN PROFICIENCY	PROPORTION AT LEVEL 1	PROPORTION AT LEVEL 1 OR 2
*Educ less than high school			
Educ-some high school	79.61		-.382
Educ-high school diploma/GED	104.19	-.226	-.632
Educ-some college	123.99	-.292	-.787
Educ-2 year college degree	135.50		-1.062
Educ-4 year college degree	140.13		-.798
Educ-graduate school	181.57	-.398	-1.268
*White			
Black	-48.63	.330	.335
Native American			
Asian/Pacific Islander			
Other race			
Work disability	-25.36	.297	.267
*No work disability			
*Speaks English very well			
Speaks English well	-65.46	.414	.596
Speaks English not well/not at all	-60.95	.710	
Recent immigrant	-52.60		.487
*Not recent immigrant			
*Did not work previous year			
Worked 1-13 weeks previous year	71.15		
Worked 14-26 weeks previous year			
Worked 27-39 weeks previous year			
Worked 40-52 weeks previous year			
*Laborer			
Service			
Sales/administrative support	17.71	-.228	
Professional/technical/managerial		-.142	
*Not in labor force			
Unemployed		-.222	
Employed	32.45	-.288	-.295
Northeast			.028
Midwest	3.75		
South			.026
*West			
CONSTANT	149.13	.431	1.183

Figures 1, 2 and 3 display the relationships between the predicted and observed values for the three dependent variables. The strong correlation between observed and predicted values is evident in each of these scatterplots.

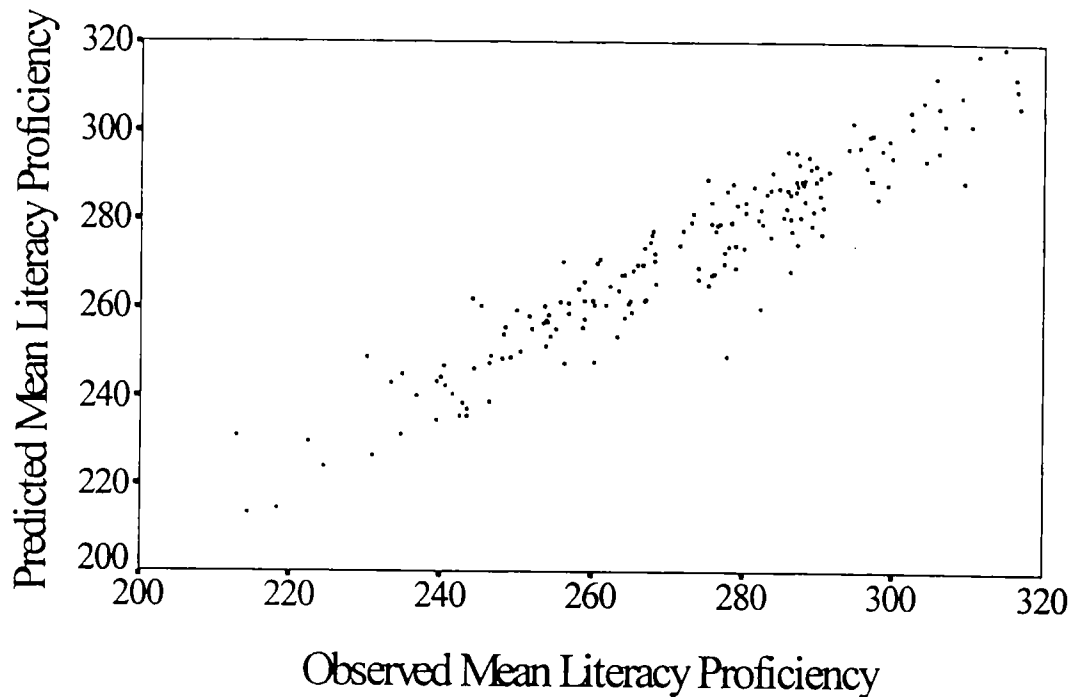


Figure 1. Scatterplot of predicted versus observed mean literacy proficiency for county aggregates.

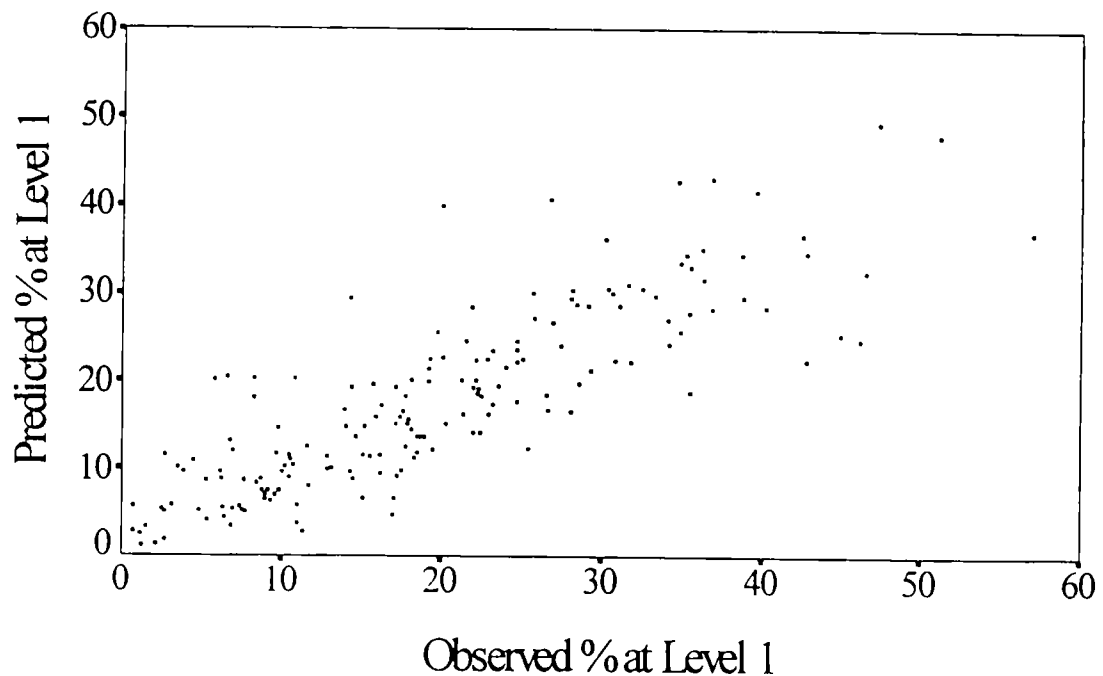


Figure 2. Scatterplot of predicted versus observed percent of adults in counties having combined literacy proficiency in Level 1.

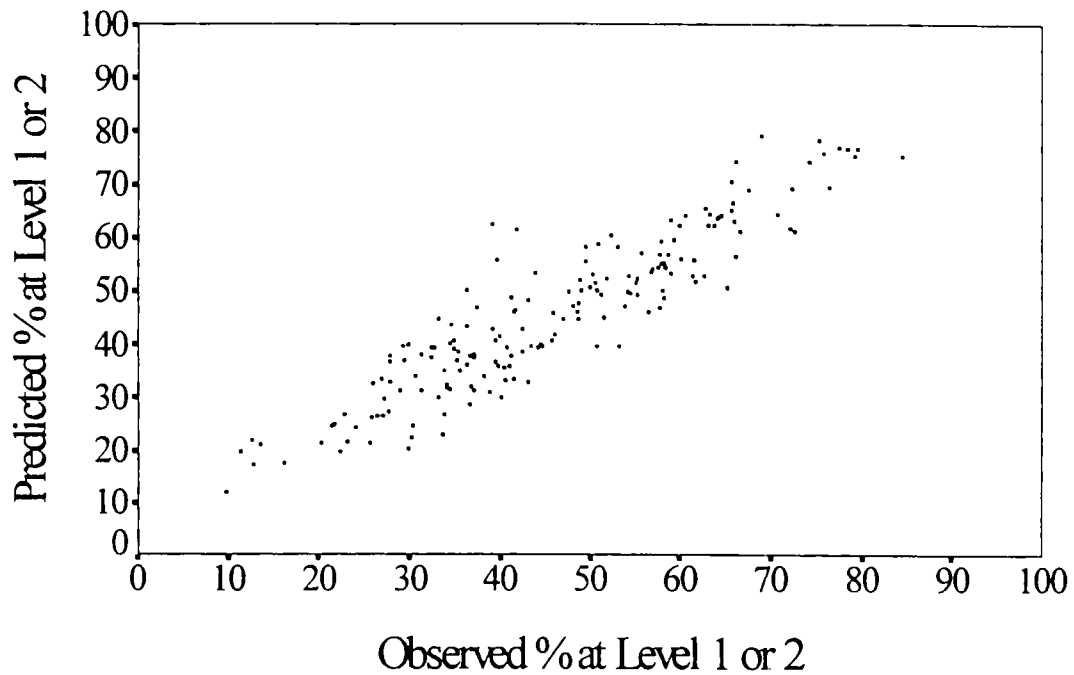


Figure 3. Scatterplot of predicted versus observed percent of adults in counties having combined literacy proficiency in Level 1 or 2.

Further information about the goodness of fit of these models is provided by analysis of the residuals of each equation. Figures 4, 5 and 6 exhibit scatterplots for the weighted residual by weighted predicted values for each county, one figure per dependent variable. The overall “shotgun blast” appearance of these scatterplots is additional evidence of how well the equations fit the county-level data.

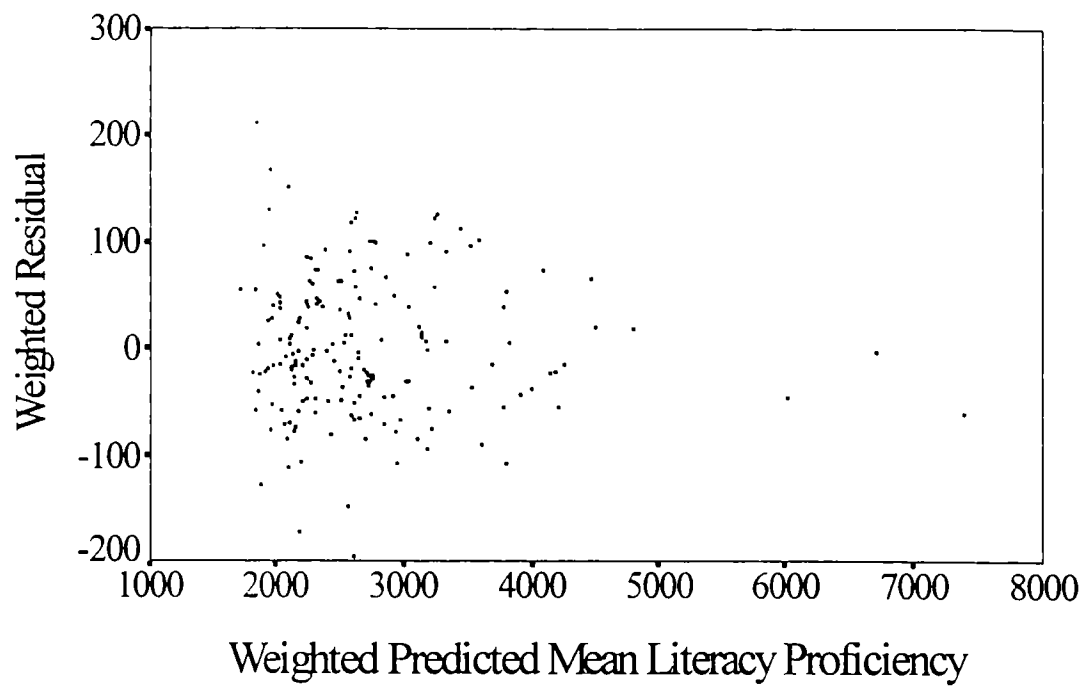


Figure 4. Scatterplot of weighted residuals versus weighted predicted values for mean literacy proficiency of counties.

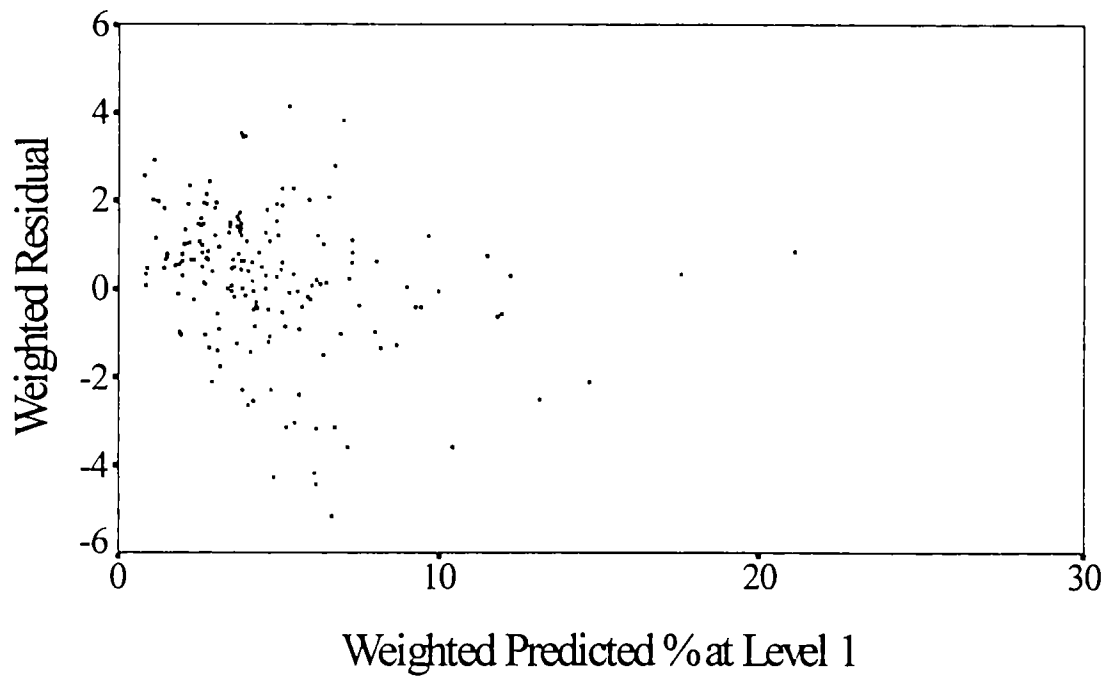


Figure 5. Scatterplot of weighted residuals versus weighted predicted percent of adults in counties having combined literacy proficiency in Level 1.

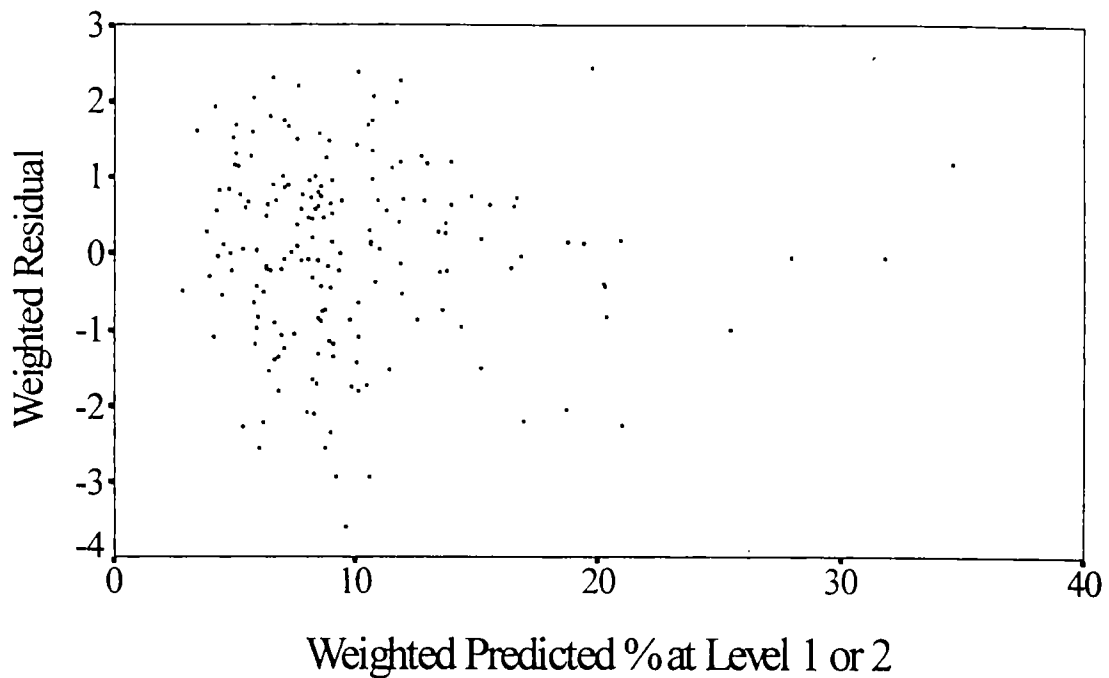


Figure 6. Scatterplot of weighted residuals versus weighted predicted percent of adults in counties having combined literacy proficiency in Level 1 or 2.

Generating Predictions for Small Census Areas

The regression equations exhibited in Table 4 were applied to 1990 Census Summary Tape File 3 data (recoded as specified in Table 1) to generate literacy predictions for Census areas. Predictions were generated for the entire population (STF Geocode 00) age 16 and above within a Census-defined county or county-like unit (STF Summary Levels 050, 061 and 062), within cities, towns and places of 10,000 or more inhabitants (STF Summary Levels 161 and 170), and congressional districts of the 103rd Congress (STF Summary Level 501). For purposes of keeping standard errors acceptably low among the Census variables used as predictors, estimates were generated only for those counties, cities, towns or places having at least 5,000 inhabitants age 16 and above and a realized sample of at least 500 for the long-form of the 1990 Census. Because cities, towns and places tabulated in STF3 have a minimum of 10,000 inhabitants, all 3,154 such units met the screening criteria. Of the 4,625 counties (and county-like units) in STF3, 4,026 passed the population (age 16 and above) and sample size criteria.⁹

In each area, three measures of adult literacy were estimated for the population age 16 and above: the mean combined NALS literacy proficiency; the percentage of persons with literacy proficiencies at Level 1; and the percentage of persons with literacy proficiencies at Levels 1 or 2. Each estimate generated was accompanied by a standard error and a 95% confidence interval for the individual prediction.¹⁰ The confidence interval takes into account not only the inherent inaccuracy of the regression model's

predictions, but also the similarity, in terms of the predictor variables, of the given area to the NALS county aggregates on which the regression models were “trained”; the regression model tends to be less accurate for areas that are less similar to the NALS aggregates in terms of demographic and other predictive characteristics.

Because of the large number of Census units for which these literacy estimates have been generated, it is not practical to disseminate all of the information in printed form. Estimates for the congressional districts of the 103rd Congress are tabled in Appendix C. Database files and computer software have been developed to allow users to conveniently display and/or print out estimates, standard errors, and confidence intervals for the three literacy measures for Census areas, along with the local values of the predictor variables used by the equations (i.e., those listed in Table 2 or 4). The software allows users to examine the estimated literacy measures for selected states, congressional districts, counties, cities towns and places as defined by the Census STF3 geography. This easy to use software is available from the U.S. Department of Education’s Clearinghouse for Adult and Vocational Education.¹¹

Validation through SALS Comparisons

The same procedures described above for generating literacy estimates for congressional districts, counties, cities, towns and places were also applied to state-level data in the STF3 files (Summary Level 040, Geocode 00). These statewide estimates are tabled in Appendix B. The statewide estimates can be compared with corresponding statewide estimates made by the State Adult Literacy Survey (SALS) for those eleven states that contracted for concurrent state-valid surveys as part of the NALS.¹² Results of this comparison are displayed in Figure 7 for mean literacy proficiency, Figure 8 for percent at Level 1, and Figure 9 for percent at Level 1 or 2.

As can be seen from the figures, the regression model developed at the county level appears to fit the state level data for the SALS states reasonably well. Most of the state-level discrepancies are within the 95% confidence interval estimated by the models.¹³

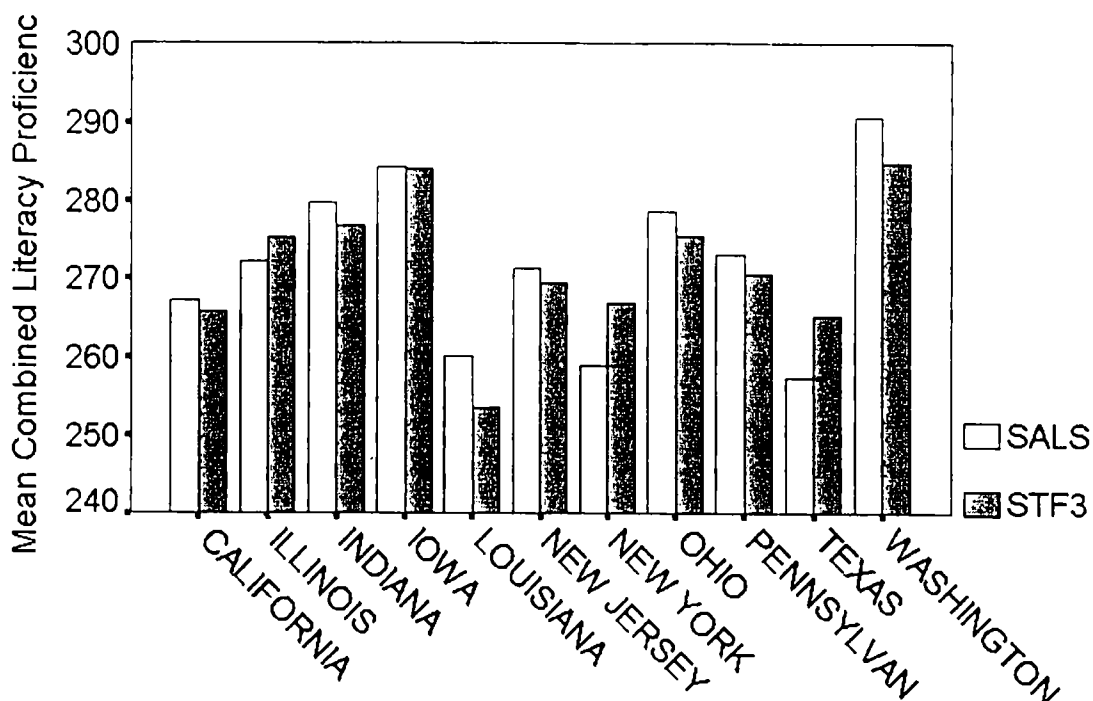


Figure 7. Comparison of synthetic estimates derived from Census STF3 data and State Adult Literacy Survey (SALS) estimates of statewide mean literacy proficiency.

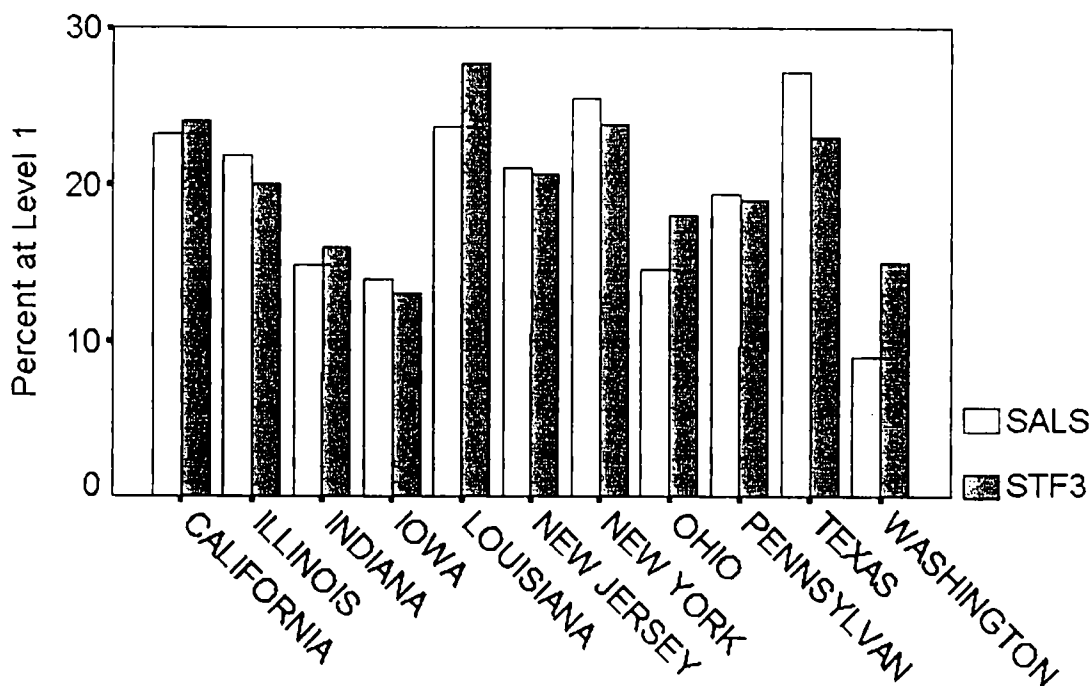


Figure 8. Comparison of synthetic estimates derived from Census STF3 data and State Adult Literacy Survey (SALS) estimates of the statewide percentage of adults with literacy proficiency in Level 1.

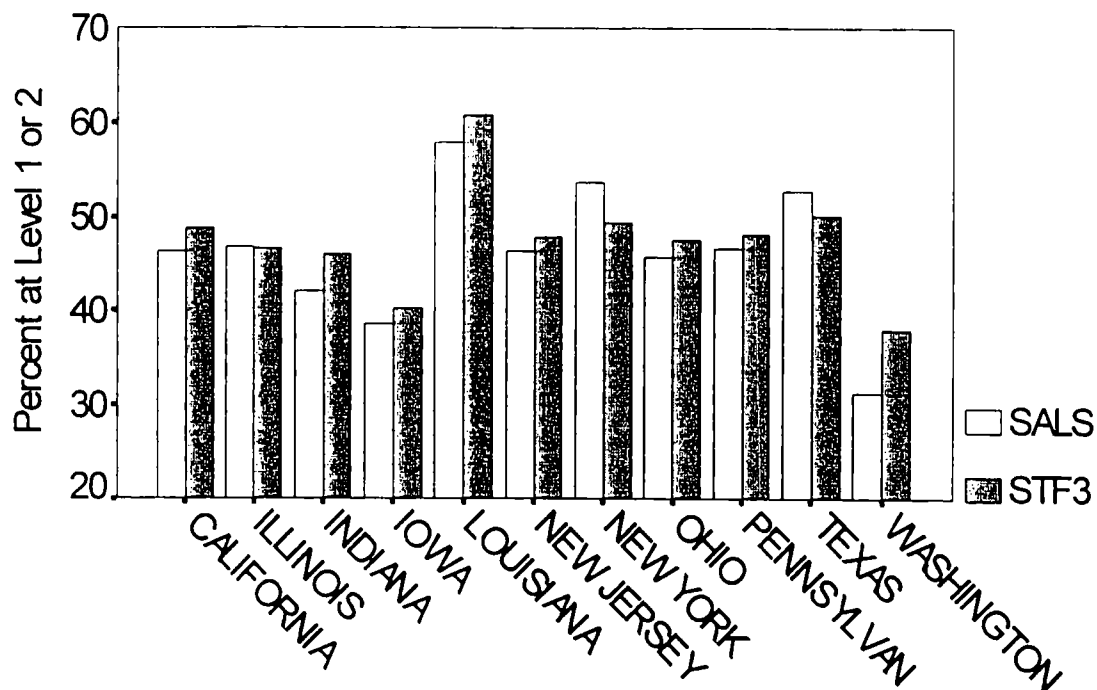


Figure 9. Comparison of synthetic estimates derived from Census STF3 data and State Adult Literacy Survey (SALS) estimates of the statewide percentage of adults with literacy proficiency in Level 1 or 2.

DISCUSSION

There are some important limitations in these synthetic estimates that should be kept in mind when using them. First of all, the regression models were developed from county-level aggregate data within NALS. Synthetic estimates have been developed not only for counties within the U.S., but also for other types of geographical units, including congressional districts, cities, towns and places of 10,000 or more inhabitants, and states. The analysis of the regression model on the county-level aggregates indicated an excellent fit of predictions to observed data. Furthermore, the state-level validation suggests that the model applies reasonably well to much larger units. As promising as these validity studies may be, there is no direct evidence available about the validity of the model's predictions for the congressional district or city/town/place Census areas. Since the NALS database contained no geographical identifiers of levels other than county or state (nor did its sampling design represent these other levels), some caution is appropriate in working with estimates at these levels. While it seems highly plausible that models which predict literacy measures accurately at county and state levels would also perform well at these other levels, the lack of direct validating information should be kept in mind when working with such estimates. On balance, these synthetic estimates should be useful for many purposes in comparing the literacy profiles and needs for service across the various units that may be relevant to decision- and policy-makers in particular contexts. Despite their shortcomings, they are typically the best information

available at present for many geographical areas in which costly local literacy assessment surveys have not been conducted.

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**APPENDIX A:
STANDARDIZED REGRESSION COEFFICIENTS**

PREDICTOR	MEAN PROFICIENCY	% AT LEVEL 1	% AT LEVEL 1 OR 2
*Educ less than high school			
Educ-some high school	.235		-.155
Educ-high school diploma/GED	.402	-.175	-.326
Educ-some college	.364	-.186	-.313
Educ-2 year college degree	.149		-.156
Educ-4 year college degree	.324		-.255
Educ-graduate school	.472	-.232	-.468
*White			
Black	-.298	.319	.276
Native American			
Asian/Pacific Islander			
Other race			
Work disability	-.067	.133	.096
*No work disability			
*Speaks English very well			
Speaks English well	-.147	.146	.179
Speaks English not well/not at all	-.189	.318	
Recent immigrant	-.085		.104
*Not recent immigrant			
*Did not work previous year			
Worked 1-13 weeks previous year	.090		
Worked 14-26 weeks previous year			
Worked 27-39 weeks previous year			
Worked 40-52 weeks previous year			
*Laborer			
Service			
Sales/administrative support	.055		
Professional/technical/managerial			
*Not in labor force			
Unemployed		-.072	
Employed	.151	-.249	-.186
Northeast			.071
Midwest	.075		
South			.070
*West			

APPENDIX B: PREDICTIONS FOR STATES

STATE	POPULATION AGE 16 & ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
Alabama	3,103,529	257.9	24.8%	57.5%
Alaska	393,394	289.2	11.1%	32.9%
Arizona	2,785,730	274.3	18.4%	42.2%
Arkansas	1,800,056	260.1	22.2%	56.3%
California	22,786,281	265.8	24.2%	46.3%
Colorado	2,518,482	289.1	13.1%	31.9%
Connecticut	2,616,747	280.4	16.1%	40.5%
Delaware	518,946	276.1	17.9%	44.2%
District of Columbia	503,173	251.1	36.5%	61.3%
Florida	10,377,252	264.9	24.7%	50.9%
Georgia	4,938,381	262.8	23.3%	53.6%
Hawaii	855,518	274.9	18.0%	40.3%
Idaho	729,819	282.6	13.3%	37.5%
Illinois	8,796,610	275.2	20.2%	44.3%
Indiana	4,248,923	276.8	15.8%	43.4%
Iowa	2,131,703	284.1	13.4%	37.5%
Kansas	1,880,434	283.4	14.3%	39.0%
Kentucky	2,838,709	262.0	19.2%	54.4%
Louisiana	3,119,293	253.5	28.1%	61.3%
Maine	952,644	278.5	14.7%	42.4%
Maryland	3,736,830	273.5	19.6%	45.4%
Massachusetts	4,809,772	280.7	16.2%	39.9%
Michigan	7,102,020	277.0	18.2%	43.6%
Minnesota	3,321,415	287.7	12.6%	35.2%
Mississippi	1,909,851	248.9	30.3%	64.1%
Missouri	3,939,284	274.3	17.2%	46.1%
Montana	599,765	282.2	13.0%	38.8%
Nebraska	1,192,803	286.1	12.9%	36.3%
Nevada	936,050	276.5	15.3%	40.4%
New Hampshire	858,615	286.1	12.2%	36.2%
New Jersey	6,129,923	269.4	21.1%	48.2%
New Mexico	1,113,046	269.5	20.2%	46.4%
New York	14,191,044	267.0	24.4%	49.6%
North Carolina	5,203,230	264.8	21.9%	51.5%
North Dakota	480,464	282.6	15.1%	38.9%
Ohio	8,349,183	275.4	18.1%	45.0%
Oklahoma	2,398,899	273.8	17.7%	46.8%
Oregon	2,191,764	282.0	15.4%	37.7%
Pennsylvania	9,392,816	270.6	18.5%	48.3%
Rhode Island	801,625	271.4	19.4%	46.5%
South Carolina	2,669,383	258.9	24.8%	56.1%
South Dakota	517,032	278.9	13.8%	41.2%
Tennessee	3,799,725	264.0	20.5%	53.4%
Texas	12,656,267	265.3	23.4%	50.5%
Utah	1,154,039	289.9	11.4%	32.5%
Vermont	434,544	284.5	12.0%	37.3%
Virginia	4,843,182	271.8	19.1%	46.8%
Washington	3,730,985	284.9	14.8%	35.4%
West Virginia	1,404,900	261.2	20.2%	55.7%
Wisconsin	3,732,898	281.7	13.8%	38.9%
Wyoming	332,293	286.6	11.4%	34.2%

APPENDIX C: PREDICTIONS FOR CONGRESSIONAL DISTRICTS

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
AL	District 1	433,461	256.8	26.2%	58.8%
AL	District 2	440,710	259.0	24.1%	56.3%
AL	District 3	446,961	253.3	26.2%	61.2%
AL	District 4	450,000	256.7	21.2%	57.6%
AL	District 5	449,256	269.4	19.3%	49.0%
AL	District 6	456,146	284.0	14.9%	39.9%
AL	District 7	426,995	228.7	41.9%	78.3%
AK	Representative at Large	393,394	289.2	11.1%	32.9%
AZ	District 1	472,497	289.4	11.6%	31.6%
AZ	District 2	433,950	241.4	31.4%	63.2%
AZ	District 3	472,453	274.9	18.1%	43.1%
AZ	District 4	481,576	292.8	10.8%	29.4%
AZ	District 5	482,124	281.6	16.3%	37.6%
AZ	District 6	443,130	268.6	21.5%	47.3%
AR	District 1	443,722	249.8	25.3%	63.5%
AR	District 2	451,330	270.4	19.6%	49.3%
AR	District 3	457,148	267.0	17.9%	51.0%
AR	District 4	447,856	249.7	27.8%	64.1%
CA	District 1	438,234	276.1	18.4%	41.4%
CA	District 2	439,364	279.0	17.7%	41.0%
CA	District 3	432,988	278.3	17.5%	39.4%
CA	District 4	441,147	287.6	14.0%	33.6%
CA	District 5	435,095	273.3	23.1%	42.7%
CA	District 6	457,153	292.7	13.5%	28.6%
CA	District 7	435,629	271.4	22.4%	44.0%
CA	District 8	491,902	260.8	31.2%	48.3%
CA	District 9	459,316	264.4	29.8%	47.9%
CA	District 10	446,733	296.3	11.6%	26.3%
CA	District 11	421,193	260.6	24.7%	50.1%
CA	District 12	468,750	281.7	20.3%	36.3%
CA	District 13	440,518	273.5	19.4%	41.4%
CA	District 14	468,643	291.0	15.5%	29.0%
CA	District 15	457,950	293.8	12.4%	27.4%
CA	District 16	425,015	254.8	28.1%	52.3%
CA	District 17	434,712	265.1	23.7%	44.8%
CA	District 18	407,538	255.2	26.1%	53.1%
CA	District 19	420,051	270.2	21.0%	44.2%
CA	District 20	392,182	220.7	41.1%	74.2%
CA	District 21	413,454	266.9	20.8%	46.7%
CA	District 22	455,931	277.9	18.8%	38.5%
CA	District 23	428,655	270.5	20.5%	41.2%
CA	District 24	464,515	287.9	15.6%	31.3%
CA	District 25	429,768	279.8	16.9%	37.2%
CA	District 26	425,859	233.3	37.5%	63.9%
CA	District 27	459,105	266.9	25.5%	45.2%
CA	District 28	439,579	277.2	19.7%	38.9%
CA	District 29	505,324	283.8	19.3%	34.3%
CA	District 30	433,009	212.5	49.5%	74.4%
CA	District 31	421,465	226.9	42.5%	67.3%
CA	District 32	449,447	238.1	40.3%	63.9%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
CA	District 33	403,839	188.4	57.8%	87.6%
CA	District 34	421,551	244.1	32.2%	58.9%
CA	District 35	406,506	213.8	49.5%	78.1%
CA	District 36	474,484	288.5	15.6%	30.9%
CA	District 37	393,751	216.2	47.5%	77.1%
CA	District 38	448,534	267.0	23.5%	45.6%
CA	District 39	446,872	278.3	19.3%	37.3%
CA	District 40	422,401	272.7	19.2%	43.6%
CA	District 41	416,877	267.4	23.1%	44.3%
CA	District 42	397,603	260.9	24.6%	49.9%
CA	District 43	416,358	271.2	20.2%	43.2%
CA	District 44	431,196	257.4	26.1%	52.9%
CA	District 45	464,593	282.2	16.8%	34.7%
CA	District 46	422,319	228.3	38.8%	64.8%
CA	District 47	456,339	291.6	14.0%	28.8%
CA	District 48	439,373	281.8	16.3%	35.4%
CA	District 49	489,825	287.1	15.1%	33.4%
CA	District 50	415,878	243.5	33.5%	61.0%
CA	District 51	446,567	288.0	15.3%	31.0%
CA	District 52	431,191	273.9	18.6%	41.9%
CO	District 1	436,010	276.0	19.6%	41.8%
CO	District 2	421,879	295.9	8.9%	27.1%
CO	District 3	418,506	279.3	15.1%	40.0%
CO	District 4	411,338	282.5	13.4%	36.4%
CO	District 5	409,823	293.3	12.3%	29.2%
CO	District 6	420,926	297.2	9.7%	26.2%
CT	District 1	436,935	272.4	21.2%	45.6%
CT	District 2	433,858	283.9	12.5%	37.9%
CT	District 3	439,672	277.5	17.1%	42.3%
CT	District 4	438,765	277.8	20.0%	42.4%
CT	District 5	430,457	281.4	15.7%	39.0%
CT	District 6	437,060	283.8	13.7%	37.8%
DE	Representative at Large	518,946	276.1	17.9%	44.2%
DC	Delegate	503,173	251.1	36.5%	61.3%
FL	District 1	435,304	272.1	19.9%	47.2%
FL	District 2	435,666	264.8	24.1%	52.7%
FL	District 3	417,782	239.5	36.8%	70.8%
FL	District 4	448,430	284.0	15.1%	38.9%
FL	District 5	471,572	268.2	23.1%	51.5%
FL	District 6	441,455	270.0	20.1%	49.6%
FL	District 7	450,351	281.1	15.5%	40.7%
FL	District 8	449,808	282.8	15.4%	38.4%
FL	District 9	460,991	280.8	16.6%	41.8%
FL	District 10	473,647	271.5	21.1%	48.1%
FL	District 11	444,250	269.1	22.3%	48.5%
FL	District 12	435,547	259.2	23.6%	56.4%
FL	District 13	475,467	271.1	20.8%	48.6%
FL	District 14	466,628	273.6	20.1%	46.6%
FL	District 15	453,308	275.3	18.9%	44.6%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
FL	District 16	458,171	276.0	18.3%	44.7%
FL	District 17	408,899	218.9	48.7%	80.6%
FL	District 18	463,931	232.5	45.3%	63.7%
FL	District 19	472,964	280.8	18.1%	41.6%
FL	District 20	453,858	280.0	16.7%	40.8%
FL	District 21	439,096	243.5	39.1%	57.2%
FL	District 22	496,958	274.0	21.6%	46.0%
FL	District 23	423,169	232.4	38.7%	74.2%
GA	District 1	445,738	261.4	22.9%	55.5%
GA	District 2	435,480	231.8	38.9%	76.0%
GA	District 3	447,974	268.1	19.2%	49.6%
GA	District 4	462,803	292.0	13.3%	32.1%
GA	District 5	456,585	251.1	35.0%	63.0%
GA	District 6	453,985	301.6	9.7%	26.1%
GA	District 7	449,177	264.1	18.7%	53.2%
GA	District 8	445,241	260.9	23.1%	54.6%
GA	District 9	454,363	260.4	18.4%	54.5%
GA	District 10	455,572	266.8	20.4%	51.4%
GA	District 11	431,463	239.1	37.0%	70.1%
HI	District 1	444,711	275.7	19.9%	39.5%
HI	District 2	410,807	274.3	16.9%	40.8%
ID	District 1	373,525	280.3	14.3%	39.4%
ID	District 2	356,294	284.9	13.0%	35.1%
IL	District 1	435,983	243.8	40.7%	67.8%
IL	District 2	422,501	245.5	38.0%	66.2%
IL	District 3	455,429	277.4	16.5%	42.2%
IL	District 4	402,843	220.6	43.7%	74.4%
IL	District 5	478,396	271.6	21.6%	45.0%
IL	District 6	451,414	293.5	12.2%	31.2%
IL	District 7	425,204	243.8	40.2%	68.2%
IL	District 8	435,349	298.7	10.6%	27.2%
IL	District 9	477,630	279.3	22.2%	40.9%
IL	District 10	440,549	295.0	13.8%	30.4%
IL	District 11	434,705	275.5	16.6%	43.5%
IL	District 12	437,771	269.2	20.6%	50.1%
IL	District 13	428,700	301.0	9.5%	25.9%
IL	District 14	423,429	288.2	13.0%	34.2%
IL	District 15	447,199	285.7	14.3%	37.9%
IL	District 16	431,465	282.9	12.5%	38.0%
IL	District 17	443,711	279.3	14.9%	41.7%
IL	District 18	438,783	281.4	14.2%	40.6%
IL	District 19	445,172	271.6	17.3%	47.5%
IL	District 20	440,377	274.1	15.3%	45.3%
IN	District 1	418,354	268.7	21.6%	49.9%
IN	District 2	432,984	278.0	14.5%	43.7%
IN	District 3	423,252	279.3	15.4%	41.9%
IN	District 4	413,196	282.4	12.4%	38.6%
IN	District 5	420,322	278.6	13.1%	42.4%
IN	District 6	423,181	296.0	9.4%	30.2%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
IN	District 7	433,951	286.2	12.6%	37.9%
IN	District 8	436,262	281.3	14.4%	41.2%
IN	District 9	422,263	274.8	13.9%	44.8%
IN	District 10	425,158	267.3	23.7%	51.0%
IA	District 1	427,915	289.3	12.2%	34.0%
IA	District 2	424,004	280.9	13.4%	39.9%
IA	District 3	432,560	284.0	12.7%	38.6%
IA	District 4	426,259	289.2	12.5%	34.4%
IA	District 5	420,965	278.7	15.1%	41.3%
KS	District 1	468,734	280.3	13.6%	40.3%
KS	District 2	474,074	282.8	13.9%	39.8%
KS	District 3	471,997	295.9	12.8%	30.6%
KS	District 4	465,629	283.2	14.5%	39.2%
KY	District 1	478,499	257.3	20.3%	57.4%
KY	District 2	466,806	261.8	17.1%	53.9%
KY	District 3	481,521	270.5	19.4%	48.4%
KY	District 4	467,892	267.7	15.8%	50.4%
KY	District 5	462,410	238.6	26.2%	71.2%
KY	District 6	481,581	272.3	16.1%	47.5%
LA	District 1	461,088	274.2	17.7%	46.1%
LA	District 2	445,054	239.7	38.8%	70.5%
LA	District 3	433,739	248.5	26.2%	64.2%
LA	District 4	433,799	224.5	43.1%	81.8%
LA	District 5	454,417	264.6	22.6%	54.0%
LA	District 6	451,400	268.5	20.0%	50.6%
LA	District 7	439,796	251.0	27.0%	62.5%
ME	District 1	495,617	282.8	13.6%	39.5%
ME	District 2	457,027	273.0	16.0%	47.0%
MD	District 1	470,279	272.7	17.4%	45.8%
MD	District 2	471,472	280.5	13.2%	39.9%
MD	District 3	471,757	275.9	18.5%	44.1%
MD	District 4	462,361	260.7	28.6%	53.6%
MD	District 5	465,480	280.9	15.2%	39.9%
MD	District 6	463,303	281.3	12.3%	39.7%
MD	District 7	462,503	236.5	40.4%	72.8%
MD	District 8	469,675	295.7	12.8%	28.4%
MA	District 1	473,023	278.6	15.4%	41.8%
MA	District 2	469,938	273.0	17.9%	45.0%
MA	District 3	474,244	277.2	16.2%	42.0%
MA	District 4	476,470	279.9	16.4%	40.1%
MA	District 5	462,672	283.1	15.3%	37.5%
MA	District 6	480,989	288.0	13.2%	34.7%
MA	District 7	498,520	289.4	13.1%	34.5%
MA	District 8	506,897	268.8	26.2%	48.6%
MA	District 9	486,166	278.5	18.3%	41.5%
MA	District 10	480,853	286.6	13.7%	36.8%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 15 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
MI	District 1	447,671	278.6	15.9%	42.9%
MI	District 2	431,847	278.6	15.7%	41.9%
MI	District 3	431,615	284.8	14.5%	37.6%
MI	District 4	442,970	281.3	14.6%	41.4%
MI	District 5	437,366	272.4	17.8%	47.5%
MI	District 6	443,078	280.4	16.3%	40.5%
MI	District 7	441,879	281.8	15.1%	40.7%
MI	District 8	447,826	291.0	11.8%	32.9%
MI	District 9	438,387	277.3	19.4%	43.4%
MI	District 10	449,658	282.3	13.6%	39.2%
MI	District 11	458,680	300.3	11.5%	26.8%
MI	District 12	457,539	283.8	15.1%	37.8%
MI	District 13	457,142	289.7	13.9%	34.3%
MI	District 14	429,079	240.1	40.3%	70.7%
MI	District 15	436,566	227.5	48.0%	81.1%
MI	District 16	450,717	279.1	15.0%	42.2%
MN	District 1	413,806	285.7	12.3%	35.6%
MN	District 2	405,732	278.6	12.6%	40.8%
MN	District 3	412,561	305.3	8.1%	21.9%
MN	District 4	422,839	291.0	13.0%	32.7%
MN	District 5	444,486	288.8	15.5%	35.2%
MN	District 6	397,954	299.6	7.2%	26.2%
MN	District 7	409,979	276.0	14.7%	43.3%
MN	District 8	414,058	279.9	14.6%	41.4%
MS	District 1	390,415	253.4	24.9%	60.6%
MS	District 2	364,543	226.4	42.2%	80.3%
MS	District 3	386,319	254.6	27.4%	60.1%
MS	District 4	383,876	252.1	31.6%	62.1%
MS	District 5	384,698	264.3	23.8%	53.3%
MO	District 1	434,365	254.6	32.7%	59.7%
MO	District 2	436,513	299.1	10.9%	27.6%
MO	District 3	442,262	279.0	14.3%	41.9%
MO	District 4	435,885	273.4	15.6%	46.5%
MO	District 5	442,490	276.1	20.1%	44.4%
MO	District 6	436,580	281.2	13.2%	41.0%
MO	District 7	444,040	278.0	14.6%	43.6%
MO	District 8	435,434	258.3	21.1%	57.4%
MO	District 9	431,715	279.0	13.8%	42.4%
MT	One Representative at Large	599,765	282.2	13.0%	38.8%
NE	District 1	403,342	288.3	11.7%	34.4%
NE	District 2	394,391	292.2	12.8%	32.7%
NE	District 3	395,070	281.9	13.5%	39.4%
NV	District 1	472,027	270.0	18.3%	45.2%
NV	District 2	464,023	282.5	12.5%	36.5%
NH	District 1	429,631	286.1	11.8%	36.4%
NH	District 2	428,984	284.7	12.5%	37.0%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
NJ	District 1	452,081	267.6	20.2%	50.1%
NJ	District 2	466,130	265.2	20.7%	51.4%
NJ	District 3	468,067	281.6	15.7%	40.7%
NJ	District 4	467,111	270.6	19.9%	48.3%
NJ	District 5	468,727	289.7	12.5%	34.3%
NJ	District 6	479,446	276.5	17.3%	43.4%
NJ	District 7	481,410	281.7	16.5%	39.5%
NJ	District 8	476,313	263.1	25.0%	51.7%
NJ	District 9	493,687	267.0	21.4%	49.5%
NJ	District 10	460,704	232.6	40.8%	74.0%
NJ	District 11	474,503	293.8	11.8%	31.1%
NJ	District 12	471,918	294.1	12.0%	31.4%
NJ	District 13	469,826	233.6	39.1%	68.4%
NM	District 1	384,660	280.1	16.1%	38.7%
NM	District 2	366,293	260.6	23.2%	51.3%
NM	District 3	362,093	267.3	21.2%	48.5%
NY	District 1	449,513	284.7	12.9%	37.2%
NY	District 2	454,709	276.7	16.7%	42.8%
NY	District 3	470,168	290.3	12.5%	33.8%
NY	District 4	466,413	277.5	20.0%	42.3%
NY	District 5	476,482	282.6	18.5%	38.5%
NY	District 6	450,794	233.9	39.6%	73.4%
NY	District 7	484,722	245.8	31.9%	63.0%
NY	District 8	496,499	274.6	23.6%	43.4%
NY	District 9	480,802	265.0	23.6%	50.9%
NY	District 10	433,308	226.7	45.1%	78.9%
NY	District 11	434,029	225.0	46.8%	79.8%
NY	District 12	433,760	207.6	53.8%	82.8%
NY	District 13	464,226	267.4	20.7%	49.5%
NY	District 14	520,834	289.9	17.0%	32.5%
NY	District 15	452,561	216.5	52.8%	81.8%
NY	District 16	403,913	205.3	56.4%	90.7%
NY	District 17	452,400	236.3	38.5%	71.0%
NY	District 18	481,631	275.7	21.6%	43.1%
NY	District 19	459,009	287.8	13.9%	34.6%
NY	District 20	445,234	280.4	17.0%	39.8%
NY	District 21	465,566	283.8	15.5%	38.8%
NY	District 22	450,731	282.4	14.2%	39.1%
NY	District 23	451,147	275.3	16.5%	44.9%
NY	District 24	442,567	276.5	16.3%	44.3%
NY	District 25	450,441	281.7	15.8%	40.2%
NY	District 26	460,729	279.9	15.9%	41.5%
NY	District 27	449,363	284.2	13.1%	37.3%
NY	District 28	452,786	278.5	19.4%	41.4%
NY	District 29	455,592	277.9	15.9%	42.5%
NY	District 30	456,301	267.8	21.6%	49.6%
NY	District 31	444,814	276.8	15.6%	43.3%
NC	District 1	417,504	231.3	38.5%	76.1%
NC	District 2	434,913	262.5	22.8%	52.7%
NC	District 3	427,869	265.2	22.2%	51.4%
NC	District 4	442,004	284.8	17.2%	37.8%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
NC	District 5	443,878	263.0	20.2%	52.9%
NC	District 6	442,390	276.6	14.4%	43.2%
NC	District 7	428,588	267.9	20.3%	49.7%
NC	District 8	420,504	257.4	22.7%	56.4%
NC	District 9	435,875	282.7	15.1%	38.7%
NC	District 10	436,927	268.3	16.0%	48.2%
NC	District 11	445,875	265.3	19.5%	51.7%
NC	District 12	426,903	245.1	33.9%	65.8%
ND	One Representative at Large	480,464	282.6	15.1%	38.9%
OH	District 1	435,565	269.2	25.3%	49.9%
OH	District 2	433,405	287.2	12.9%	36.2%
OH	District 3	443,887	276.3	19.3%	44.3%
OH	District 4	434,052	274.8	15.6%	45.5%
OH	District 5	428,970	279.8	13.1%	41.6%
OH	District 6	438,385	272.2	17.9%	48.0%
OH	District 7	438,656	280.4	14.8%	41.9%
OH	District 8	432,047	281.6	13.2%	40.7%
OH	District 9	437,547	278.5	17.2%	42.6%
OH	District 10	448,944	280.8	17.1%	41.7%
OH	District 11	439,889	248.4	37.6%	65.0%
OH	District 12	432,934	280.9	19.5%	41.8%
OH	District 13	430,525	281.2	14.0%	39.8%
OH	District 14	447,673	281.4	17.0%	41.2%
OH	District 15	455,363	291.9	12.7%	33.9%
OH	District 16	436,280	276.5	15.4%	44.8%
OH	District 17	444,774	272.8	19.0%	47.2%
OH	District 18	438,715	269.7	17.2%	49.7%
OH	District 19	451,572	284.4	14.0%	38.6%
OK	District 1	400,216	282.8	15.4%	40.1%
OK	District 2	398,124	265.8	19.5%	52.8%
OK	District 3	404,005	264.3	19.5%	54.0%
OK	District 4	397,277	277.4	16.0%	44.4%
OK	District 5	401,724	284.7	14.5%	39.0%
OK	District 6	397,553	265.2	20.2%	52.9%
OR	District 1	439,954	292.2	12.1%	29.7%
OR	District 2	434,140	275.9	16.7%	42.6%
OR	District 3	441,054	280.5	15.7%	38.5%
OR	District 4	440,089	280.7	14.8%	39.8%
OR	District 5	436,527	282.0	14.8%	37.8%
PA	District 1	428,714	230.3	41.7%	77.9%
PA	District 2	451,637	246.0	37.5%	66.9%
PA	District 3	450,929	263.8	21.4%	53.9%
PA	District 4	446,287	274.2	16.4%	46.0%
PA	District 5	447,155	276.4	14.5%	45.5%
PA	District 6	449,840	268.5	16.6%	49.3%
PA	District 7	454,652	290.8	13.0%	34.4%
PA	District 8	436,408	289.6	11.3%	34.2%
PA	District 9	441,960	265.6	16.0%	51.6%
PA	District 10	443,537	274.5	14.8%	45.5%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
PA	District 11	455,970	269.1	17.4%	49.4%
PA	District 12	447,810	265.2	17.7%	53.0%
PA	District 13	452,785	291.3	13.2%	33.4%
PA	District 14	462,075	268.6	22.7%	50.8%
PA	District 15	448,253	275.7	15.3%	43.6%
PA	District 16	432,411	278.3	14.5%	41.9%
PA	District 17	441,972	275.3	14.8%	44.4%
PA	District 18	460,720	278.3	17.8%	43.1%
PA	District 19	446,729	276.6	13.1%	43.0%
PA	District 20	452,066	271.5	17.4%	48.3%
PA	District 21	440,906	273.6	16.3%	46.5%
RI	District 1	404,847	271.8	19.1%	46.0%
RI	District 2	396,778	272.8	18.5%	46.0%
SC	District 1	442,738	273.0	19.6%	46.0%
SC	District 2	447,187	273.8	20.9%	45.4%
SC	District 3	452,047	260.2	22.7%	54.9%
SC	District 4	454,644	263.4	21.9%	53.1%
SC	District 5	441,416	252.5	26.2%	59.9%
SC	District 6	431,351	232.3	39.1%	75.4%
SD	Representative at Large	517,032	278.9	13.8%	41.2%
TN	District 1	434,634	261.9	18.3%	54.3%
TN	District 2	431,922	271.2	16.7%	48.2%
TN	District 3	426,390	264.5	20.3%	52.4%
TN	District 4	422,542	251.7	20.3%	60.9%
TN	District 5	429,282	273.2	20.4%	46.8%
TN	District 6	415,110	270.8	15.4%	48.0%
TN	District 7	412,762	271.7	16.6%	47.0%
TN	District 8	417,824	254.1	23.3%	59.9%
TN	District 9	409,259	245.6	35.0%	66.4%
TX	District 1	432,706	260.5	24.0%	56.2%
TX	District 2	431,259	254.5	25.8%	60.9%
TX	District 3	434,830	300.6	9.8%	26.2%
TX	District 4	431,420	273.1	17.6%	46.6%
TX	District 5	428,950	254.4	25.9%	58.7%
TX	District 6	427,592	298.6	9.1%	27.7%
TX	District 7	427,801	297.7	11.9%	28.3%
TX	District 8	425,281	288.4	12.2%	36.3%
TX	District 9	426,855	267.6	22.5%	49.8%
TX	District 10	443,173	285.0	15.7%	37.7%
TX	District 11	428,854	265.1	22.7%	52.5%
TX	District 12	427,797	266.5	20.3%	50.3%
TX	District 13	425,374	260.5	22.1%	55.2%
TX	District 14	423,786	257.6	23.6%	56.5%
TX	District 15	392,177	223.4	40.7%	75.8%
TX	District 16	405,037	238.4	36.6%	65.1%
TX	District 17	428,024	262.7	21.7%	54.2%
TX	District 18	429,766	242.4	36.4%	67.7%
TX	District 19	418,559	277.7	15.7%	43.2%
TX	District 20	415,459	253.0	27.8%	59.2%

STATE	CONGRESSIONAL DISTRICT	POPULATION AGE 16 AND ABOVE	MEAN PROFICIENCY	PERCENT AT LEVEL 1	PERCENT AT LEVEL 1 OR 2
TX	District 21	435,979	286.3	14.5%	37.4%
TX	District 22	423,815	284.0	16.3%	37.1%
TX	District 23	396,780	239.5	35.1%	65.1%
TX	District 24	411,947	257.9	25.0%	55.3%
TX	District 25	421,150	265.9	23.7%	50.1%
TX	District 26	436,778	296.2	10.7%	29.1%
TX	District 27	401,287	241.3	33.5%	65.3%
TX	District 28	403,095	234.6	34.8%	71.2%
TX	District 29	396,122	220.5	39.8%	76.5%
TX	District 30	424,614	243.5	34.9%	65.6%
UT	District 1	380,822	289.7	10.9%	32.2%
UT	District 2	396,742	294.6	10.4%	28.9%
UT	District 3	376,475	286.8	12.1%	34.7%
VT	Representative at Large	434,544	284.5	12.0%	37.3%
VA	District 1	434,126	273.7	18.5%	45.3%
VA	District 2	432,493	281.4	15.6%	40.3%
VA	District 3	427,484	236.1	38.4%	72.7%
VA	District 4	431,191	257.2	25.0%	57.5%
VA	District 5	447,572	253.8	24.6%	59.7%
VA	District 6	452,115	267.8	18.2%	50.1%
VA	District 7	438,712	285.8	13.7%	36.7%
VA	District 8	464,771	289.1	16.8%	32.6%
VA	District 9	451,001	258.6	20.1%	56.6%
VA	District 10	427,244	285.7	12.0%	35.8%
VA	District 11	436,473	294.0	12.6%	29.4%
WA	District 1	413,781	297.5	9.7%	25.9%
WA	District 2	410,252	284.0	13.2%	36.1%
WA	District 3	408,081	281.9	14.2%	37.7%
WA	District 4	396,921	267.0	20.2%	46.9%
WA	District 5	413,994	285.3	14.6%	35.9%
WA	District 6	416,754	277.5	17.5%	41.5%
WA	District 7	457,229	287.0	17.9%	33.7%
WA	District 8	403,555	293.9	10.6%	28.5%
WA	District 9	410,418	283.5	13.7%	35.8%
WV	District 1	474,000	267.6	17.6%	51.1%
WV	District 2	466,078	264.7	18.5%	53.2%
WV	District 3	464,822	252.1	24.4%	62.9%
WI	District 1	412,034	278.9	14.0%	41.4%
WI	District 2	425,075	293.8	10.4%	30.4%
WI	District 3	413,085	282.0	12.4%	38.2%
WI	District 4	423,282	283.2	13.9%	37.8%
WI	District 5	409,790	268.6	26.3%	50.2%
WI	District 6	414,495	278.9	12.6%	40.9%
WI	District 7	411,286	277.7	13.8%	41.8%
WI	District 8	411,554	279.7	12.7%	40.1%
WI	District 9	412,297	287.6	10.2%	34.3%
WY	Representative at Large	332,293	286.6	11.4%	34.2%

ENDNOTES

¹Thanks are due to several people who assisted this effort. Professor Robert Fountain, director of the Statistical Consulting Laboratory at Portland State University, provided very suggestions and discussion regarding the design, implementation and analysis of the estimation models. Chris Wingerd and Charlie Mauck, students of Dr. Fountain, helped with the construction of databases and with the running of statistical programs. The computer software that was developed to display results of these analyses was programmed by David Lowry and Charlie Mauck (Windows version) and by Cavanaugh and Theodore Latiolais (macintosh version). The assistance of Dr. Mary Lovell of the U.S. Department of Education throughout this effort is gratefully acknowledged.

²Please direct correspondence and questions to the author at this address.

³The NALS sample also included a component which sampled individuals incarcerated in state and federal prisons; only the household component of the NALS is pertinent here, since the prison sample was not designed for state-level disaggregation and is not included in SALS estimates.

⁴ These eleven states were California, Illinois, Indiana, Iowa, Louisiana, New Jersey, New York, Ohio, Pennsylvania, Texas and Washington.

⁵ Florida also conducted a SALS survey, but after the NALS had been completed. Oregon and Mississippi conducted similar surveys of their adult populations, but limited the age range involved (Oregon surveyed those 16-65, whereas Mississippi surveyed the 16-75 age range).

⁶ The public use version of the NALS data set masks county identifiers for those counties having relatively small populations in order to protect respondents' confidentiality. The version of the data set used in these analyses did not mask the identifiers of counties with small populations. In the end, however, this did not matter, since only counties with NALS subsamples of at least 50 survey respondents were used in the regression modeling, and all such counties were sufficiently large to have unmasked identifiers. Thus individuals wishing to replicate or extend this modeling can do so with the public use data set.

⁷ The combined literacy proficiency was calculated as the mean of the 15 plausible values imputed for each respondent - 5 for prose, 5 for document and 5 for quantitative literacy. The prose, document and quantitative scales were combined in this fashion because they are so highly intercorrelated as to be effectively unidimensional (Reder, 1994a), and especially so when separately estimated by regression models (Reder, 1994b).

⁸ SPSS for Windows 6.1.3 was used to estimate these models.

⁹ All congressional districts, states and the District of Columbia met these screening criteria.

¹⁰ The confidence intervals were calculated for the *individual* Census area rather than for the mean of all areas like it (which would be a smaller or tighter confidence interval). This is often called the *prediction interval*.

¹¹ The software is available from:
Adult Learning and Literacy Clearinghouse
600 Independence Avenue, SW, MES 4414
Washington, DC 20202-7240
Fax: 202/205-8973.
Attention: Tammy Fortune

¹² A SALS survey conducted by Florida shortly after NALS is not included in this comparison.

¹³ The individual SALS estimates, being based on relatively small sample sizes, have standard errors that also must be taken into account in evaluating the fit of the model's predictions to these state-level assessment results.

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
AL	District 1	433461	257	27%	58%
AL	District 2	440710	259	26%	56%
AL	District 3	446961	253	29%	61%
AL	District 4	450000	257	26%	57%
AL	District 5	449256	269	22%	49%
AL	District 6	456146	284	15%	40%
AL	District 7	426995	229	42%	78%
AK	At Large	393394	289	12%	35%
AZ	District 1	472497	289	13%	34%
AZ	District 2	433950	241	37%	64%
AZ	District 3	472453	275	20%	45%
AZ	District 4	481576	293	11%	32%
AZ	District 5	482124	282	18%	40%
AZ	District 6	443130	269	22%	49%
AR	District 1	443722	250	29%	63%
AR	District 2	451330	270	20%	49%
AR	District 3	457148	287	21%	51%
AR	District 4	447856	250	30%	64%
CA	District 1	438234	276	20%	44%
CA	District 2	439384	279	20%	43%
CA	District 3	432988	278	20%	42%
CA	District 4	441147	288	15%	36%
CA	District 5	435095	273	23%	45%
CA	District 6	457153	293	14%	31%
CA	District 7	435629	271	22%	46%
CA	District 8	491902	281	29%	51%
CA	District 9	459318	264	28%	51%
CA	District 10	446733	296	12%	29%
CA	District 11	421193	281	27%	52%
CA	District 12	468750	282	18%	39%
CA	District 13	440518	273	19%	44%
CA	District 14	468643	291	16%	32%
CA	District 15	457950	294	12%	30%
CA	District 16	425015	255	30%	54%
CA	District 17	434712	265	27%	47%
CA	District 18	407538	255	30%	55%
CA	District 19	420051	270	23%	47%
CA	District 20	392182	221	49%	75%
CA	District 21	413454	267	24%	49%
CA	District 22	455931	278	21%	41%
CA	District 23	428655	271	23%	43%
CA	District 24	464515	288	15%	34%
CA	District 25	429768	280	17%	40%
CA	District 26	425859	233	40%	66%
CA	District 27	459105	267	24%	48%
CA	District 28	439579	277	19%	41%
CA	District 29	505324	284	18%	38%
CA	District 30	433009	213	51%	76%
CA	District 31	421465	227	44%	69%
CA	District 32	449447	238	40%	67%
CA	District 33	403839	188	64%	88%
CA	District 34	421551	244	36%	60%
CA	District 35	406506	214	50%	80%
CA	District 36	474484	288	15%	34%
CA	District 37	393751	216	50%	78%
CA	District 38	448534	267	24%	48%
CA	District 39	446872	278	19%	39%
CA	District 40	422401	273	22%	46%
CA	District 41	416877	267	24%	46%
CA	District 42	397603	261	28%	51%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
CA	District 43	416358	271	23%	45%
CA	District 44	431196	257	29%	55%
CA	District 45	464593	282	16%	37%
CA	District 46	422319	228	41%	67%
CA	District 47	456339	292	14%	32%
CA	District 48	439373	282	17%	38%
CA	District 49	489825	287	15%	36%
CA	District 50	415878	244	35%	63%
CA	District 51	446567	288	16%	33%
CA	District 52	431191	274	20%	44%
CO	District 1	436010	276	22%	44%
CO	District 2	421879	296	11%	30%
CO	District 3	418506	279	18%	42%
CO	District 4	411338	283	17%	39%
CO	District 5	409823	293	13%	32%
CO	District 6	420928	297	10%	29%
CT	District 1	436935	272	21%	46%
CT	District 2	433858	284	14%	38%
CT	District 3	439672	277	18%	43%
CT	District 4	438765	278	20%	43%
CT	District 5	430457	281	17%	39%
CT	District 6	437060	284	14%	38%
DE	At Large	518946	276	19%	44%
DC	Delegate	503173	251	35%	62%
FL	District 1	435304	272	21%	47%
FL	District 2	435666	265	25%	53%
FL	District 3	417782	240	37%	71%
FL	District 4	448430	284	15%	39%
FL	District 5	471572	268	23%	52%
FL	District 6	441455	270	21%	49%
FL	District 7	450351	281	16%	41%
FL	District 8	449808	283	16%	39%
FL	District 9	460991	281	16%	42%
FL	District 10	473647	271	21%	48%
FL	District 11	444250	269	23%	49%
FL	District 12	435547	259	26%	56%
FL	District 13	475467	271	21%	49%
FL	District 14	466628	274	20%	46%
FL	District 15	453308	275	19%	45%
FL	District 16	458171	276	19%	45%
FL	District 17	408899	219	48%	80%
FL	District 18	463931	233	46%	64%
FL	District 19	472964	281	17%	42%
FL	District 20	453858	280	17%	41%
FL	District 21	439096	243	40%	57%
FL	District 22	496958	274	20%	46%
FL	District 23	423169	232	39%	74%
GA	District 1	445738	261	24%	55%
GA	District 2	435480	232	41%	76%
GA	District 3	447974	268	20%	50%
GA	District 4	462803	292	13%	33%
GA	District 5	456585	251	34%	64%
GA	District 6	453985	302	9%	27%
GA	District 7	449177	264	21%	53%
GA	District 8	445241	261	25%	55%
GA	District 9	454363	260	22%	55%
GA	District 10	455572	267	23%	52%
GA	District 11	431463	239	37%	70%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
HI	District 1	444711	276	17%	42%
HI	District 2	410807	274	17%	42%
ID	District 1	373525	280	17%	41%
ID	District 2	356294	285	17%	37%
IL	District 1	435963	244	38%	70%
IL	District 2	422501	246	37%	68%
IL	District 3	455429	277	17%	44%
IL	District 4	402843	221	49%	76%
IL	District 5	478396	272	21%	48%
IL	District 6	451414	294	11%	34%
IL	District 7	425204	244	39%	71%
IL	District 8	435349	299	10%	30%
IL	District 9	477630	279	20%	44%
IL	District 10	440549	295	13%	33%
IL	District 11	434705	275	18%	46%
IL	District 12	437771	269	22%	53%
IL	District 13	428700	301	9%	28%
IL	District 14	423429	288	15%	37%
IL	District 15	447199	286	16%	40%
IL	District 16	431465	283	15%	41%
IL	District 17	443711	279	18%	44%
IL	District 18	438783	281	16%	43%
IL	District 19	445172	272	21%	50%
IL	District 20	440377	274	18%	48%
IN	District 1	418354	269	23%	52%
IN	District 2	432984	278	17%	46%
IN	District 3	423252	279	18%	45%
IN	District 4	413196	282	15%	41%
IN	District 5	420322	279	17%	45%
IN	District 6	423181	296	10%	33%
IN	District 7	433951	286	15%	40%
IN	District 8	436262	281	17%	44%
IN	District 9	422263	275	18%	47%
IN	District 10	425158	267	24%	54%
IA	District 1	427915	289	14%	37%
IA	District 2	424004	281	17%	43%
IA	District 3	432560	284	16%	41%
IA	District 4	426259	289	13%	37%
IA	District 5	420965	279	18%	44%
KS	District 1	468734	280	17%	43%
KS	District 2	474074	283	16%	42%
KS	District 3	471997	296	13%	33%
KS	District 4	465629	283	16%	42%
KY	District 1	478499	257	25%	57%
KY	District 2	466806	262	21%	54%
KY	District 3	481521	270	20%	48%
KY	District 4	467892	268	19%	50%
KY	District 5	462410	239	31%	71%
KY	District 6	481581	272	18%	47%
LA	District 1	461088	274	18%	46%
LA	District 2	445054	240	38%	70%
LA	District 3	433739	249	27%	63%
LA	District 4	433799	224	43%	81%
LA	District 5	454417	265	23%	54%
LA	District 6	451400	268	20%	50%
LA	District 7	439796	251	26%	62%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
ME	District 1	495617	283	15%	39%
ME	District 2	457027	273	19%	47%
MD	District 1	470279	273	19%	46%
MD	District 2	471472	280	14%	40%
MD	District 3	471757	276	18%	44%
MD	District 4	462361	261	25%	54%
MD	District 5	465480	281	15%	40%
MD	District 6	463303	281	14%	40%
MD	District 7	462503	237	39%	73%
MD	District 8	469675	296	12%	29%
MA	District 1	473023	279	17%	42%
MA	District 2	469938	273	19%	45%
MA	District 3	474244	277	18%	42%
MA	District 4	476470	280	17%	40%
MA	District 5	462672	283	17%	37%
MA	District 6	480989	288	14%	35%
MA	District 7	498520	289	13%	35%
MA	District 8	506897	269	25%	49%
MA	District 9	486166	279	18%	41%
MA	District 10	480853	287	14%	37%
MI	District 1	447671	279	19%	45%
MI	District 2	431847	279	19%	44%
MI	District 3	431615	285	17%	40%
MI	District 4	442970	281	17%	43%
MI	District 5	437368	272	21%	49%
MI	District 6	443078	280	19%	43%
MI	District 7	441879	282	17%	43%
MI	District 8	447826	291	13%	35%
MI	District 9	438387	277	21%	46%
MI	District 10	449658	282	15%	42%
MI	District 11	458680	300	11%	30%
MI	District 12	457539	284	15%	41%
MI	District 13	457142	290	15%	37%
MI	District 14	429079	240	39%	73%
MI	District 15	436566	228	48%	83%
MI	District 16	450717	279	17%	44%
MN	District 1	413806	286	15%	38%
MN	District 2	405732	279	16%	43%
MN	District 3	412561	305	8%	25%
MN	District 4	422839	291	13%	36%
MN	District 5	444486	289	16%	38%
MN	District 6	397954	300	9%	29%
MN	District 7	409979	276	18%	46%
MN	District 8	414058	280	18%	44%
MS	District 1	390415	253	28%	61%
MS	District 2	364543	226	43%	80%
MS	District 3	386319	255	29%	60%
MS	District 4	383876	252	32%	62%
MS	District 5	384698	264	25%	53%
MO	District 1	434365	255	32%	62%
MO	District 2	436513	299	11%	30%
MO	District 3	442262	279	16%	44%
MO	District 4	435885	273	18%	49%
MO	District 5	442490	276	20%	47%
MO	District 6	436580	281	15%	43%
MO	District 7	444040	278	17%	46%
MO	District 8	435434	258	25%	60%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
MO	District 9	431715	279	17%	45%
MT	At Large	599765	282	16%	41%
NE	District 1	403342	288	14%	37%
NE	District 2	394391	292	13%	35%
NE	District 3	395070	282	17%	42%
NV	District 1	472027	270	20%	47%
NV	District 2	464023	283	15%	39%
NH	District 1	429631	286	13%	36%
NH	District 2	428984	285	14%	37%
NJ	District 1	452081	268	21%	50%
NJ	District 2	466130	265	23%	51%
NJ	District 3	468067	282	16%	40%
NJ	District 4	467111	271	20%	48%
NJ	District 5	468727	290	12%	34%
NJ	District 6	479446	277	17%	44%
NJ	District 7	481410	282	16%	40%
NJ	District 8	476313	263	24%	52%
NJ	District 9	483687	267	20%	50%
NJ	District 10	460704	233	36%	74%
NJ	District 11	474503	294	11%	31%
NJ	District 12	471918	294	12%	32%
NJ	District 13	469826	234	40%	68%
NM	District 1	384660	280	20%	41%
NM	District 2	366293	261	28%	53%
NM	District 3	382093	267	24%	50%
NY	District 1	449513	285	14%	37%
NY	District 2	454709	277	17%	42%
NY	District 3	470168	290	11%	34%
NY	District 4	466413	278	18%	42%
NY	District 5	476482	283	16%	38%
NY	District 6	450794	234	37%	73%
NY	District 7	484722	246	29%	63%
NY	District 8	496499	275	22%	44%
NY	District 9	480802	265	20%	51%
NY	District 10	433308	227	43%	79%
NY	District 11	434029	225	43%	80%
NY	District 12	433760	208	54%	82%
NY	District 13	464226	267	19%	49%
NY	District 14	520834	290	17%	34%
NY	District 15	452561	216	52%	82%
NY	District 16	403913	205	58%	90%
NY	District 17	452400	236	37%	71%
NY	District 18	481631	276	19%	43%
NY	District 19	459009	288	14%	34%
NY	District 20	445234	280	17%	40%
NY	District 21	465566	284	15%	39%
NY	District 22	450731	282	16%	39%
NY	District 23	451147	275	19%	45%
NY	District 24	442567	277	19%	44%
NY	District 25	450441	282	16%	40%
NY	District 26	460729	260	18%	42%
NY	District 27	449363	284	15%	38%
NY	District 28	452786	279	20%	42%
NY	District 29	455592	278	18%	42%
NY	District 30	456301	268	23%	50%
NY	District 31	444814	277	19%	43%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
NC	District 1	417504	231	41%	76%
NC	District 2	434913	263	25%	53%
NC	District 3	427869	265	24%	51%
NC	District 4	442004	285	18%	39%
NC	District 5	443878	263	24%	53%
NC	District 6	442390	277	17%	44%
NC	District 7	428588	268	22%	50%
NC	District 8	420504	257	26%	57%
NC	District 9	435875	283	16%	40%
NC	District 10	436927	268	21%	49%
NC	District 11	445875	265	23%	52%
NC	District 12	426903	245	35%	66%
ND	At Large	480464	283	18%	42%
OH	District 1	435565	269	25%	52%
OH	District 2	433405	287	15%	39%
OH	District 3	443887	276	20%	47%
OH	District 4	434052	275	19%	48%
OH	District 5	428970	280	17%	44%
OH	District 6	438385	272	21%	50%
OH	District 7	438656	280	17%	44%
OH	District 8	432047	282	16%	43%
OH	District 9	437547	279	19%	45%
OH	District 10	448944	281	17%	44%
OH	District 11	439889	248	36%	68%
OH	District 12	432934	281	19%	44%
OH	District 13	430525	281	16%	42%
OH	District 14	447673	281	18%	44%
OH	District 15	455363	292	13%	36%
OH	District 16	436280	276	18%	47%
OH	District 17	444774	273	21%	49%
OH	District 18	438715	270	20%	52%
OH	District 19	451572	284	14%	41%
OK	District 1	400216	283	16%	40%
OK	District 2	398124	266	23%	52%
OK	District 3	404005	264	23%	53%
OK	District 4	397277	277	18%	44%
OK	District 5	401724	285	15%	39%
OK	District 6	397553	265	23%	53%
OR	District 1	439954	292	13%	32%
OR	District 2	434140	276	20%	45%
OR	District 3	441054	280	17%	41%
OR	District 4	440089	281	18%	42%
OR	District 5	436527	282	17%	40%
PA	District 1	428714	230	41%	77%
PA	District 2	451637	246	36%	67%
PA	District 3	450929	264	21%	54%
PA	District 4	446287	274	17%	46%
PA	District 5	447155	276	17%	45%
PA	District 6	449840	268	19%	49%
PA	District 7	454652	291	12%	34%
PA	District 8	436408	290	12%	34%
PA	District 9	441960	266	19%	51%
PA	District 10	443537	275	17%	45%
PA	District 11	455970	269	20%	49%
PA	District 12	447810	265	20%	53%
PA	District 13	452785	291	13%	34%
PA	District 14	462075	269	22%	51%
PA	District 15	448253	276	17%	44%
PA	District 16	432411	278	16%	42%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
PA	District 17	441972	275	17%	44%
PA	District 18	460720	278	17%	43%
PA	District 19	446729	277	15%	43%
PA	District 20	452066	271	18%	48%
PA	District 21	440606	274	18%	46%
RI	District 1	404847	272	20%	46%
RI	District 2	396778	273	20%	46%
SC	District 1	442738	273	20%	46%
SC	District 2	447187	274	21%	46%
SC	District 3	452047	260	26%	55%
SC	District 4	454644	263	24%	53%
SC	District 5	441416	252	29%	60%
SC	District 6	431351	232	41%	75%
SD	At Large	517032	279	17%	43%
TN	District 1	434634	262	22%	55%
TN	District 2	431922	271	19%	48%
TN	District 3	426390	264	23%	52%
TN	District 4	422542	252	26%	61%
TN	District 5	429282	273	20%	47%
TN	District 6	415110	271	18%	48%
TN	District 7	412762	272	18%	47%
TN	District 8	417824	254	26%	60%
TN	District 9	409259	246	34%	66%
TX	District 1	432706	260	26%	56%
TX	District 2	431259	254	28%	60%
TX	District 3	434830	301	10%	27%
TX	District 4	431420	273	20%	46%
TX	District 5	428950	254	28%	58%
TX	District 6	427592	299	9%	28%
TX	District 7	427801	298	12%	29%
TX	District 8	425281	288	13%	36%
TX	District 9	426855	268	23%	49%
TX	District 10	443173	285	17%	38%
TX	District 11	428854	265	25%	52%
TX	District 12	427797	267	23%	50%
TX	District 13	425374	261	26%	55%
TX	District 14	423786	258	27%	56%
TX	District 15	392177	223	46%	74%
TX	District 16	405037	238	40%	64%
TX	District 17	428024	263	25%	54%
TX	District 18	429766	242	37%	68%
TX	District 19	418559	278	18%	43%
TX	District 20	415459	253	31%	58%
TX	District 21	435979	286	15%	37%
TX	District 22	423815	284	17%	37%
TX	District 23	396780	240	39%	64%
TX	District 24	411947	258	27%	55%
TX	District 25	421150	266	24%	50%
TX	District 26	436778	296	11%	29%
TX	District 27	401287	241	38%	64%
TX	District 28	403095	235	39%	70%
TX	District 29	396122	220	46%	75%
TX	District 30	424614	243	36%	66%
UT	District 1	380822	290	13%	32%
UT	District 2	396742	295	11%	30%
UT	District 3	376475	287	14%	34%
VT	At Large	434544	285	15%	37%

Synthetic Estimates of Adult Literacy

Prepared by Stephen Reder
Portland State University

State	District	Pop >= 16	Mean Lit	% Level 1	% Level 1 & 2
VA	District 1	434126	274	20%	45%
VA	District 2	432493	281	15%	40%
VA	District 3	427484	236	38%	73%
VA	District 4	431191	257	26%	58%
VA	District 5	447572	254	28%	60%
VA	District 6	452115	268	20%	50%
VA	District 7	438712	286	14%	37%
VA	District 8	464771	289	17%	33%
VA	District 9	451001	259	25%	56%
VA	District 10	427244	286	13%	36%
VA	District 11	436473	294	12%	30%
WA	District 1	413781	297	10%	29%
WA	District 2	410252	284	15%	38%
WA	District 3	408081	282	16%	40%
WA	District 4	396921	267	24%	49%
WA	District 5	413994	285	16%	38%
WA	District 6	416754	278	19%	44%
WA	District 7	457229	287	17%	37%
WA	District 8	403555	294	12%	31%
WA	District 9	410418	284	15%	38%
WV	District 1	474000	268	20%	51%
WV	District 2	466078	265	21%	53%
WV	District 3	464822	252	27%	62%
WI	District 1	412034	279	17%	44%
WI	District 2	425075	294	12%	33%
WI	District 3	413085	282	16%	41%
WI	District 4	423282	283	15%	40%
WI	District 5	409790	269	26%	53%
WI	District 6	414495	279	16%	44%
WI	District 7	411286	278	17%	44%
WI	District 8	411554	280	16%	43%
WI	District 9	412297	288	13%	37%
WY	At Large	332293	287	15%	37%

SYNTHETIC ESTIMATES OF NALS LITERACY PROFICIENCIES (1990 Census)

STATE or OTHER AREA	MEAN PROFICIENCY	COMBINED		
		% in LEVEL 1	% in LEVEL 2	% in LEVELS 3-5
ALABAMA	263	21	34	46
ALASKA	294	5	19	76
ARIZONA	279	12	27	61
ARKANSAS	264	19	33	47
CALIFORNIA	271	19	25	56
COLORADO	291	7	21	71
CONNECTICUT	279	13	26	61
DELAWARE	276	13	30	57
DIST. OF COLUMBIA	254	31	34	35
FLORIDA	263	19	34	47
GEORGIA	267	18	33	49
HAWAII	275	14	26	60
IDAHO	286	8	23	69
ILLINOIS	276	15	27	58
INDIANA	281	10	28	62
IOWA	284	9	23	68
KANSAS	284	9	24	66
KENTUCKY	268	18	31	51
LOUISIANA	260	23	34	44
MAINE	279	10	27	62
MARYLAND	274	15	31	54
MASSACHUSETTS	279	13	25	62
MICHIGAN	280	12	27	61
MINNESOTA	289	8	20	72
MISSISSIPPI	257	25	34	41
MISSOURI	278	13	27	60
MONTANA	288	7	23	70
NEBRASKA	285	9	23	68
NEVADA	281	10	27	63
NEW HAMPSHIRE	285	8	24	68
NEW JERSEY	271	17	28	54
NEW MEXICO	274	15	28	57
NEW YORK	266	21	29	50
NORTH CAROLINA	268	18	32	50
NORTH DAKOTA	283	12	20	68
OHIO	280	11	28	61
OKLAHOMA	272	14	33	53
OREGON	287	8	24	68
PENNSYLVANIA	273	14	30	56
RHODE ISLAND	273	16	27	57
SOUTH CAROLINA	264	20	34	46
SOUTH DAKOTA	281	11	23	65
TENNESSEE	267	18	32	50
TEXAS	263	21	31	48
UTAH	293	5	21	74
VERMONT	283	9	24	67
VIRGINIA	273	16	29	55
WASHINGTON	289	7	23	70
WEST VIRGINIA	267	17	32	50
WISCONSIN	284	10	23	67
WYOMING	290	6	21	72
UNITED STATES	273	16	28	56

SOURCE: S. Reder, "Synthetic Estimates of NALS Literacy Proficiencies From 1990 Census Microdata", Northwest Regional Educational Laboratory, August 1994

PREPARED BY: U.S. Department of Education,
Division of Adult Education and Literacy
9/15/94

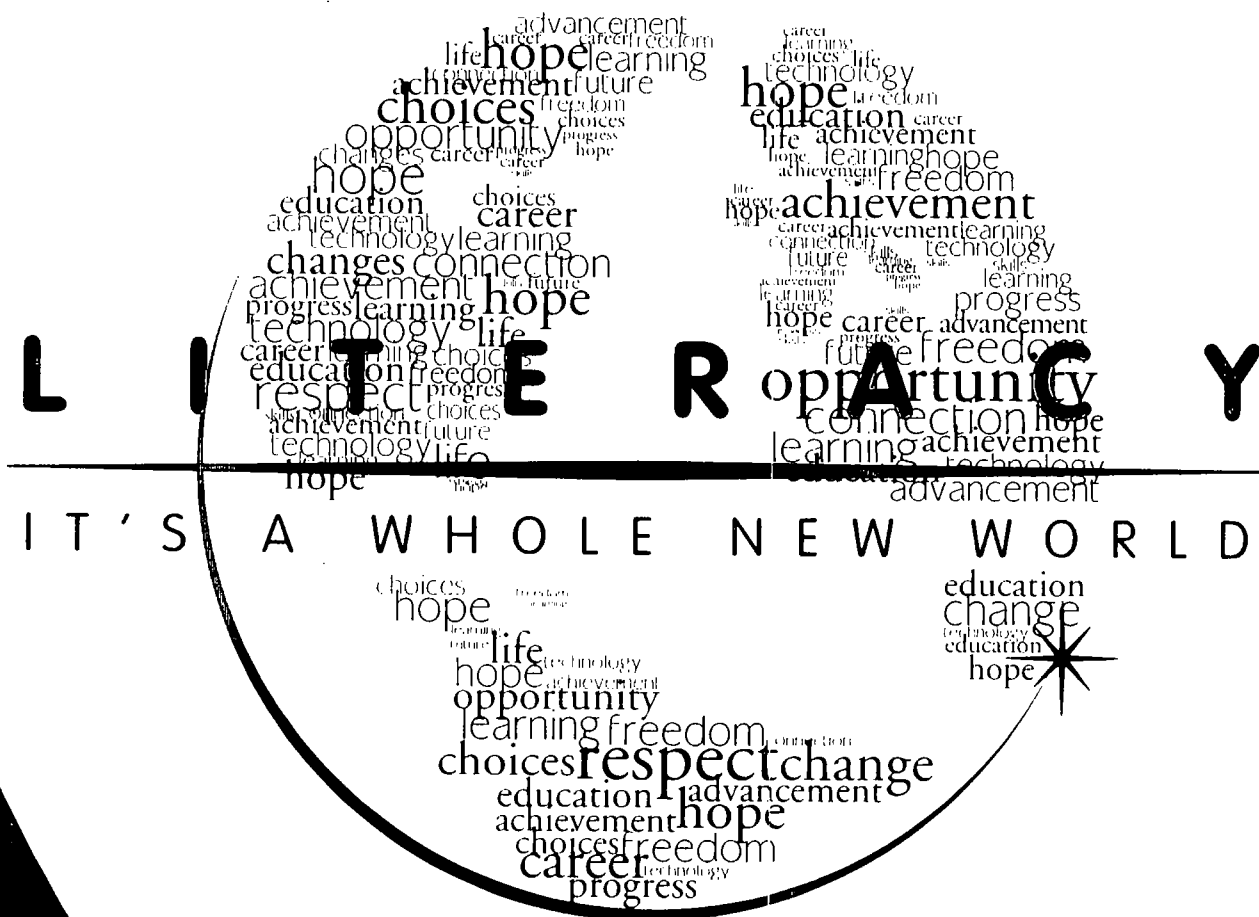
LITERACY SKILLS OF ADULTS
AT "BELOW ADEQUATE LEVEL"

LEVEL 1 0-225 AVG. 198 21 TO 23% 40 TO 44M	✓ Very limited in processing information ✓ Simply routine tasks: total entry on deposit slip; identify specific inf. in brief newspaper article ✓ Level 2: limited literacy skills; low-level inferences; calculate total cost of purchase	LEVEL 2 226-275 AVG. 259 25 TO 28% 50 MILLION	LEVEL 3 276-325 AVG. 298 32% 61m
25% 62% 35% 27% 21%	IMMIGRANTS LACK H.S. DIPLOMA 0 TO 8 YEARS 9 TO 12 YEARS HIGH SCHOOL DIPLOMA	08% 26% 07% 19% 36%	05% 08% 01% 07% 31%
43%	BLACK/HISPANIC	24%	13%
26% 19%	P-M-H CONDITION VISUAL DIFFICULTY	13% 07%	07% 03%
44% 50% \$240 18 TO 19	LIVE IN POVERTY OUT OF LABOR FORCE MEDIAN WEEKLY INCOME AVE # WEEKS WORKED	23% 33% \$281 27	12% 25% \$339 35
33% 70%	AGE 64 OR OLDER DO NOT PERCEIVE AT RISK	18% 97%	09%

SUMMARY: "BELOW ADEQUATE LEVEL" INFORMATION PROCESSING SKILLS
LEVELS 1 & 2

1. CANNOT CONSISTENTLY RESPOND TO TASKS REQUIRING:
 - HIGHER LEVEL READING AND PROBLEM-SOLVING SKILLS
 - INTEGRATION OR SYNTHESIZING OF INFORMATION FROM COMPLEX TEXTS
 - TWO OR MORE SEQUENTIAL QUANTITATIVE PROBLEMS;
2. RACIAL COMPOSITION: PREDOMINATELY BLACK, NATIVE AM., HISPANIC;
3. FAR LESS LIKELY THAN LITERATE PEERS TO BE EMPLOYED FULL-TIME, TO EARN HIGH WAGES, AND TO VOTE;
4. MAY BE "AT RISK" AS THE NATION'S ECONOMY AND SOCIAL FABRIC CONTINUE TO CHANGE.

PHOTOCOPY
PRESERVATION



**PHOTOCOPY
PRESERVATION**

National Institute For Literacy

800 Connecticut Ave. NW, Suite 200, Washington, DC 20006-2712

NIFL Hotline: 1 - 800 - 228 - 8813

NIFL Hotline TTY: 1 - 800 - 552-9097



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1-800-228-8813 • National Institute For Literacy

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NIFL Hotline: 1-800-228-8813 • phone: 202/632-1500 • fax: 202/632-1512
<http://www.nifl.gov>

FAST FACTS ON LITERACY

SCOPE...

- More than 20 percent of adults read at or below a fifth-grade level — far below the level needed to earn a living wage. The National Adult Literacy Survey found that over 40 million Americans age 16 and older have significant literacy needs.
- The National Literacy Act defines literacy as “an individual’s ability to read, write, and speak in English, compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals, and develop one’s knowledge and potential.”

LITERACY & CHILDREN...

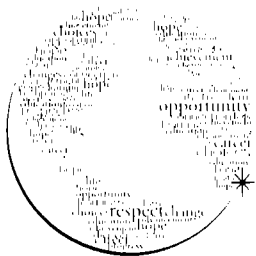
- As the education level of adults improves, so does their children’s success in school. Helping low-literate adults improve their basic skills has a direct and measurable impact on both the education and quality of life of their children.
- Children of adults who participate in literacy programs improve their grades and test scores, improve their reading skills, and are less likely to drop out.

LITERACY & POVERTY...

- Forty-three percent of people with the lowest literacy skills live in poverty; 17 percent receive food stamps, and 70 percent have no job or a part-time job.
- Workers who lack a high school diploma earn a mean monthly income of \$452, compared to \$1,829 for those with a bachelor’s degree.

EFFORTS TO PROMOTE LITERACY...

- The federal government provided \$361 million for adult education program in 1996. This funding enables millions of families to participate in basic education programs that help people help themselves.
- Federal adult education funds leverage an additional \$800 million each year in state funds for literacy, and millions of dollars in private funding.



L I T E R A C Y

IT'S A WHOLE NEW WORLD

10 things **YOU** can do to support literacy

1. **Be a lifelong learner.**

The demands of our workplaces and our world are changing every day. Brush up on your skills.

2. **Encourage others to be lifelong learners.**

Support your friends, family members, and neighbors who are considering improving their skills — whether it be reading and writing, getting a diploma or GED, or learning to program computers.

3. **Read with your child.**

Studies show that parents are the most important teachers of their children. Children learn the importance of reading from those closest to them.

4. **Volunteer to tutor.**

Many literacy programs are small and depend on the involvement of local community members. They are glad to provide training to potential volunteers.

5. **Volunteer to support an education program in other ways.**

Many literacy programs do not have the funds to pay for support staff, and welcome volunteers to help answer phones and provide other office support.

6. **Support friends who want to participate in a literacy program.**

If someone you know wants to participate in a literacy program, offer to take care of their children while they attend class or drive learners to and from programs.

7. **Donate equipment or other materials.**

If your work or home office is getting a new copier, fax machine or computer, consider donating the old equipment to a literacy program in your community.

8. **Donate money.**

All literacy programs combined serve fewer than 10 percent of people with literacy needs. More money allows more people to get the help they need.

9. **Start a literacy program in your office.**

Make sure your office provides training to employees, and that courses are presented as a positive opportunity to improve skills.

10. **Strengthen the links between literacy programs and other community groups.**

If you volunteer at another program in your community — such as a homeless shelter — make sure employers are aware of literacy programs and how to refer potential learners to them.

National Literacy Resource List

Adult Literacy & Technology Network

301 S. Geneva St., Room G-10
Ithaca, NY 14850
607/273-0634

Adult Literacy Resource Institute

989 Commonwealth Avenue
Boston, MA 02215
617/782-8956

American Association of Adult and Continuing Education

1200 19th Street, NW, Suite 300
Washington, DC 20036
202/429-4131

American Council on Education, GED Testing Service

1 Dupont Circle, NW, Suite 250
Washington, DC 20036
202/939-9490

American Library Association

50 E. Huron Street
Chicago, IL 60611
312/944-6780

American Poetry & Literacy Project

1058 Thomas Jefferson Street, NW
Washington, DC 20007
202/338-1109

Barbara Bush Foundation for Family Literacy

1002 Wisconsin Avenue, NW
Washington, DC 20007
202/338-2006

Correctional Education Association

4380 Forbes Boulevard
Landham, MD 20706
301/918-1915

Institute for the Study of Adult Literacy

Pennsylvania State University
102 Rackley Building
University Park, PA 16802
814/863-3777

International Reading Association

444 North Capitol Street, Suite 422
Washington, DC 20001
202/624-8800

Laubach Literacy Action

1320 Jamesville Avenue, Box 131
Syracuse, NY 13210
315/422-9121

Learning Disabilities Association of America

4156 Library Road
Pittsburgh, PA 15234
412/341-1515

Literacy Volunteers of America

635 James Street
Syracuse, NY 13203
315/472-0001

National Adult Literacy and Learning Disabilities Center

1875 Connecticut Avenue NW, 8th floor
Washington, DC 20009-1202
202/884-8178

National Alliance of Business

Workforce Adjustment Program
1201 New York Avenue NW, Suite 700
Washington, DC 20005
202/289-2934

National Alliance of Urban Literacy Coalitions

600 Jefferson, Suite 500
Houston, TX 77002
713/845-2557

National Association of State Literacy Resource Centers

c/o DC Literacy Resource Center
MLK Memorial Library, Room 300
901 G Street, NW
Washington, DC 20001
202/727-1616

NATIONAL INSTITUTE FOR LITERACY

800 Connecticut Avenue, NW, Suite 200

Washington, DC 20006-2712

202/632-1500

<http://www.nifl.gov>

National Center for Family Literacy

Waterfront Plaza, Suite 200
325 West Main Street
Louisville, KY 40202-4251
502/584-1133

National Center for Learning Disabilities

381 Park Avenue South, Suite 1420
New York, NY 11565
212/545-7510

National Center on Adult Literacy

University of Pennsylvania
3910 Chestnut Street
Philadelphia, PA 19104-3111
215/898-2100

National Center on the Study of Adult Literacy and Learning

Nichols House, Harvard University
Graduate School of Education
Cambridge, MA 02138
617/496-0516

National Clearinghouse for ESL Literacy Education

Center for Applied Linguistics
1118 22nd Street NW
Washington, DC 20037
202/429-9292

National Council of State Directors of Adult Education

P.O. Box 2120
Richmond, VA 23216-2120
804/225-2293

National Institute for Literacy

800 Connecticut Ave., NW, Suite 200
Washington, DC 20006
202/632-1500

Newspaper Association of America Foundation

11600 Sunrise Valley Drive
Reston, VA 22091-1412
703/648-1000

Orton Dyslexia Society

Chester Building, Suite 382
8600 LaSalle Road
Baltimore, MD 21286-2044
410/296-0232 or 800/222-3123

Student Coalition for Action in Literacy Education

140 1/2 E. Franklin St., CB #3505
University of North Carolina
Chapel Hill, NC 27599-3505
919/962-1542

Teachers of English to Speakers of Other Languages

1600 Cameron Street, Suite 300
Alexandria, VA 22314
703/836-0774

The Center for the Book

The Library of Congress
Washington, DC 20540
202/707-5221

U.S. Department of Health and Human Services

Office of Family Assistance
370 L'Enfant Promenade SW, 5th Fl., E
Washington, DC 20447
202/401-4619

U.S. Department of Education

Division of Adult Education and Literacy
330 C St. SW
Washington, DC 20202-7240
202/205-9685

U.S. Department of Labor

Employment & Training Administration
200 Constitution Avenue, NW, Room N5637
Washington, DC 20210
202/219-7674

National Institute for Literacy Publications

To order any of the following free publications from National Institute for Literacy, call the National Literacy Hotline at 800-228-8813 (or 800-552-9097 TTY). Most publications are also available online through the National Institute for Literacy's homepage: <http://www.nifl.gov>

Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning.

This research report and compilation of essays by adult learners on how improving their literacy skills has changed their lives is the foundation of a long-term project to create national literacy standards and systemic reform. The 121-page book includes adults learners speaking in their own words about "What it Means to be Literate," "What it Means to Compete in a Global Economy," "What it Means to Exercise the Rights and Responsibilities of Citizenship," "Voices of Adults on Welfare," and "Voices of Adults in Prison and Treatment Centers."

Literacy and Adult Education in the 104th Congress.

This 35-page guide contains a description of the federal legislative process, and the history and the text of the current Adult Education Act law.

Literacy Leader Fellowship Program Reports

- Driver Education for the Information Superhighway, (Literacy Leader Fellowship Program Report: Volume II, Number 2.) *This report by David Rosen, director of Boston's Adult Literacy Resource Institute, discusses how adult learners and instructors use the Internet, and provides a staff development model designed for practitioners with little or no Internet experience. (available May, 1997)*
- Framework for Developing Skill Standards for Workplace Literacy, (Literacy Leader Fellowship Program Report: Part I in a Series). *This report by Eunice Askov, Ph.D., director of Pennsylvania State University's Institute for the Study of Adult Literacy, describes major national and federal workforce development initiatives, including skill standards, and includes a framework for workplace literacy skill standards needed for work in high performance organizations.*
- State Level Policy for Workplace Basic Education: What Advocates are Saying, (Volume II, Number 1). *This report by Paul Jurmo, director of Learning Partnerships, examines barriers to workplace basic education programs and recommends successful strategies for educating policymakers about this timely issue. (available May, 1997)*

Literacy Works: Building State Performance Measurement, Reporting, and Improvement Systems.

This report describes how four states are designing and implementing performance measurement, reporting, and improvement systems that will enable them to unify goals, consolidate programs, and develop common terminology and technologies.

National Resources for Adults with Learning Disabilities.

This guide is for adults who suspect they have a learning disability. By providing information on assessing the problem, a learning disabilities checklist, and a listing of resources, it is a starting point for gaining information that can lead to obtaining services at the state or local level. (Also available on the Internet through the following: info@nalldc.aed.org)

National Institute for Literacy News.

Back issues of the National Institute for Literacy newsletter provide concise updates on the Institute's activities, and focus on specific literacy topics. Recent issues focus on literacy and learning disabilities, and the increasing use of technology by literacy programs.

National Institute for Literacy Information Booklet.

This booklet provides a general overview of the National Institute for Literacy, including background, mission, and current programs.

National Institute for Literacy Policy Updates.

These periodic overviews provide timely and concise information about current policy issues and legislation of interest to the adult education and literacy field. Recent topics include welfare reform, literacy funding increases, federal education legislation, and the America Reads Challenge.

Talk Time Handbook: Conversation Sessions for Volunteer Facilitators and Limited English Speaking Participants.

This step-by-step guide, produced by the Tacoma Community Training Project in Washington state, provides an overview of a proven method for assisting adults in beginning to learn English while they are on waiting lists for ESOL literacy programs.

To be added to the National Institute for Literacy mailing list call 202/632-1500 and choose option #1 or email request to staffasst@nifl.gov

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I T E R A C Y

advancement
career
life
hope
learning
connection
achievement
future
freedom
choices
opportunity
progress

career
learning
choices
life
technology
hope
freedom
education
career
life
achievement

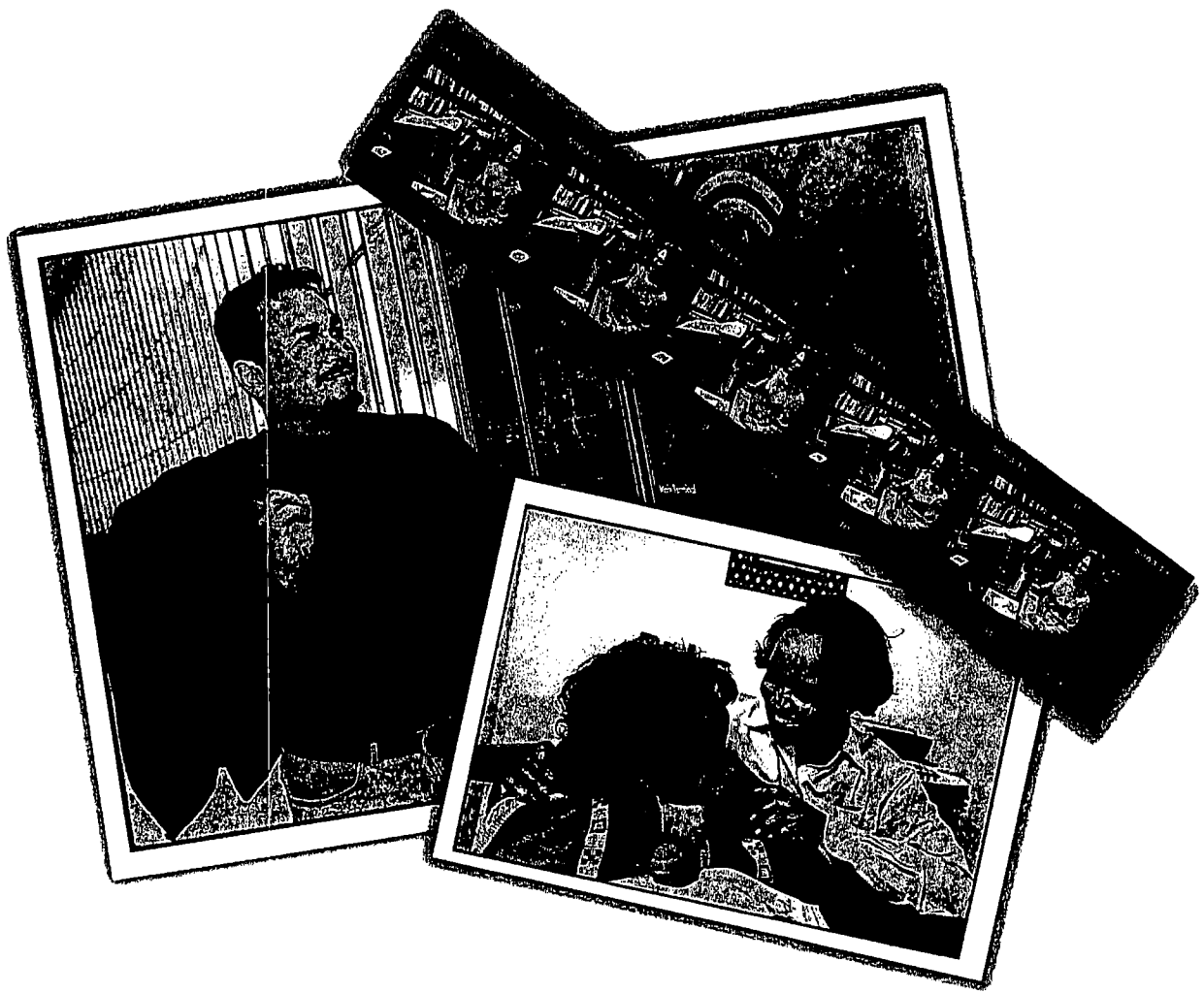
3 A W H O L E N E W W O R L D

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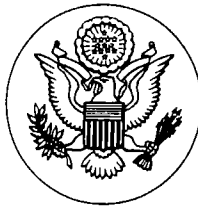
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National Institute For Literacy

Helping Equip America for the Future



National Institute for Literacy

800 Connecticut Avenue NW, Suite 200, Washington, DC 20006

National Institute for Literacy HOTLINE 1-800-228-8813

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<http://www.nifl.gov>

FACT SHEET:

the national literacy delivery system

Literacy services are provided across the country by a broad array of public and private organizations.

need

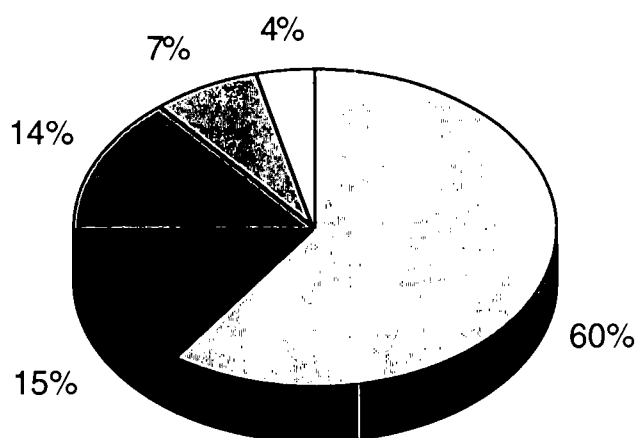
- More than 20 percent of adults read at or below the fifth-grade level — far below the level needed to earn a living wage.
- Over 40 million Americans age 16 and older have significant literacy needs.

resources

- Federal investment = \$345 million annually
- All State and local investment combined = \$830 million annually

literacy provider network

Nationally, 3.8 million adults (fewer than 10 percent of adults without a high school diploma or GED) enroll in adult basic education programs each year. Adult learners participate in literacy programs offered by the following:



- Local Education Agencies
- Community Colleges
- ▣ Community-Based Organizations
- Public and Private Non-Profits
- Correctional Facilities

outcomes

Of adults participating in literacy programs each year:

- 342,000 earn a high school diplomas or GED;
- 168,000 move on to more advanced education and training;
- 110,000 get a job;
- 101,000 get a better job.

volunteer efforts

- Over 140,000 certified volunteer tutors teach 250,000 adult literacy students annually.
- Most volunteers work through 1,500 local programs that are affiliated with two national volunteer literacy organizations: Laubach Literacy Action and Literacy Volunteers of America.
- Volunteers give 7 million hours of literacy service annually.
- Sixty percent of funding for volunteer programs comes from individual, corporate, and foundation support; 40 percent from federal, state, and local government grants.
- Volunteer programs are based primarily in libraries, churches, and community centers.

RECOMMENDED RESOURCES

Division of Adult Education
and Literacy
Department of Education
600 Independence Ave., SW
Washington, DC 20202-7240
202/205-8270

Laubach Literacy Action
Box 131
Syracuse, NY 13210
315/422-9121

Literacy Volunteers of America
5795 Widewaters Parkway
Syracuse, NY 13214
315/472-0001

By using a comprehensive and holistic approach to education, family literacy programs are making great strides in helping families break the cycle of low literacy, poverty, and hopelessness.

need

- Children's literacy levels are strongly linked to the educational level of their parents, especially their mothers.
- Parental income and marital status are both important predictors of success in school, but neither is as significant as having a mother (or primary caregiver) who completed high school.
- Children of parents are unemployed and have not completed high school are five times more likely to drop out than children of employed parents.

solution

The National Center for Family Literacy supports programs that include four essential components for family literacy:

1. *Early Childhood Education*: focuses on pre-literacy skills such as vocabulary building and verbal expression.
2. *Adult Literacy Education*: helps parents enhance their own reading, math and language skills.
3. *Parent and Child Together (PACT)*: brings parents and children together in the pre-school classroom in order to teach parents how to best fulfill their role as their child's most important teacher.
4. *Parent Time*: offers topics for study and discussion, including child nurturing, managing and coping with child behavior, self-esteem, career options, and community resources.

outcomes

- Adults stay enrolled in family literacy programs longer than in most adult-only programs, and their attendance rate is higher.
- Children participating in family literacy programs in 15 cities made gains at least three times greater than would have been expected based on their pre-enrollment rate of development.
- Adults significantly improve their self-confidence, confidence in their parenting abilities, and in their employment status (29 percent increase).
- Children showed an 80 percent increase in reading books, and made twice as many trips to the library.
- Long-term National Center for Family Literacy follow-up studies¹ found the following:
 1. Fifty-one percent of adults participating in family literacy programs earned their GED or the equivalent.
 2. Forty-three percent became employed, compared with 14 percent before enrolling.
 3. Thirteen percent enrolled in higher education or training programs and another 11 percent continued in GED programs.
 4. Twenty-three percent of those who were on public assistance when they enrolled are now self-sufficient.

RECOMMENDED RESOURCES

National Center for Family Literacy
Waterfront Plaza, Suite 200
325 West Main Street
Louisville, KY 40202-4251
502/584-1133

Barbara Bush Foundation
for Family Literacy
1002 Wisconsin Ave., NW
Washington, DC 20007
202/338-2006

Department of Education
Even Start Division
600 Independence Ave., SW
Washington, DC 20202
202/260-7764

¹"The Power of Family Literacy," 1996 Edition (available by calling 502/584-1133).

FACT SHEET:

english for speakers of other languages

English for Speakers of Other Languages (ESOL) is the fastest growing area of the adult basic education system.

need

- Nearly 32 million people in the United States speak languages other than English — a 38 percent increase over 1980.
- More than 50 percent of adults learning English as a second language are Hispanic. Other common first languages of ESOL participants are the following: French, Portuguese, Polish, Russian, Chinese, and Vietnamese.
- Programs do not have enough space to serve everyone who wants to learn English. Most cities have waiting lists of several months to several years, and some rural areas have no available classes.

solution

- ESOL programs vary in scope and content. Some programs, especially those for recent arrivals, emphasize life skills and focus on improving listening and speaking abilities. Others stress vocational topics, citizenship education, family literacy, or academic or GED preparation.
- Over one million adults are enrolled in federally-funded ESOL instruction. Many more are tutored by volunteers in churches, libraries, local businesses and unions, community colleges, and other community-based organizations.

RECOMMENDED RESOURCE

National Clearinghouse for ESL Literacy Education (NCLE)
Center for Applied Linguistics
1118 22nd St. NW
Washington, DC 20037-1214
(202) 429-9292, ext. 200
World Wide Web <http://www.cal.org/ncle>

Thanks to NCLE for providing the information for this fact sheet.

NATIONAL INSTITUTE FOR LITERACY

800 Connecticut Avenue, NW, Suite 200

Washington, DC 20006-2712

202/632-1500

<http://www.nifl.gov>

In order to stay competitive in the global economy, employers need workers who can read, write, compute, solve problems, and communicate well.

need

- About 20 percent of America's workers have low basic skills, and 75 percent of unemployed adults have reading or writing difficulties.
- Workers who lack a high school diploma earn a mean monthly income of \$452, compared to \$1,829 for those with a bachelor's degree.
- Over 60 percent of front-line workers in the goods-producing industry cannot match information in a text to the required task if any inference is involved, and cannot integrate information from several sources.

solution

- Workplace literacy programs provide workers with the skills needed to get or retain a job, advance in their careers, or increase productivity.
- Workplace literacy programs do not have to be expensive. Federal and state grants and tax credits are available.

RECOMMENDED RESOURCES

National Alliance of Business
1201 New York Avenue NW, Suite 700
Washington, DC 20005
202/289-2934
<http://www.nab.com>

Institute for the Study of Adult Literacy
The Pennsylvania State University
University Park, PA 16801
814/863-3777
<http://www.psu.edu/institutes/isal/>

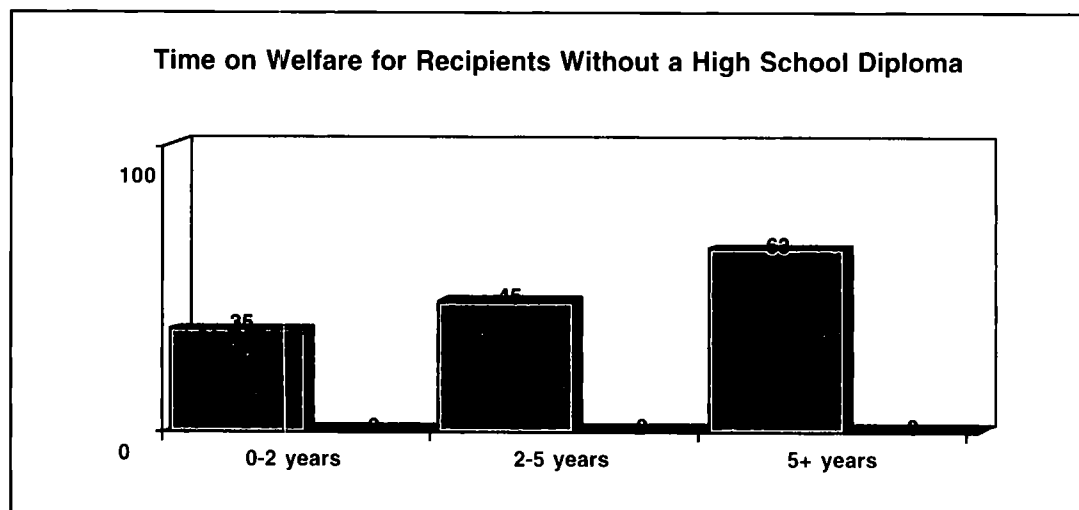
Improving basic literacy skills can be the key to long-term self-sufficiency for welfare recipients.

Welfare recipients generally have low education skills.

- Welfare recipients ages 17-21 read, on average, at the sixth grade level. When single parents drop out of school, they are likely to drop in to the welfare system.
- Almost 50 percent of adults on welfare do not have a high school diploma or GED.

Welfare recipients with low education skills stay on welfare the longest; those with stronger education skills become self-sufficient more quickly.

- Over 60 percent of those who spend more than five years on welfare enter AFDC with less than a high school education.
- Over 65 percent of people on welfare who have a high school diploma or GED leave welfare and become self-sufficient within two years.



The education level of welfare recipients is closely linked to their income level.

- Adults with low literacy skills earn the least. As literacy skills improve, average weekly wages increase.
- Workers who lack a high school diploma earn a mean monthly income of \$452, compared to \$1,829 for those with a bachelor's degree.
- Among adults with low literacy skills, 43 percent live in poverty and 17 percent receive food stamps. In contrast, among adults with strong literacy skills, fewer than five percent live in poverty and fewer than one percent receive food stamps.

Helping welfare recipients improve their basic education and literacy skills improves our economic competitiveness.

- Ninety percent of Fortune 1000 executives expressed concern in a recent survey that low literacy is hurting their productivity and profitability.
- 40 million American adults need to improve their literacy skills. While they can read some basic information, they cannot locate an intersection on a map or read a newspaper article. Until they improve their basic education skills, these adults cannot effectively compete for today's jobs.
- Welfare recipients with low literacy skills work 11 weeks per year, on average, compared to 29 weeks for those with stronger literacy skills.

RECOMMENDED READING

1. "Literacy and Dependency: the Literacy Skills of Welfare Recipients Living in the United States," available from the Educational Testing Service (609/734-5694).
2. "A Brief Summary of Key Provisions of the Temporary Assistance for Needy Families Block Grant of H.R. 3734: The Personal Responsibility and Work Opportunity Reconciliation Act of 1996," available from the Center for Law and Social Policy (202/328-5140).
3. "How to Prepare for Welfare Changes," available from the National Institute for Literacy (202/632-1500).

This emerging area — new for both the literacy and medical fields — has grown out of the recognition that there is a significant overlap in the populations served and that better literacy skills can contribute to greater well-being.

overview

- Individuals with low literacy skills are at risk of not being able to understand materials distributed by health care providers.
- Low birth weight is a condition that may increase a child's risk of developing health, learning, and behavioral problems.
- Children who are born at a low birth weight are more likely to be enrolled in special education classes, to repeat a grade, or to fail in school.
- Family literacy programs provide parents with an opportunity to learn about child development, good health, and proper nutrition through parent support groups that enable them to discuss health issues with specialists.
- Partnerships between literacy and health providers are making a difference in low literate communities. Massachusetts is a leader in this effort and has had significant success with some of its programs.

RECOMMENDED RESOURCES

System for Adult Basic Education Support
Northern Essex Community College
45 Franklin Street
Lawrence, MA 01840
508/688-6089

World Education
44 Farnsworth St.
Boston, MA 02210-1211
617/482-9485

Talk to any adult literacy teacher and you are likely to hear of an apparently bright and able student who does not achieve to potential. The student who shows this unexpected underachievement may have a learning disability.

overview

- “Learning disability” is an umbrella term that encompasses a wide variety of disorders, including basic psychological processes involved in understanding or using spoken or written languages.
- Learning disabilities may manifest themselves as an inability to effectively listen, think, speak, read, write, spell, or compute — skills needed by adults to function effectively as parents, family members, employees, and citizens.
- People with learning disabilities are recognized as having a disability under federal law. This means that they are entitled to “reasonable accommodation” and certain other federally-supported services.

scope

Many people have learning disabilities. Estimates range from:

- Fifty to 80 percent of all students in literacy and basic education programs.
- Fifteen to 30 percent of all participants in job training programs.
- Twenty-five to 40 percent of all adults on welfare.

assessment

- Only diagnostic testing can accurately determine the presence of a learning disability.
- Literacy practitioners can be trained to help students with learning disabilities, including those who have not been formally diagnosed.
- Most participants in adult literacy programs are unable to afford formal testing administered by trained professionals.

consequences

- **education**

Learning disabilities may manifest themselves as difficulties in spoken or written language, arithmetic, reasoning, and organization skills will affect adults in adult basic education, literacy, postsecondary, and vocational training settings.

- **employment**

Adults with learning disabilities commonly make errors in completing employment applications because of poor reading or spelling skills. Some may not reach employment at all. Job-related problems may arise for adults with learning disabilities as a result of their difficulties with tasks that require organizing, planning, scheduling, monitoring; difficulties with language comprehension and expression; lack of social skills; and inattentiveness. Accommodation for these problems may increase employability.

- **self-esteem**

Being criticized, put down, teased, or rejected because of failures in academic, vocational, or social endeavors often contribute to low self-esteem and depression in the adult with learning disabilities.

- **social interactions**

Adults with learning disabilities may misinterpret others' moods and attitudes and appear to be less sensitive to others' thoughts and feelings.

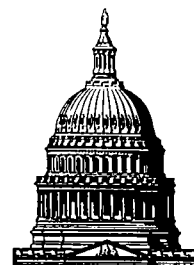
- **independent living**

Such basic responsibilities such as writing checks, filling out tax forms, or recording phone messages may present problems for adults with learning disabilities.

RECOMMENDED RESOURCE

The National Adult Literacy and Learning Disabilities Center
Academy for Educational Development
1875 Connecticut Avenue, NW
Washington, DC 20009-1202
Phone: 202/884-8185; 800-953-2553
Fax: 202/884-8422
Internet: info@nalldc.aed.org

NATIONAL INSTITUTE FOR LITERACY *Policy Update*



REPORT FROM WASHINGTON, D.C.

The President and Congress Agree on Education as a Top Priority

- January 31, 1997 -

The 105th Congress, which was sworn in earlier this month and continues through 1998, faces an ambitious education agenda. Adult, vocational, and higher education measures soon expire, along with education for disabled children and elementary and secondary school reform legislation. All must be revised during the next two years. In addition, Congress may take up new initiatives around reading and literacy, training and workforce development, and educational technology.

OLD FRIENDS CHART THE COURSE ON CAPITOL HILL

Legislators with a long-standing interest in -- and solid track records of support for -- adult education and literacy now chair the committees responsible for most education policy.

In the House, Bill Goodling (PA), author of the Even Start Family Literacy program and last year's CAREERS bill, directs the Committee on Education and the Workforce. Bill Clay (MO) is the senior Democrat. The Subcommittee on Postsecondary Education, Training and Lifelong Learning, chaired by Howard "Buck" McKeon (CA), will craft the adult education and literacy legislation. The ranking subcommittee Democrat is Dale Kildee (MI).

In the Senate, Jim Jeffords (VT), recipient of the National Coalition for Literacy's "Hero of Literacy" award in 1996, will head the Labor and Human Resources Committee, which has jurisdiction over education legislation. Jeffords has long been a key advocate of increasing the national investment in education, including adult education. The senior Democrat on the committee is Edward Kennedy (MA).

Jeffords and new committee member Patty Murray (WA) were among the primary architects of last year's Workforce Development Act amendment that would have substantially increased literacy funding.

For more information, contact Alice Johnson at 202-632-1500, extension 31

The appropriations committees, which set education funding levels, are chaired by Bob Livingston (LA) in the House and Ted Stevens (AK) in the Senate, with Dave Obey (WI) and Robert Byrd (WV) as the senior Democrats. The subcommittees that set adult education and literacy spending levels are headed by John Porter (IL) and Arlen Specter (PA), respectively, with Obey and Tom Harkin (IA) as the ranking Democrats.

KEY EDUCATION BILLS

While there may be disagreement over other major policy issues, education is one area in which both Republicans and Democrats have expressed a desire to work together. Due to the high volume of education bills that must be addressed, policymakers are likely to examine the entire spectrum of how education programs fit together and how they can be better connected in order to promote true lifelong learning.

House leaders plan to weave three themes through all pieces of education legislation, as follows:

1. Promoting parental involvement in children's education;
2. Ensuring that basic academic needs are met;
3. Getting education dollars into the classroom.

Overviews of specific pieces of legislation of interest to the literacy field follow.

Adult Education Act.

The Adult Education Act governs funds that flow from the federal government to the states for adult education activities, and includes National Literacy Act programs. Congress is likely to preserve adult education as a program separate from job training.

Because the President and Congress last year increased adult education funding to \$345 million, one key issue likely to emerge this year is accountability for results. The bill may also address how education technology can be used effectively by adult education and literacy programs. Policymakers may also explore links with the new welfare law, particularly if it affects the adult education and literacy system as expected, by dramatically increasing the number of adults who enroll while limiting the amount of time they have to achieve results.

The first step in the process is for the President to submit an initial bill to Congress for consideration. This is likely to occur in late winter or early spring. Next, Congress will research adult education issues and needs, including a review of what has changed since the bill was last overhauled. This process will include public hearings in Washington, DC and several states, which will most likely include Vermont, Pennsylvania, California, and Massachusetts.

Last year, the Senate Workforce Development Act would have consolidated adult education and literacy programs with other education and job training programs into one large block, giving Governors great flexibility in how to spend adult education, vocational education, and job training funds. This bill was not enacted and is not likely to be revived. Instead, a separate vocational education bill will address some of the job training issues from last year.

America Reads.

The President's new high profile literacy proposal, America Reads, would ensure that all children can read well by the end of third grade. (A recent national survey¹ of fourth graders found that 40 percent were not reading at a "basic" level.)

America Reads calls for a \$1.75 billion investment over five years in a new national reading corps, primarily made up of volunteers. The corps would provide after-school and summer tutoring for children in grades K-3 in the 30,000 schools with the greatest need. AmeriCorps members and reading specialists would be hired to organize, manage, and train the volunteers.

The bill would also provide new grants totaling \$300 million for local, regional, and national organizations -- including volunteer and family literacy programs -- with track records of success in helping parents assist their children in becoming successful readers. Congress may consider revising this bill so that it includes assisting both children *and adults* who need to improve their reading skills.

Higher Education Act.

The Higher Education Act helps low and middle-income students continue their education through Pell Grants, which total nearly \$6 billion annually. As it revamps this bill, Congress may consider the President's proposal to increase Pell grants by 25 percent, up to \$3,000 per year, and to open up the program to more low-income adults.

A key theme of the reauthorization will likely be how to control the escalating cost of higher education. Over the past 10 years, tuition at public colleges has risen by 23 percent; at private colleges, 36 percent. The reauthorization may include tax incentives that would encourage families to save money for college and that would make students' work-study earnings tax exempt. This legislation could also create new Skill Grants for students who want to continue their education but are not yet ready for undergraduate programs.

Rep. McKeon introduced an early version of the Higher Education Act, H.R. 6, in January and plans May hearings. The Senate begins higher education hearings next

¹ Source: National Assessment of Educational Progress 1994 Reading Report Card for the Nation and the States, available through the Office of Education Research and Improvement by calling 1-800-424-1616.

month, beginning with a field hearing in Burlington, Vermont on February 3 and continuing with testimony from Education Secretary Richard Riley in Washington, DC on February 27.

HOPE Scholarships.

The President has proposed increasing educational access by making available a \$1,500 tax credit for the first two years of higher education for some students, including those who maintain a "B" average and stay drug-free. This proposal may include up to \$10,000 in tax deductions for tuition costs. Some in the literacy field are hopeful that the bill will be broadened to ensure that it does not leave behind youth and adults who are not yet ready for postsecondary education, including those who must earn a GED before they will be eligible to enroll in higher education.

HOPE scholarships are likely to be introduced on February 5 as part of the President's budget. Because it deals with tax issues, this proposal will be reviewed by the Senate Finance Committee, chaired by Bill Roth (DE), and the House Ways and Means Committee, chaired by Bill Archer (TX).

KEY LITERACY POLICYMAKERS FOR THE 105TH CONGRESS

SENATE: Committee on Labor & Human Resources

Jim Jeffords (VT)
Dan Coats (IN)
Judd Gregg (NH)
Mike DeWine (OH)
Bill Frist (TN)
Mitch McConnell (KY)
John Warner (VA)
Mike Enzi (WY)
Tim Hutchinson (AR)
Susan Collins (ME)
Edward Kennedy (MA)
Chris Dodd (CT)
Tom Harkin (IA)
Barbara Mikulski (MD)
Paul Wellstone (MN)
Jeff Bingaman (NM)
Patty Murray (WA)
Jack Reed (RI)

HOUSE: Subcommittee on Postsecondary Education, Training & Lifelong Learning

H. "Buck" McKeon (CA)
Bill Goodling (PA)
Tom Petri (WI)
Marge Roukema (NJ)
Bill Barrett (NE)
Jim Greenwood (PA)
Lindsey Graham (SC)
David McIntosh (IN)
Bob Schaffer (CO)
John Peterson (PA)
Mike Castle (DE)
Frank Riggs (CA)
Mark Souder (IN)
Fred Upton (MI)
Nathan Deal (GA)

Dale Kildee (MI)
Robert Andrews (NJ)
Tim Roemer (IN)
Lynn Woolsey (CA)
Carlos Romero-Barcelo (PR)
Earl Blumenauer (OR)
Ruben Hinojosa (TX)
Carolyn McCarthy (NY)
John Tierney (MA)
Ron Kind (WI)
Loretta Sanchez (CA)
Harold Ford, Jr. (TN)

* Regular type indicates Republicans; *italics*, Democrats.

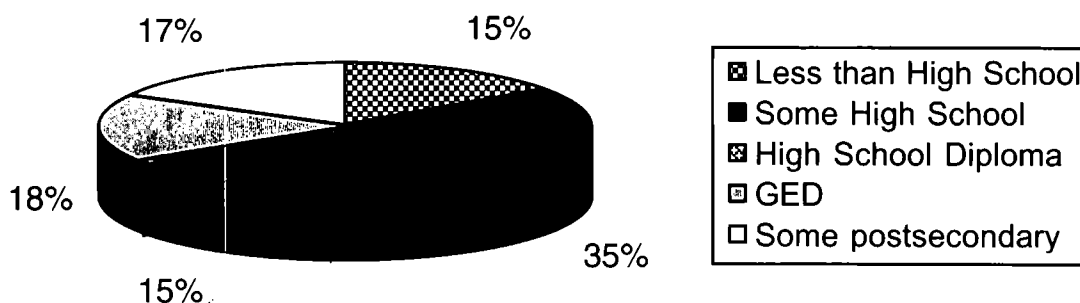
To be added to the mailing list, please call 202/632-1500 and choose option 6.

Prisoners generally have significantly lower literacy skills than the general population. Those who improve their skills return to prison less often.

need

- Only 51 percent of prisoners have completed high school or its equivalent, compared with 76 percent of the general population.
- Seventy percent of prisoners scored in the two lowest literacy levels of the National Adult Literacy Survey. This means that while they have some reading and writing skills, they are not adequately equipped to perform tasks like writing a letter explaining an error on a credit card bill or understanding a bus schedule.
- Inmates who have a high school diploma demonstrate lower basic skills than members of the general public with a high school diploma.
- Eleven percent of prisoners self-report having learning disabilities, compared with three percent of the general population.

education level of prisoners



delivery system

- The federal prison system began mandatory literacy training in 1982, and in 1991 raised the achievement standard from 8th to 12th grade.
- The percentage of inmates with low literacy skills who actually receive literacy education is estimated at 7 to 10 percent.

outcomes

- Various studies have found that education diminishes the rate of recidivism. A study by the Federal Bureau of Prisons concluded that "the more actively the inmates successfully participated in prison education programs, the less likely they were to recidivate."
 1. A Virginia study found that out of a sample of 3,000 inmates, 49 percent of those who did not participate in correctional education programs were reincarcerated, compared to 20 percent of those who did participate in these programs.
 2. An Illinois study found that inmates with an education of 8th grade or less were re-arrested at a rate of 62 percent. High school graduates had a re-arrest rate of 57 percent, and those with some college, 52 percent.

Sources: "Literacy Behind Prison Walls," National Center for Education Statistics, "Prison Literacy Programs," ERIC Digest No. 159, "Literacy in Corrections," Correctional Education Association.

RECOMMENDED RESOURCES

Correctional Education Association
4380 Forbes Boulevard
Lanham, MD 20706
301/918-1915

Department of Education
Office of Adult & Vocational Education
600 Independence Ave., SW
Washington, DC 20202
202/205-9258

FAX**Date** 08/18/97**Number of pages including cover sheet** 6**TO:** Ann Lewis**FROM:** Carolyn Staley
National Institute for
Literacy**Phone****Fax Phone** 456 -- 1213**Phone** (202) 632-1526**Fax Phone** (202) 632-1512**CC:** Kris Balderston, Carol
Rasco, Bill Kincaid, Bob
Shireman**REMARKS:** ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

Dear Ann:

I understand you are aware of the scheduling request by the Dept. of Education and the National Institute for Literacy for an event with the President at the White House on Sept. 8. This date is celebrated annually around the globe as "Literacy Day". Events and planning process to date:

1. Since the spring a group of more than a dozen national literacy education organizations has been meeting to plan the Sept. 8 event. Attached is an overview of the event draft plans/program and planning committee;
2. We have been in regular contact with Stephanie Streett, Kris Balderston (David Beaubier in Kris's absence), Bob Shireman, and Bill Kincaid on various aspects of the event planning.
3. Carol Rasco submitted the scheduling request to Cabinet Affairs, and I submitted a request memo to Scheduling and Advance, and to the President;
4. After a meeting at the White House with DoE representatives at which the Sept. 8 literacy and "America Goes Back to School" event was suggested for the President's schedule, we were advised that it would be useful to have several policy announcement ideas for the President to ensure the newsworthiness of the event. We have submitted the attached memo of ideas to Bill, Bob, Kris and David.

I hope we can work with you, Ann, on this event to celebrate the importance of "America Goes Back to School" for Americans of every age. This is a banner year for the issue of literacy for many reasons—the President's America Reads challenge, the Presidents' Summit on Service, the increase of public awareness of literacy as an issue for both children and adults, the National Institute for Literacy's year-long literacy awareness campaign launched in March 97, and literacy as the platform issue for Miss America Tara Holland. At the same time, however, concerns have been expressed across the education and literacy field about the lack of an articulated message and plan from the President for America's low literate adults.

On September 8, the President can use the opportunity of Literacy Day 1997 to accept the NIFL's reports presented by Sen. Paul Simon of NIFL's board on state, county and congressional district literacy levels of our nation, and can make a statement of the importance of education for every American and that children and adults with reading, writing and math literacy needs should go back to school to complete or increase their education, and follow with an announcement, possibly from the 5-6 ideas provided.

Attending will be Sen. Paul Simon, 4-5 members of Congress to receive the report "State of American Literacy" (probably Goodling, Jeffords, Kennedy, Sawyer, Clay), Secretaries Riley, Shalala, Herman, NIFL board, a family literacy testimonial, Miss America Tara Holland who will join all other contestants later in the day for a video-conference hook-up to a literacy reading activity with kids, 60 adult learners representing every state, and literacy representatives.

The event is planned as a "big tent" event which celebrates literacy for all. What I have described is only part of the substance & celebration.

I hope very much you will contact us or anyone at the Dept. of Education's "America Reads" or "America Goes Back to School" for verification of our enthusiasm as a group for this kick-off & Literacy Day event.

Please call if we may assist in any way.

Thank you,

Sincerely,

Cafu Stacy

Attachments

1. Planning Committee
2. Proposed Agenda, Program Sept. 8, 1997
3. Presidential Announcement ideas

Literacy Day 1997, Planning Committee

American Library Association	Mary Costabile	202-628-8410
Center for the Book, Library of Congress	Anne Boni	202-707-1519
America Reads Challenge	Diane Jones Communications Dir.	202-401-3292
America Goes Back to School	Sarah Staley Public Affairs	202-401-3383
America Goes Back to School	Jennifer Ballen	202-401-0618
DC LEARNS	LeAnna Marr	202-632-1524
PBS-Literacy Link	Noreen Lopez	703-739-8692
Dept of HHS ACF/DFA	Yvonne Howard	202-401-4619
US Office of Consumer Affairs Economic Literacy Project	Juanita Howard	202-401-9338
Reading is Fundamental	Rachel Walker/Rachel Howard	202-287-3371
Department of Labor	Libby Queen	202-219-7674
International Reading Association	Rich Long/Scott Brody	202-624-8800
Department of Education/DAEL	Ron Pugsley Kiki Hunter	202-205-9414
AFL-CIO	Tony Sarmiento	202-637-5144
Department of Education/OVAE Newspaper Association of America	Tamara Monosoff Renee Gunter	202-401-9963 703-902-1600
Council on Economic Literacy	Della Cronin Sandy Dowling	202-289-3900 212-730-7007
Starbucks	Kenny Fried	202-296-7200
National Institute for Literacy	Carolyn Staley Andy Hartman, Alice Johnson	202-632-1526

DRAFT

September 8 Program

Pre-event

Music
Literacy Activities
Celebrity involvement

PROGRAM

1. Welcome

Background on International Literacy Day
Why we are gathered to celebrate Literacy

MC ideas: Tipper Gore
Walter Anderson
Wally "Famous" Amos

2. Remarks/presentations

Learner testimony: adults and children--Enrique and family?
America Reads testimony--child reader who strengthened skills this summer?

Presentation to Tara Holland: Literacy Ambassador or Miss Literacy America
Give Tara additional role--present with new crown (cap) and brooch (pin/button)
Idea--Cal Ripken also to be named a literacy ambassador? Oprah?

Introduction of Paul Simon

3. Launch of NIFL's second campaign message: former Senator Paul Simon

Reports to Congress on literacy profiles in every state and Congressional district
Good news/bad news and why literacy is so important now; intro Steve Reder

Present reports to members: Goodling, Jeffords, Kennedy, Sawyer, Murray, Clay
bipartisan, bicameral representation

Present report to the Secretaries and to the President

Others reports given to adult learners representing each state for delivery to the Hill
Show PSA?

4. Remarks by Secretary Riley, Secretary Herman, Secretary Shalala

5. Remarks and announcement by President/Vice President

Literacy Issues in America, America Reads, America Goes Back to School,
Read*Write*Now, Hope Scholarships, Education Funding

Post event-

Reception

More reading/literacy activities



NATIONAL INSTITUTE FOR LITERACY

MEMORANDUM

TO: David Beaubiere
FROM: Carolyn Staley
DATE: August 14, 1997
RE: International Literacy Day

Thank you for taking the time to talk with me yesterday, it was very helpful to hear your thoughts on to plan a successful White House event focused on literacy. We think it can be a great day for both the President and the national literacy field. The staff of the National Institute for Literacy, with input from other literacy leaders, have compiled a set of possible policy actions that the President might announce in conjunction with the event. It would be very much appreciated if you could give us your reactions to these ideas and as well as share them with other appropriate staff at the White House.

Our ideas for a possible International Literacy Day policy announcement by the President include:

1. Appointing a "blue ribbon" panel, possibly chaired by Paul Simon, to report back to him by Sept. 8, 1998 with a set of recommendations for what the nation must do to give Americans with low levels of literacy and education a chance to find opportunity in the economy and society of today and the future. Our Board is appointed by the President and confirmed by the Senate and -- with Paul Simon's confirmation in July -- the next Board meeting will be the first of all of the Clinton nominees, so it could serve as a ready-made panel, or another group could be named.
2. Announce a legislative initiative for the next fiscal year. It could be a special section and appropriation to the Adult Education Act that would provide funding for specific populations and areas of need, such as ESL or welfare-to-work. In the case of ESL, the waiting list information we have collected is a national shame (several months to several years in major urban areas) and could justify -- and generate support for -- an effort like this. The recent National Center for Education Statistics (NCES) report on dropouts also demonstrates the need of immigrants for alternative education services. With regards to welfare-to-work, since education services have been largely written out of the welfare reform legislation, including the new \$3 billion welfare to work program, the 50 percent of welfare recipients without a high school degree could

benefit from on-the-job educational training? (Recipients read, on average, at the sixth grade level.)

3. Announce that there will be a follow up to the 1992 National Adult Literacy Survey (NALS) report that would provide a picture of literacy in the nation by 2002. Preliminary planning for such a survey has been initiated by NCES, but the President could make sure it actually happens by making such an announcement. Such an announcement could also be used to ascertain the impact of other initiatives such as #5 (below).
4. Modify the original executive order around the College Work Study initiative and broaden it to allow tutors to work not just with children but, in with their parents as well, in cases where parents have low literacy levels. This would address a number of issues: it would increase the number of schools willing to sign up for the effort since many colleges already support adult and family literacy tutoring programs and a national structure for this is already in place; and, it would recognize the critical and irreplaceable role parents play in the literacy development of their children. In addition, it would tap into a successful and highly-regarded national training and support system built up around adult and family literacy that simply is not in place for tutoring young children.
5. Challenge each state to improve the number of people being served in literacy programs and those receiving GEDs by a specific percentage by a specific date. Clarify or expand the Hope Scholarship proposal to include course work preparation for the GED for persons who have not attained a 12th grade credential. Ask the NIFL/ED to create teams in each state to advocate for this and track the progress. Ask for annual report back to him. This could also include some sort of incentive or reward for states that meet the challenge.

An announcement containing elements such as those described above, or other, would round out the President's major children's literacy initiative, America Reads. It would also demonstrate the support for literacy as a lifelong learning issue -- effecting children, youth and adults -- that he has shown throughout his public life.

Thank you again for your help, and we look forward to working with you to make this a completely successful day for the President and literacy in America.

FAX**Date** 08/18/97**Number of pages including cover sheet** 8

TO: Bob Shireman
Bill Kincaid ✓
Kris Balderston
David Beaubaire
Ann Lewis

Phone**Fax Phone**

FROM: Carolyn Staley
National Institute for
Literacy

Phone (202) 632-1526**Fax Phone** (202) 632-1512

CC: C. Rasco, P. McNeil

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

Hello and happy August!

Attached you will find a draft introduction and sample state template for the report, "The State of Literacy in America: A Report from the National Institute for Literacy and the US Department of Education". We hope this information provides a clear idea of the report Sen. Paul Simon will release to the President and the Congress on Sept. 8. We have asked that the Literacy Day/Back to School event be held with the President at the White House and submitted a draft program and list of organizers in a separate fax yesterday.

The full report will be approximately 250 pages in length. The contents will include:

-title page, acknowledgments/thank yous

-introduction and definition of Level 1 (3 pages)

-a national map and accompanying data (3 pages)

-series of color maps and B/W data of each state, broken down by county and congressional district: 1 map of counties—color; 1 map congressional districts—color; 100 color pages of maps by county and congressional district; 150 pages of state data

Thanks in advance for all your help in making this event with America Reads/DoE a good one for the President, for literacy and education as we encourage America to go back to school. Please let us know if you have questions.

AUG-18-1997 14:12

P.02

**THE STATE OF LITERACY IN AMERICA
A REPORT FROM THE NATIONAL INSTITUTE FOR LITERACY
AND
THE US DEPARTMENT OF EDUCATION**

INTRODUCTION

On the whole, Americans today are better educated and more literate than at any other period in history. At the same time, employers face a constant struggle to find workers with the reading, writing, mathematical, and other skills the modern workplace demands. Today, people who most need to improve their literacy skills have already left school, making them difficult to reach.

Adult literacy problems have been a stubborn thread running through not only the job market, but also some of the nation's most troublesome social issues: welfare, crime, homelessness, and teen pregnancy, to name a handful. Yet, until a few years ago, we had no reliable grasp on the dimensions or even the definition of the problem. In the 90s, the knowledge gap has been filled by the National Adult Literacy Survey (NALS), a monumental effort that remains to date the most comprehensive, statistically reliable source of data on one of our most enduring social and economic stumbling blocks.

NALS

An effort undertaken by the Division of Adult Education and Literacy of the US Department of Education, the Educational Testing Service, the National Center for Education Statistics, and Westat, Inc., NALS involved nationwide household interviews conducted among 13,600 individuals age 16 or over in 1992. In addition, approximately 1,000 adults were surveyed in each of 11 states that chose to participate (California, Illinois, Indiana, Iowa, Louisiana, New Jersey, New York, Ohio, Pennsylvania, Texas, and Washington). In addition, 1,100 inmates were queried at 80 federal and state prisons, providing information on the skills of the prison population.

The survey yielded a wealth of information, including a rich vein of demographic background such as languages spoken, educational and occupational experiences, and respondents' perceptions of and uses of literacy. NALS offers a far more complex – hence far more useful – definition of literacy proficiency than previously available, using direct assessments of an individual's ability to perform everyday literacy tasks like completing forms, interpreting graphs and charts, and pulling information from written materials. Based on the survey results, the population divides into five levels of literacy proficiency, with Level One the lowest and Level Five the highest.

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P.03

TODAY'S REPORT

The NALS data has proved such an invaluable assessment of the nation's literacy proficiency, it made people hungry for even more information. Policymakers and adult literacy workers in individual states, counties, and cities clamored to know where their population stood and how far they had to go. They were especially keen on seeing an accurate evaluation of the scope of the literacy problem for adults at the lowest literacy level — those in greatest need of remedial services. Today's report is the answer.

Fortunately, there are trustworthy statistical techniques available to enable analysts to make adult literacy proficiency estimates for the cities, counties, and states that have been so eager for data. Thanks to the efforts of [need to know exactly who to fill in here — Stephen Reder, NIFL, DAEL/DVOE, et al.], we can present here for the first time an extrapolation of NALS data for states, counties, congressional districts, and cities with populations over 10,000. This is an extraordinary resource. The numbers offer the closest approximation of a literacy head count that these areas have ever had at their disposal — and without imposing upon them the staggering expense of conducting such a survey themselves.

METHODOLOGY

To arrive at this point, analysts began by looking deeper into the NALS surveys. From that data, they isolated the factors that best predicted literacy, such as the respondent's country of origin or educational attainment. They then turned to Census data to isolate these predictors for the states, counties, and cities and developed a regression model that allowed them to estimate literacy levels for areas not directly surveyed.

The state- and county-level estimates have been statistically validated and found to be accurate. Although the state-level data tend to underestimate slightly the numbers of people who fall into the lowest literacy level, the county-level data do not. Some caution is appropriate when working with the congressional district and city-level data. While it seems highly plausible that models that predict literacy measures accurately at county and state levels would also perform well for cities, the lack of direct validating information should be kept in mind. Despite these warnings, the estimates in this report are reliable tools for comparing literacy profiles and needs for service across the areas.

What follows is a state-by-state, county-by-county, congressional district-by-congressional district, and city-by-city numerical portrait of those at the lowest literacy level, identified as Level One in the NALS report. People who fall into this category have demonstrated the greatest difficulty with the least demanding literacy tasks in three areas:

- ◆ **Prose literacy:** They have very limited skills in locating a single piece of information in a short text, although that information is identical to or synonymous with information in the instructions or question. Example: Underline a sentence from a brief news item telling what a swimmer ate.

AUG-18-1997 14:13

- **Document literacy:** They have limited ability to locate and use information in materials such as job applications, payroll forms, transportation schedules, maps, tables, and graphs. Example: Sign name on a line marked "Signature."
- **Quantitative literacy:** They have trouble performing single, simple arithmetic operations, such as addition, when the numbers to be used are provided and the operation to be performed is specified. Example: Total two numbers on a pictured bank deposit slip and enter the result on a line labeled "Total."

On the tables that follow, the scores for all three scales at all five literacy levels have been collapsed into a single "mean adult literacy proficiency" measure, and the three Level One scales have been collapsed into a single Level One score.

Gaining a better grasp on the definition of our worst literacy problems gives us a better chance of focusing limited literacy resources where they are most needed. The data offered here will be a guide for those who must decide which literacy services get directed where. We are richer for having such a treasure to work with.

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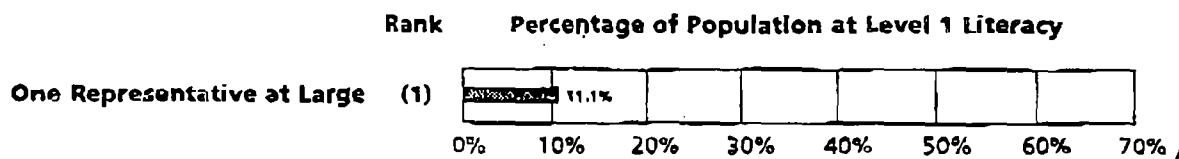
P.05



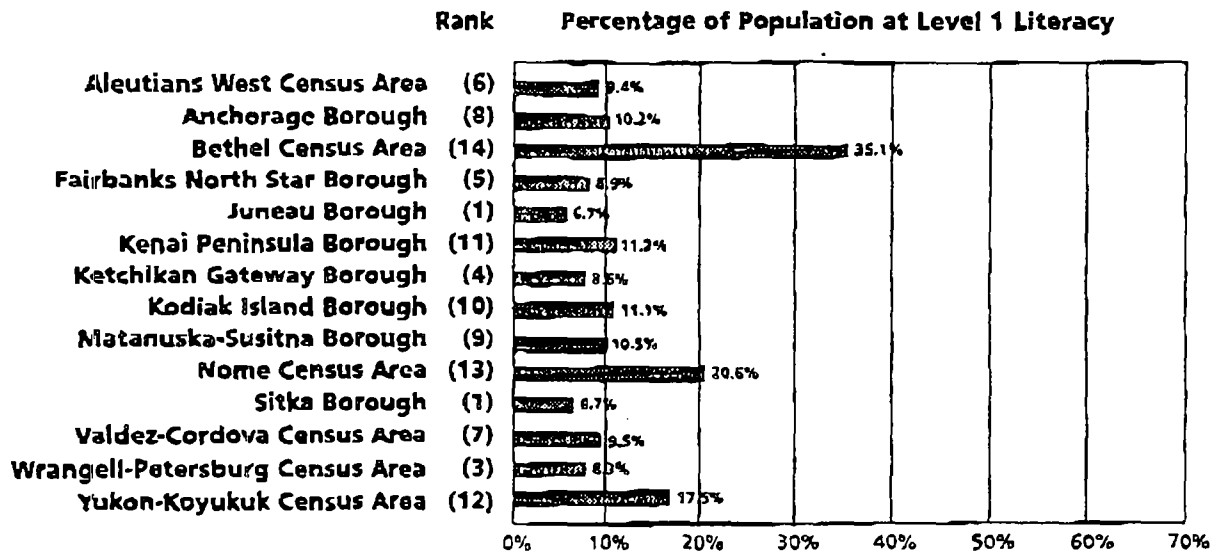
Alaska

**11.1% of population
is at Level 1 Literacy**

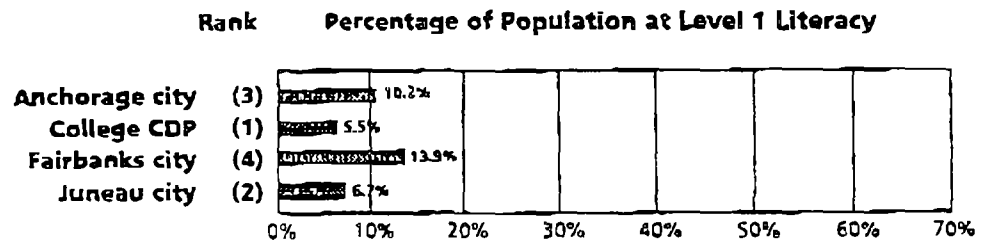
Congressional Districts



Counties



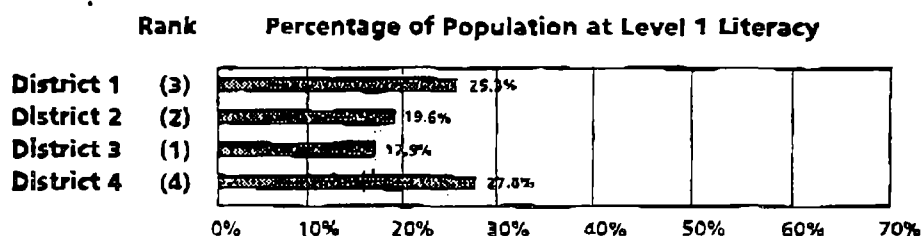
Cities



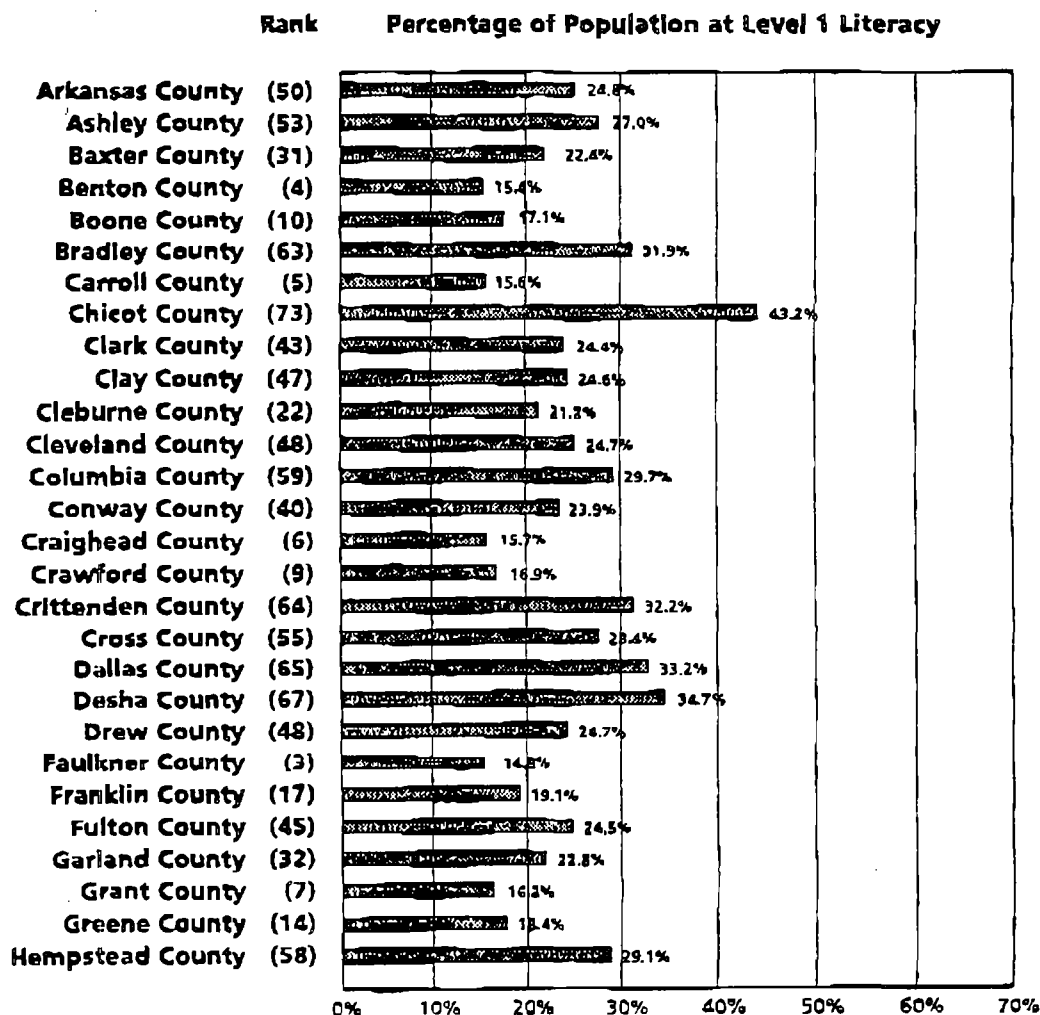
Arkansas

**22.2% of population
is at Level 1 Literacy**

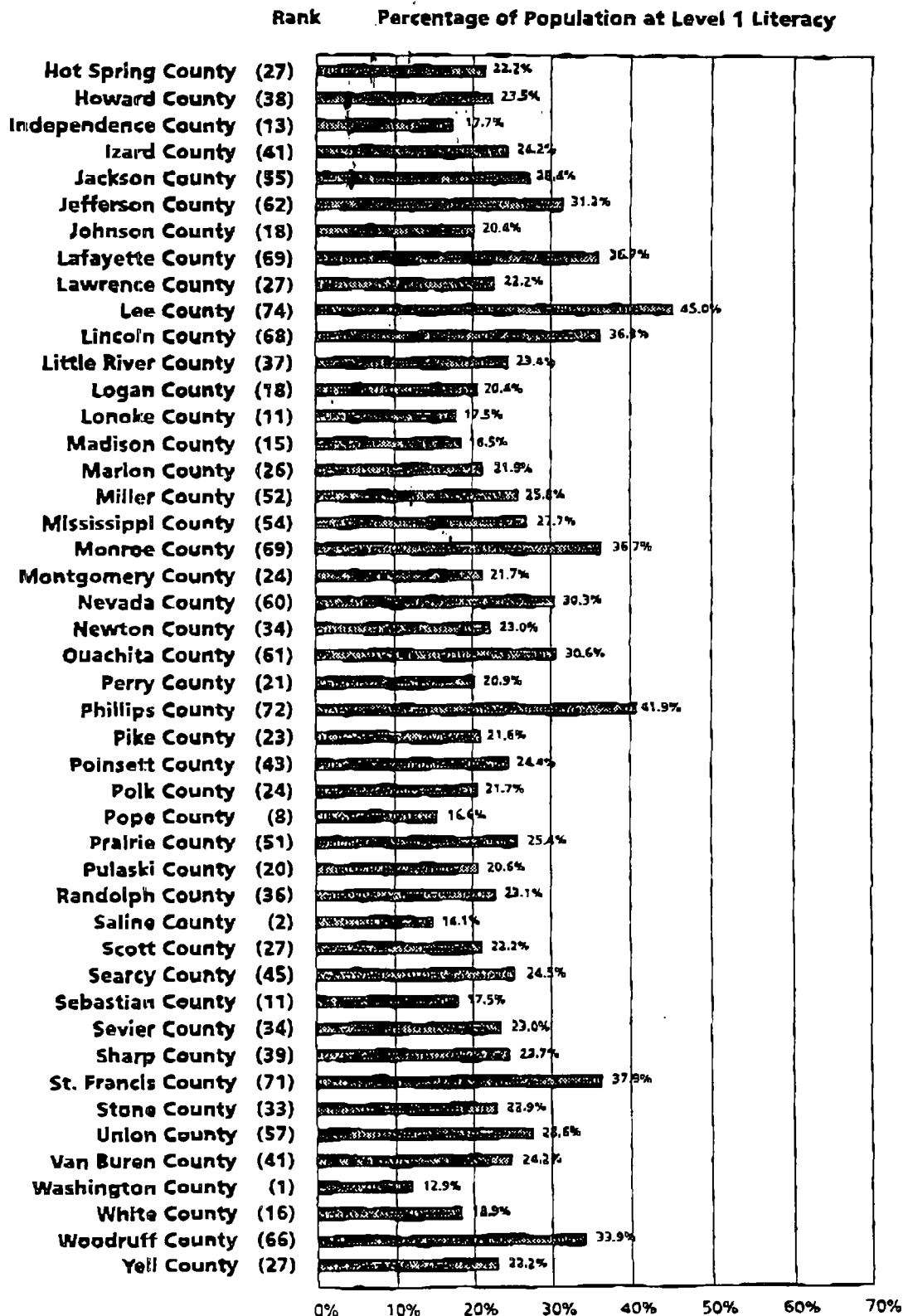
Congressional Districts



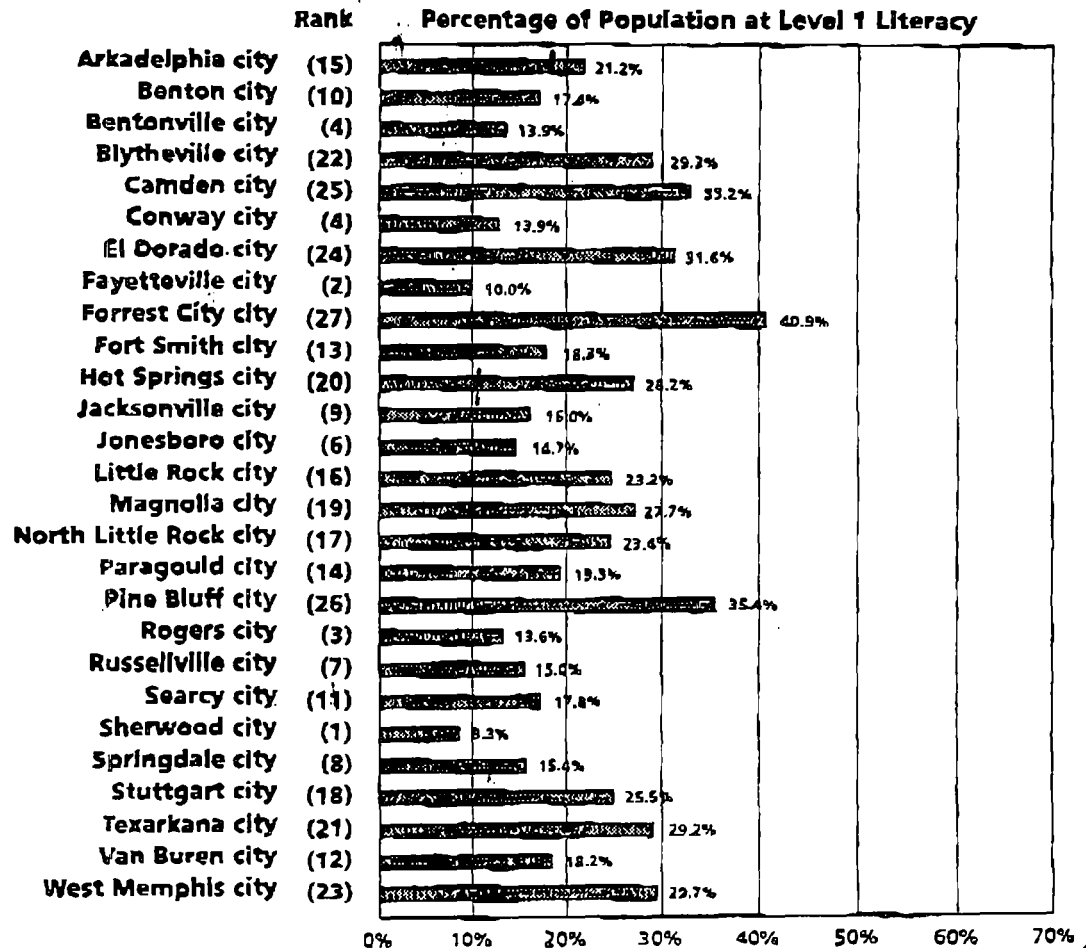
Counties



AUG-18-1997 16:35

Counties (cont.)

Cities





UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF VOCATIONAL AND ADULT EDUCATION

Memorandum

Contact: Tamara Monosoff
(202) 401-9963

DATE: August 22, 1997
TO: Bill Kincaid
FROM: Office of the Assistant Secretary, Patricia McNeil
RE: Addendum to materials forwarded by National Institute for
Literacy (NIFL) for possible Adult Literacy event at the White House on
September 8, 1997 -- International Literacy Day--

COMMENTS:
Possible message for the President.

International Literacy Day Adult Education Message

The U.S. Department of Education's, Office Of Vocational and Adult Education, Division of Adult Education is conducting a *National Forum on Adult Literacy: Views from Adult Learners* on September 7-9, 1997. State Directors throughout the nation have identified highly successful adult learners to represent their respective states. These individuals from all 50 states will convene in Washington, D.C. to participate in focus group discussions on accessibility of adult education programs, support services, retention/persistence, and expectations for the future. While the adult learners are in Washington, they will participate in the International Literacy Day celebration on September 8, 1997. We are hopeful that this important literacy event will take place at the White House.

In his message to UNESCO's World Conference on Literacy in Hamburg, Germany on July 15, 1997, the President stated that "Adult education provides crucial help for people seeking to lead productive and fulfilling lives..." The President might begin his remarks by referencing this Hamburg statement (see attachment) and then by introducing the *Adult Learners* from the fifty states. These adult learners are prime examples that the adult education system is preparing individuals for the challenges of the 21st century.

Other ideas that the President might reference are:

- Parents as essential teacher. America Reads stresses the need for literate third graders by the year 2000. While tutors/teachers have a limited amount of time in the child's life, the parent is the primary educator. Increasing the skills of the parent enhances the educational opportunities for their children. An emphasis should be placed on lifelong learning in order to break the cycle of intergenerational illiteracy.
- Charge the Secretaries to hold a national summit with the top state officials in education, labor, and health and human services to discuss the status of adult literacy in the nation. The goal would be to raise awareness of the problem among the states and to encourage them to create possible solutions (i.e., educate policy makers to understand the centrality of adult literacy to a wide-variety of economic, social, political, environmental, and health issues.)
- Charge the Secretary of Education to hold a national summit of all chief school officers, post secondary commissioners, and other agency heads responsible for adult education and literacy in each of the states. Similar to the purposes described above in addition to the issues of accountability for results, public funding, etc.

IUDAI

SPECIAL MESSAGE TO DELEGATES

THE WHITE HOUSE
WASHINGTON

July 15, 1997

Warm greetings to everyone participating in the Fifth International Conference on Adult Education. I commend you for focusing on the vital role of adult education as the world's cities seek to make the historic transition from the industrial age to the information age.

Perhaps our most important pursuit as members of a global community is ensuring that all of our citizens receive the education they need to make the most of their lives. We need the energy, creativity, and determination of all our people. Only when we know that everyone is able to achieve his or her full potential can we truly say we are prepared for the challenges of the 21st century.

Adult education provides crucial help for people seeking to lead productive and fulfilling lives, and I applaud each of you for your dedication to breaking down the barriers and building new bridges to encourage lifelong learning. You can take great pride in the work you are doing each day to help people live out their dreams.

Best wishes for a productive conference.

Bill Clinton

Room 1: THURSDAY 17th JULY 17:30 -

COMMEMORATIVE CEREMONY DAME NITA BARROW

Under the Presidency of Mr Boutros Boutros Ghali
Former Secretary-General of the United Nations
Adviser to the Director-General of UNESCO

Master of Ceremony: Colin Power

Homenaje a Paulo Freire

Video sobre Paulo Freire de UNESCO

Participantes:

Dr Jaime Nino Diaz, Ministro de Educacion
Sr Moacir Gadotti, Presidente del Instituto
Representante de Sur Africa
Sra Ana Maria de Freire

Homage for Dame Nita Barrow

UNIFEM's video on Dame Nita Barrow

Participants:

Representatives the Government of Barbados
A Representative of the International NGO Network
A Representative of the Women's Movement
A West Indian Abroad
Representative of the Caribbean Regional Council

Closing Remarks: Mrs Sussmuth

Paulo Freire's Video by the International Literacy Institute
Video from a West Indian Network about Nita Barrow

PROGRAMME

COMMISSIONS I & II

For whom ?

For all the delegates and participants