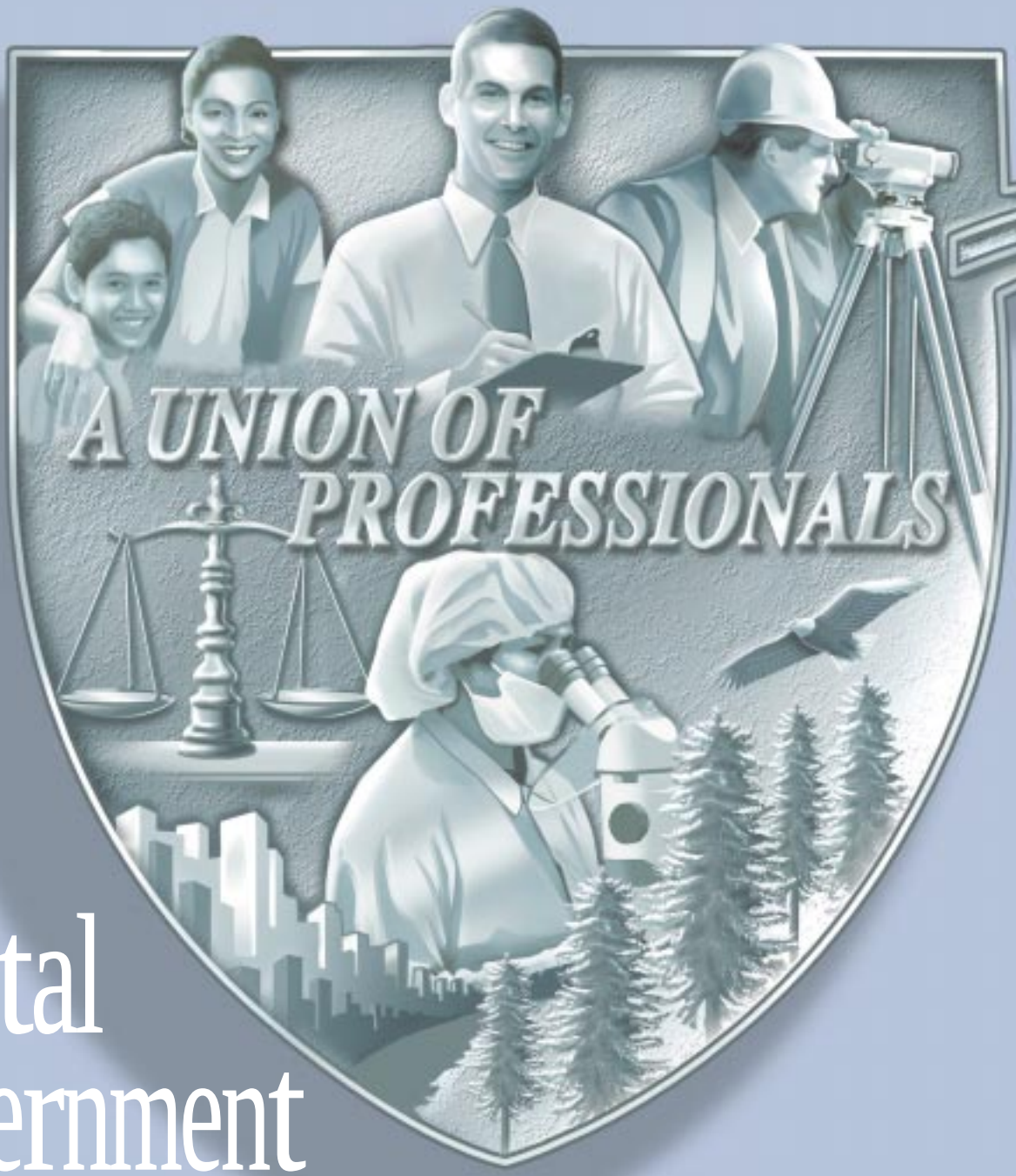


Digital Government and Technological Change:

The Impact on Public Employees and Quality Public Services

AFT Public Employees

Digital Government and Technological Change: The Impact On Public Employees and Quality Public Services

A report from the AFT Public Employees Digital Government Task Force

AFT Public Employees
June 2002

AFT Public Employees, AFL-CIO
Sandra Feldman, President
Edward J. McElroy, Secretary-Treasurer
Nat Lacour, Executive Vice President

AFT Public Employees Digital Government Task Force

Gerry Nies, North Dakota Public Employees Association
Harry Banks, Matanuska-Susitna Bourough Employees (AK)
Anthony Dembek, Administrative and Residual Union (CT)
Roane Lytle, Federation of State, Cultural and Education Professionals (PA)
Marilyn Besich, Vocational Technical Educators of Montana
Jill Hynum, Wisconsin Professional Employees Council
Sandy Oemichen, Wisconsin Professional Employees Council

AFT Public Employees Staff

Steve Porter, Director
Jennifer Shaw, Senior Associate
Karen Schiffhauer, Administrative Secretary
Charlie Glendinning, Director of Art
Darryl Alexander, Director of Health and Safety
Jay Lederer, Field Writer
Mary Boyd, Copy Editor

http://www.aft.org

Cover design by Todd Dawes

Executive Summary

Government workplaces across the country have changed dramatically over the past several years due to advances in technology. The digital age that we are experiencing, has also changed the expectations that the public has for government services. The level of change in the American workplace over the past 20 years has forced some to conclude that the changes are only second in scope to the changes brought about by the industrial revolution. Government services are often enhanced by technology changes and the productivity and effectiveness of public employees can be improved by these developments. However, this rapid pace of change also presents some significant challenges that must be addressed if government is to meet its full potential for improving public services. The planning and implementation of technological changes in government workplaces is most successful when employees and their union are involved in the process.

Current budget cutbacks are likely to slow the rate of technological change and exacerbate the recruitment and retention problems that government at all levels is experiencing. Talented professionals knowledgeable in the use of technology are going to be harder to keep and attract to public service if public employee salaries and benefits do not keep pace with the private sector. Younger generations of workers who might be attracted to public services are not going to be lured to government jobs with outdated systems of technology. The public too has an expectation that their taxes will yield more convenient services accessible at the click of a mouse.

To support this technology and make it run efficiently, continuous updated training is essential. Public employers have often lagged far behind the private sector in the investment they are willing to make in training and professional development. AFT Public Employees is committed to advancing the professional interests of our members and to work with employers in improving opportunities for skills development and professional training.

The post 9-11 period has brought about an unprecedented increase in demands for security in all aspects of daily life. Public employee access to technology is no exception. New biometric security measures and the monitoring of employee workplace activities will create challenges for our union in protecting the privacy of our members. Through the active involvement of public employees and their unions, we can move to enhance security precautions while protecting personal privacy.

Public employees are facing new health and safety challenges with

the introduction of new systems of technology in the workplace. Reductions in indoor air quality, increases in carpal tunnel problems, and eyesight damage are often related directly to increased dependence on personal computers and other technology used in the government workplace. AFT Public Employees and its affiliated unions must work to develop the necessary expertise to address these health and safety challenges and protect the health of our members.

Technology opens new avenues for job innovation, workplace design and professional development. Planned or negotiated telework plans can offer employees alternatives to work from home or a telework center closer to home. New concepts for the scheduling and place of work offer alternatives for our changing culture and the demands of our changing workforce.

The most important recommendation of this task force is that public employees be involved in the process of technological change. Planning and executing a strategic plan for technological innovation can best be carried out with the involvement of those required to work with the new system and make it work. Through their expertise and that of their union, the promise and the challenges of technological change can best be met.

AFT Public Employee leaders must also take advantage of this digital age by improving communications throughout the union. Our members indicate that overwhelmingly they have access to the internet and email is a preferred method for receiving information about their union. New technology can help us to educate the next generation of union leaders and help us to mobilize our members to address the whole range of challenging issues facing our diverse membership.

In this report, the task force provides 8 recommendations to AFT Public Employee leaders.

- Encourage discussions at all levels of the organization regarding workplace changes due to changes in technology
- Develop acceptable telework plans to meet the needs of our members and improve the effectiveness of government services
- Establish health and safety committees at appropriate levels of the union to monitor the health effects and impact of technology on members
- Work with university programs to document health and safety problems among members and devise solutions
- Establish joint labor management health and safety committees to address issues in a systematic way
- Provide clear information to our members regarding their privacy rights with the use of the internet, e-mail and other technology
- Collect and disseminate best practices, contract language and legislation that deals with technology in government work places across the country
- Advocate for more effective employee training and professional development to help our members deal with the rapidly changing demands of government workplaces

Foreword

Technology has created unprecedented changes in the delivery of government services. Along with these changes come opportunities for improving government services. Improvements in communications and technology give citizens the ability to access government services easily, rapidly and engages people in ways that bolster democracy and citizen involvement.

AFT Public Employees and the myriad employees represented by our union are pledged to improving government services and the institutions where our members work. With this commitment, the AFT Public Employees Program and Policy Council established a special task force to look at the technological changes taking place in government workplaces across the country. This digital government task force has been charged with making recommendations on the use of technology to promote high-quality government services as well as the necessary protections, safeguards and training that must be undertaken to make this technology work. The work is changing year by year. How the union prepares and protects members through this burgeoning technological transition spells the difference between success and failure. The union has a responsibility – an obligation- to participate in all discussions pertaining to the transformation of our jobs and the increased expectations for government workers.

The following report is the product of a year-long investigation by the seven members of the task force from six states and a variety of job classifications. Each was enthusiastic about the topic and had a unique perspective on the issues examined. In preparing our recommendations, we met on two occasions for a day and a half each. We heard from a number of presenters, including: Martin Gould, Research Specialist with the National Council on Disability; Jim Getty, Chief Information Officer, Department of General Services, State of Maryland; Donna Canestraro, Center for Technology in Government; Michael Lohman, AFT Health and Safety; and Stephanie Baxter, AFT Legal Counsel. All provided invaluable information and guidance as we formulated our recommendations.

The first challenge facing our task force was to focus our probe. The AFT Public Employees digital government task ultimately settled on four topics: health and safety in the digital age, training for the future of work, telework and other work options available with new technologies, and employee privacy and security issues.

In Government, making a right decision takes priority over making a fast decision. Government is generally slower to adapt to technological change because, out of necessity, it operates in a more risk-averse culture. The impact on society would be disastrous if dot-govs failed at the same rate as dot-coms. The public sector is more accountable than the private sector for the money it spends and is bound by more and different laws, in areas of procurement for example. It has to be more conscious of integrity, transparency, and openess. It must seek political support for its projects, and ideology is often involved. Finally, the sheer size and complexity of government completely dwarf most companies.

E-Gov, e-business Stategies for Government
Douglas Holmes

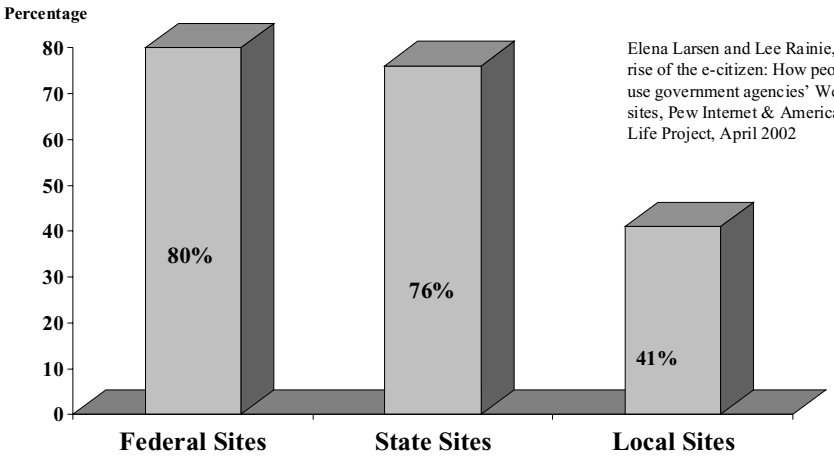
Introduction

96% of AFT Public Employees do work that involves computers or technical equipment. (Hart Survey, 2002)

The public has come to expect that if they can order a book online from Powells.com, they should also be able to use the Internet to order a marriage license, reserve a camp site, obtain a copy of their birth certificate, register their car or vote. While the private sector has embraced the Internet and other 21st century technologies, citizens may wonder why government has not been as quick to utilize these new technologies. There is no doubt that technology in our world is here to stay. In the government sector, the use of technology is often referred to as digital government, E-government or techno-government. Throughout this document, we refer to digital government as the 21st century challenge of using technological applications (not just the Internet) to enhance government services.

Digital government has the potential to transform government for the better. We, as public employees, understand that taking advantage of 21st century technology can improve quality, reduce costs and bring government closer to our clients, the U.S. citizen. Technology will alter dramatically citizens' relationship with their government and the government workers who will make this transition. In March 2002, 68 million American adults used a government agency website. Sixty percent of these government Web site users say such sites have improved their interactions with one level of government (Larsen).

68 Million Americans Have Used Government Agency Web Sites

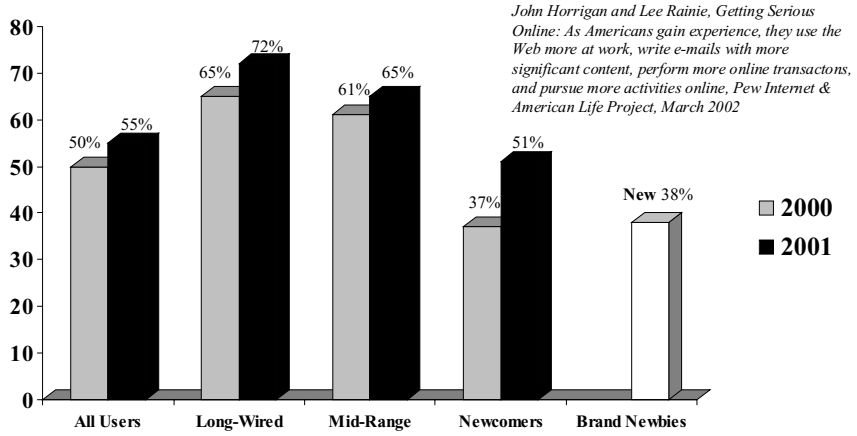


Elena Larsen and Lee Rainie, The rise of the e-citizen: How people use government agencies' Web sites, Pew Internet & American Life Project, April 2002

When fully implemented, citizens will be proud of their government; interactions at every level will be enhanced. For example, citizens with disabilities may, in some cases, be better able to conduct business with government agencies online. In fact, using government Web sites has become one of the most popular activities online (Horrigan). People feel that the Internet is a good way to connect with agencies previously viewed as unapproachable.

Internet Users Who Have Ever Used the Internet for Access to Government Web Sites

Long-wired: online for less than 3 years; Mid-range: online 2-3 years
Newcomers: online for one year in 2000; Brand Newbies: came online between 3/00 and 3/01



John Horrigan and Lee Rainie, Getting Serious Online: As Americans gain experience, they use the Web more at work, write e-mails with more significant content, perform more online transactons, and pursue more activities online, Pew Internet & American Life Project, March 2002

This picture of the future cannot happen without the valuable input of government employees. As government employees, we are responsible for insuring that digital government is secure and user friendly. Citizens who choose not to access the information online or in kiosks in the mall or elsewhere will continue to seek our expertise. The government of the immediate future must be both high tech and no-tech to accommodate **all** citizens. We believe that everyone benefits when government services are easily accessible to all citizens.

As union members who are proud of the public services we provide, and as one of the major stakeholders in the government's transformation to the digital age, we reiterate our concern that we have been overlooked in the strategic planning process. Too often, government employees are not included in discussions about technological change, this despite the fact that we are responsible for the successful implementation of changes required by the transition to digital government. In examining the available data on digital government, union activists and leaders find an incredible vacuum on information regarding the role of government employees. In addition to the enormous professional stake we have in the success of digital government, we share the concerns of all citizens and taxpayers for efficient, high-quality services.

Smart implementation of digital government can be a boon to society.

Dot.gov initiatives must be stable and cannot risk failure as so many of the dot.com companies have. The Center for Technology in Government highlighted the inherent risks associated with moving too quickly toward digital government in its paper "Making Smart IT choices." Government is different from the private sector in that it must contend with budget cycles, regulated procurement, multiple stakeholders in decisions, divided decision-making authority and an inherent aversion to risk.

Government employees are the engine that will propel a digital government. Political leaders will come and go, and it is our responsibility to see that policy makers appreciate all of the "back-end" work that is required to insure that digital government flourishes. We understand that becoming a "digital government" means much more than learning how to post data on a Web site. Questions abound: How do we insure that data is secure? How do we keep up with the most up-to-date training and technology? How do we retain a qualified workforce secure in their job and comfortable with change? How do we monitor the health and safety of our workforce with the new technology? How do we insure that even the poorest citizens with no access to technology receive the services they need?

Our union must insure that our members are prepared to handle the work changes necessitated by the transition to the digital age. The new technologies of the 21st century can be incredibly useful; at the same time, they can trigger increased stress levels among all government employees. The most effective implementation of digital government initiatives requires government employees and their representatives to be at the table when strategic plans and decisions are being made.

Worker training needs must be included in technology plans to insure the continuing quality of the work we provide. Technology changes every day, with new data sets and computer programs, updated Web-based programs and new procurement options, to name just a few. The government workforce must feel confident in our ability to understand the technology we are asked to maintain and work with. Leaving workers to learn the systems "as they go" or to get the training on their own is not acceptable professional practice.

Our health and safety concerns – ergonomics, and indoor air quality for example– cannot fall by the wayside. Increased reliance on computers and other technologies puts new and different stresses on our bodies. These need to be identified and controlled to insure the safety of all government employees.

We must advocate for increased telework options to help our members manage a better work/life balance. Digital government allows us to concentrate on ***how*** the work is accomplished and not just ***where*** the work is accomplished. Many government jobs are perfectly suited for telework options either on a regular basis, infrequently or as needed. Government workers who telework report much higher satisfaction levels and reduced stress. This can provide

a win-win situation for management and unions if done correctly!

Lastly, everyone benefits by building a secure and private digital government where employees' concerns about their own employment data are as important as the data we store in government computers. Employees must be clear in their understanding about use of new technology – both personal e-mail and Internet. Workers must be confident that their work is protected and secure from Internet hackers. This report provides recommendations for union leaders who are dealing with each of the above-mentioned issues.

Health and Safety Concerns

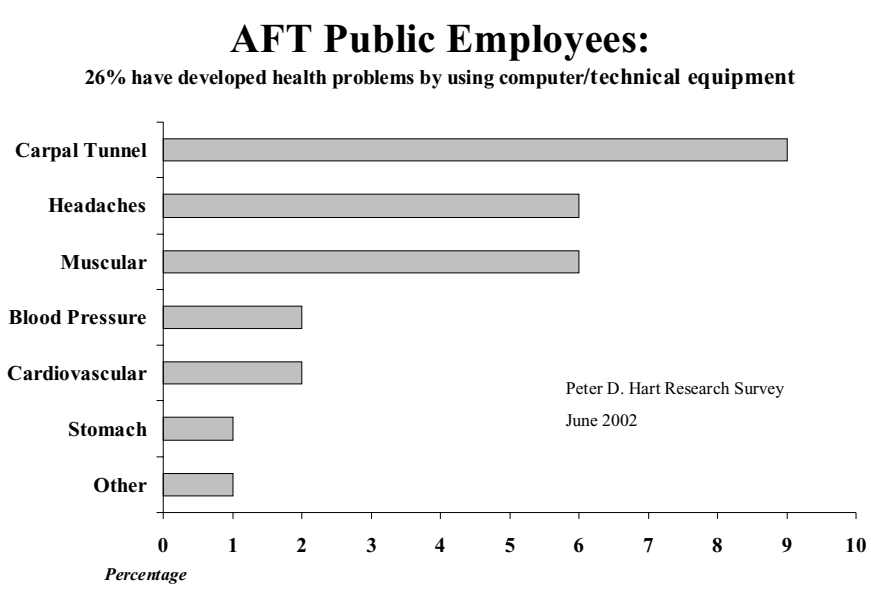
Not so long ago, placing a long-distance phone call required a specially trained operator who would contact other operators to complete the circuit and place the call. Yesterday's office bustled with activity and motion. Systems rarely changed. Every office function needed to be performed manually by a person or groups of workers.

Technology changed all that. It has had an enormous impact on how work is done today in our public agencies. Today, information can be accessed via an office Intranet and the Internet, minimizing the need to be physically active, for example, to get up and research data by hand. Even a person on the other side of the world is just a few keystrokes away. Meetings and contacts are frequently conducted over the telephone or by teleconference. The once labor intensive phone call is now a do-it-yourself operation. Typing, editing and database management have resulted in a mainly sedentary worker. For the most part, technology and humans abide. The ability to access the sum of human knowledge from the desktop has expanded the role of the average office worker and given great flexibility to the manager. The machine age has, however, also led to health and safety hazards for the 21st century public employee. Today, public employees wrestle with issues of ergonomics, work organization, isolation and poor indoor environmental quality.

For 15 years, labor unions have worked to pass a federal ergonomic OSHA standard. This was accomplished in 2000, but President Bush and the 106th Congress rescinded the standard in the winter of 2001. Unions continue the fight for a national standard that would clarify ergonomic injuries; yet, despite overwhelming research that documents ergonomic hazards, we face an ongoing battle for recognition and legitimization of workplace ergonomic injuries.

Twenty-five years ago, the word "ergonomic" rarely appeared in public employee union literature. With the changing workforce, ergonomics has become the buzzword for safety in workplaces everywhere. Ergonomics is defined as the study of the relationship between human beings and the work environment. The increased use of technology has brought this concept to the forefront of safety discussions. For 15 years, labor unions have worked to pass a federal ergonomic OSHA standard. This was accomplished in 2000, but President Bush and the 106th Congress rescinded the standard in the winter of 2001. Unions continue the fight for a national standard that would clarify ergonomic injuries; yet, despite overwhelming research that documents ergonomic hazards, we face an ongoing battle for recognition and legitimization of workplace ergonomic injuries.

Today's office environment is extremely dynamic. Systems change frequently with implications for the physical environment and the organization of work. Many more knowledge workers use computers and hand-held Palm Pilots on a daily basis, continuously performing



work that requires several keystrokes and mouse clicks. These tasks are repetitive and taxing on the delicate joints of the wrist and shoulder. If not supported correctly, these joints will deteriorate or inflame. Employees increasingly deal with vision problems caused by the glare of the computer screen and back strain from sitting at a computer all day. These work-related injuries are not trivial; they often lead to disabilities and job loss.

Constantly changing work organization is the "invisible" ergonomic challenge. Public administrators characteristically make major software purchase decisions without any input from the people who will work with the system. This problem is compounded by the fact that training on new systems is often inadequate or non-existent. Sometimes the new systems fail to perform as promised, and new systems or software ultimately place more demands on the end user.

Constantly changing work organization is the "invisible" ergonomic challenge. Public administrators characteristically make major software purchase decisions without any input from the people who will work with the system.

As a result of escalating changes and demands, public workers are placed in a position of increasing demand with little or no control. Public employees report more stress and stress-related illnesses today than they did 25 years ago. Recent research has unearthed increased rates of work-related high blood pressure and heart disease among lower- and middle-level public employees.

Humans are set apart from animals by our ability to control our environments for comfort and survival. People build houses and turn up the thermostat. Computers and computer network equipment share space with today's workforce. Public agencies and public employee workspaces are, more often than not, many years old. Most computer networks were installed after the buildings were finished, thus, the major components must be placed where they can fit. Employees have had to adjust their existing workspaces to accommodate the new technology. Some of these components are sensitive to temperature extremes or must be secured against theft or damage. Usually, this accommodation comes at the cost of the public

employees utilizing outdated space.

New technologies require very specific needs. The air must be a constant temperature to protect the machines. To maintain consistent air temperatures, many new and renovated public buildings have special insulation and hardware to "tighten" airflow. New buildings have fewer windows. Older, stone-covered buildings can be humid and become breeding grounds for molds, spores, bacteria, fungi and mildew. The same technology that protects us from the icy blasts of winter also captures the fumes, mold and bacteria that formerly were exhausted from the area by opening a window.

The variety of machines found in today's public employee work setting - printers and copiers - add pollutants and toxic chemicals to the office in the form of toner dust and vapor exhaust. Asbestos, dust, cleaning materials, old carpeting and overcrowding can be significant concerns as well. Combined, these factors create an office that exposes workers to these and other pathogens for many hours a day and for many days a week. The ramifications of technology in our workspaces demand that the union be involved in all aspects of public employees' work environments to assure the health, well-being and overall safety of our members.

In the future, technologies such as voice recognition in computers and biometrics will pose different ergonomic, health and safety concerns that unions will need to address. The best way to keep track of developing issues is to establish meaningful health and safety committees and, where possible, have dedicated staff who can aid members as they struggle with these new accommodations.

In the future, technologies such as voice recognition in computers and biometrics will pose different ergonomic, health and safety concerns that unions will need to address. The best way to keep track of developing issues is to establish meaningful health and safety committees and, where possible, have dedicated staff who can aid members as they struggle with these new accommodations. Additionally, unions should establish relationships with university programs to devise strategies to solve problems together. Above all, unions in this digital age must keep abreast of – and anticipate - the members' concerns so as to guide members to a safe and healthy workplace environment.

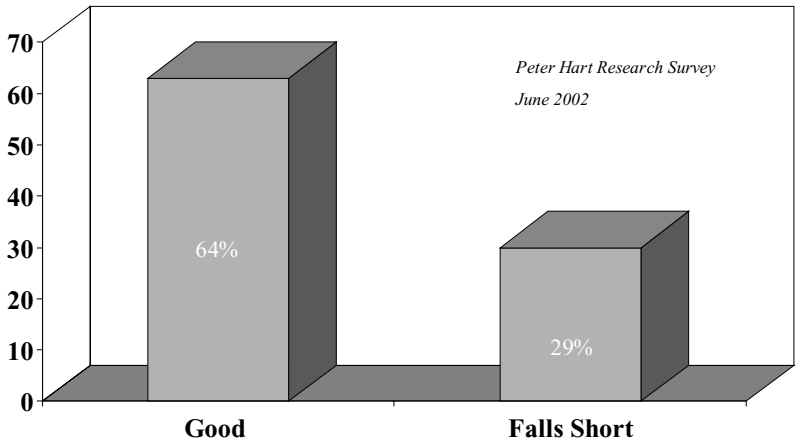
Privacy and Security

Employees of the San Francisco Bay Area Rapid Transit will soon have to use finger-scanning equipment when moving around the airport, this to control and monitor access to secure areas. The governor of Utah was sued for not saving e-mail communication, and Sedgwick County, Kansas residents and commissioners are battling over the issue of e-mail retention as it pertains to a particular commission vote.

Around the country, public employees increasingly are faced with new challenges introduced by new technologies. In the 21st century, public employees' privacy and the security of their personnel data have become hot-button issues that all unions need to address in an aggressive, pro-active way. The task force reviewed available documentation and heard presentations on issues including: employee's personal use of the employer's computer systems (Internet and e-mail); employee monitoring; biometrics; identity theft; and employee responsibilities and liabilities for e-mail retention.

In the 21st century, public employees' privacy and the security of their personnel data have become hot-button issues that all unions need to address in an aggressive, pro-active way.

AFT Public Employees: Privacy of Personal Data



Personal use of employer-provided computers remains a controversial topic in today's public workplaces. This is not new ground for labor unions; unions once negotiated over employee use of the telephone, bulletin boards and occasionally, the fax machine. Technology brings this workplace discussion to a new level.

Employees in many public agencies use computers and the Internet every day. It is in the employer's best interest to have Internet-savvy employees who feel comfortable using this technology. Electronic mail systems in government benefit management, employees and citizens. Citizens can receive responses to questions and concerns much faster via e-mail and employee interaction among different agencies, and levels of government is faster and easier.

17% of AFT Public Employees feel that their employer excessively monitors employee use of e-mail and the internet. (Hart Survey, 2002)

Use of the Internet and e-mail brings new concerns for both the union and management. We are facing a burgeoning field of case law regarding employee privacy rights and security expectations. There are a number of specific concerns that unions have had to address through grievance handling, legislation and negotiations.

Public employees are concerned about personal privacy while using computers and other technological applications. Employees and unions argue that the computer is the communication tool of the 21st century, and, as such, employees should be free to utilize computers for personal use on their own time. There is great concern regarding First and Fourth Amendment rights for public employees. Without appropriate and consistent guidelines, employees could be subject to arbitrary and capricious management actions regarding their use of the Internet or e-mail at work.

Public employers have expressed concerns that inappropriate use of technology in the workplace will reflect negatively on the agency. They argue that inappropriate viewing of Internet sites increases an employer's liability in the areas of sexual harassment or a hostile work environment. Some government agencies have brought forward claims that an employee has misused government funds, characterizing time on a computer as "cyberloafing."

While unions have some flexibility to negotiate over privacy and security, the courts and the federal government have limited the discussion. The Electronic Privacy Communications Act of 1986 states that, under certain conditions, an employer cannot intercept an employee's e-mail; however, the employer has every right to monitor all e-mail traffic, stored e-mail, Internet usage and voice mail. The courts consistently have held that e-mail sent on the employer's equipment is the property of the employer.

Nationally, few published arbitration decisions on the subject of personal use of the computer in the public sector exist; there are, however, a number of defensive actions that unions should take when considering legislative or contract language on this topic. It should be clear to the entire membership that there is a limited expectation of privacy while using the employer's computer. Employees should be advised that the employer has the right to control e-mail and Internet use. Unions should insist that members are provided with a uniform policy that is clearly explained to all members.

Management does not have the right to decide arbitrarily which personal e-mail is allowed and nonallowed. If managers allow

employees to circulate e-mail announcing social activities - such as baby showers, afterwork get-togethers or fundraising events, then they are on shaky ground if they decide to discipline an employee for sending a union-related e-mail. Many unions encourage union-related e-mail to be sent from an e-mail address outside of the employer's system to avoid conflict in this area. If a union is allowed to bargain, it is desirable to include contract language on this subject. (See, Appendix C).

It is clear that more and more public employers are monitoring employees' use of e-mail and the Internet. Every keystroke and every screen can be called up for review of each employee's work. Software exists that can screen every e-mail on a system looking for specific words or phrases. Many states have enacted statutes or regulations that apply to both the private and public sector employer's use of surveillance. Local unions should be aware of these regulations if they are defending a member disciplined by employer monitoring of their computers (see Appendix B). Additionally, each union should be sure that regulations or contracts contain language to prohibit employers from monitoring without probable cause.

It is clear that more and more public employers are monitoring employees' use of e-mail and the Internet. Every keystroke and every screen can be called up for review of each employee's work.

Another type of monitoring that has increased since September 11th is monitoring employee movement throughout the day. This can be done by using video cameras, identity badges and other security measures. For example, a recent paper by Cheryl Buswell Robinson describes the trend toward fully integrated employee tracking systems in nursing homes and hospitals. Employers use identification badges to monitor and "provide [the employer] real-time and historical information on the location of any item [or person] it is tracking. (Buswell). These systems can be integrated with billing and payroll systems. Employers may argue that increased monitoring is a cost-saving device and a safety issue; unions, however, should emphasize that there is a fine line between monitoring for safety and invasion of a member's personal privacy. Public employers should outline the security needs for such extensive monitoring and should assure the union that this does not conflict with the union's representation rights or an employee's privacy.

Employee security and monitoring may include the concept of biometrics in the near future. Biometrics is described as the science that uses your body as a password—the use of an employee's hands, iris or voice for security clearance— once only seen in science fiction. More and more public agencies are reviewing biometric options to keep government buildings secure. There are data security risks inherent with the use of biometrics. Who will control this personal information about an employee? How will security be maintained to insure that personal information is not compromised? John Spotila, former administrator of the federal Office of Information and Regulatory Affairs, has said, "…when a company collects biometric information and stores it in a database, that company accepts an implied responsibility to limit access to that information." Employers will take on liability if that biometric information is compromised (Verton). The security of employee data must be of first

John Spotila, former administrator of the federal Office of Information and Regulatory Affairs, has said, "…when a company collects biometric information and stores it in a database, that company accepts an implied responsibility to limit access to that information."

concern. As this issue comes to the forefront, unions must be involved in these discussions.

When new security is introduced in the workplace, it is the union's responsibility to protect employee privacy through contractual and/or legislative language. Local unions should try to negotiate agreements about how information is gathered, where it's stored and how long it will be kept. Unions should be vigilant about the employer's liability when disclosing sensitive data and publicizing any legal actions taken against employers around the state.

The task force examined research on employee responsibility for document retention in the technological era. Complicating this issue is a continuing dialogue about whether e-mail should be considered a government record. While some argue that e-mail is an extension of a phone conversation, and thus not a true "document," the press and special interest groups often request *all* documentation about a particular issue, including all pertinent e-mails. Employees have been disciplined for not maintaining adequate e-mail files, and lawsuits against the government over e-mail deletion are not uncommon.

In the past, government employers provided extensive guidance on what needed to be maintained in the government files and for what length of time. This was in the era of the "stovepipe" government, when these decisions moved up the chain of command and all documents were retained for a certain length of time. As the "stovepipe" mentality is exchanged for a flatter management style that authorizes more people to both put information on the Web and take information off the Web, we are left with a void regarding responsibility over electronic document retention. The union must work to insure that there is a clear policy regarding document retention – with both electronic and traditional paper documents. The law is the same regardless of the medium. Employees need to be confident that they are keeping the correct documents and deleting electronic documents in accordance with the law. Occasionally, there is a conflict between management and employees when management puts unnecessary pressure on employees to minimize storage on hard drives or networks.

Lastly, unions are wrestling with an increase in cases of public employee identity theft. Social Security numbers are often found on an employee's identity badge, time sheets and check stubs. In one example, a contractor working with Medicaid management in New York hired work-release prisoners to process paperwork. One of the prisoners stole the Social Security number of a state employee and created havoc in his life. It took months to iron out the fraudulent claims made in the employee's name. The union must recognize this potential threat and take action to protect members' privacy. Many states are eliminating the use of Social Security numbers as employee identification numbers and securing time sheets and paycheck stubs. The employer and the union can take action to assist members who are victims of this crime at the workplace and work to prevent future instances.

In conclusion, the privacy and security issues of public employees are becoming more complicated as the usages of technology in the workplace increase. The task force recognizes that unions have an increased responsibility in the workplace of the 21st century. These responsibilities include: informing the members of the limitations of the Internet as it relates to the regulations and policies of their employer; protecting members from unnecessary monitoring and identity theft; pursuing clear policies regarding document retention; and actively negotiating biometric introduction in the workplace.

Telework

14% of AFT Public Employees currently telework.
(Hart Survey, 2002)

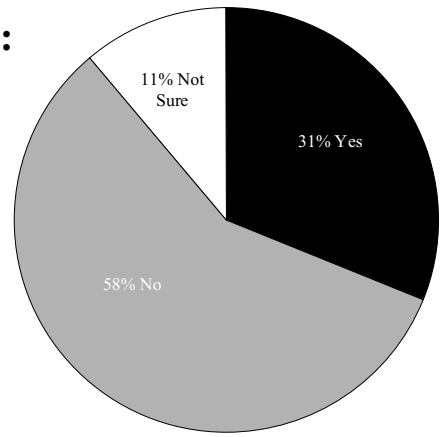
As discussed previously in this document, the availability of new technology opens the door for a discussion on the changing nature of government work and workplace innovations. Personal computers, inter- and extranets, electronic mail and palm pilots have altered the public sector and now offer one of the greatest potentials for work-place change in the 21st century: the opportunity for employees to telecommute, or telework, as it is now called. With this technology, employees in some job titles are able to complete work assignments from alternate locations. Nationally, 28.8 million employees telework– an increase of 17 percent since 2000 (ITAC National Survey, October 2001). Unfortunately, in the public sector we have not seen as dramatic a jump in the number of teleworkers as in the private sector. The task force believes that telework offers public employees the opportunity to enhance the work experience and strengthen the quality of services provided to the public.

56% of AFT Public Employees who do not currently telework would choose to telework if offered.
(Hart Survey, 2002)

Telework programs require extensive advance planning in order be successful. Programs only work when employees have a voice in the process and work with management on the details. A 1992 study of Hawaii's telework program maintains that, "Working with the unions and incorporating them in the formulation of the program and at least as signatories into the telecommuting agreement is essential to the success of the program (BNA, p 750). Public sector programs reviewed by the task force included Oregon, Arizona, Washington State and California. Each of these telework programs rolled out slowly over a number of years after extensive labor and management collaboration. They started with a Pilot Project and expanded to include the entire state workforce only after the pilot project was viewed as a success – perhaps two years after the original planning began. Whether or not the union works under a collective bargaining agreement, this long term planning effort should be undertaken.

AFT Public Employees:
Employer permits telework

(Hart Survey, 2002)



As union activists, we often struggle with employers who attempt unplanned, informal telework programs through an arbitrary selection process. Telework programs can bring new concerns for the union including data security while working outside of the primary work location, resentment among colleagues who choose not to utilize a telework plan, the potential for increased monitoring of those teleworking, equipment and support issues, and the fear that this option might limit members career mobility. These concerns are valid when not addressed through a detailed telework plan.

The research shows that government employees are happier when offered an opportunity to work closer to home a few days a week. Many employees battle horrible traffic every day to get to work. Public employees volunteer that they get more work done in the quiet of their home or telework center (Oregon). Absenteeism and instances of stress overload are reduced significantly through the introduction of a telework option. The task force supports the telework concept as a work arrangement that can benefit both the employee and the taxpayer.

It is not our intent to summarize all of the documentation supporting telework in this section of the Task Force report. Unions will find myriad research tools on this topic. We will concentrate our discussion on specific safeguards that unions should consider when negotiating or discussing a telework program with the employer.

First, it is important for equity and fairness that unions insist on a ***formal application process*** for any employee who wishes to telework (see Appendix A). This application will help to insure that all employees who wish to utilize a telework program – whether it is regular, occasional or emergency – are offered equal consideration in the selection process. In fact, the task force feels that the formalization of the process is essential to the success of any telework program. **Everyone** should fill out an application in order to be considered for telework selection. Eligibility criteria should be very general so that it encourages all interested members to apply. Once an employee completes the general eligibility application, they should move to a more extensive selection procedure. Telework is not appropriate for every employee or job. Programs should have transparent selection criteria that might include: analysis of the employee's job requirements, number of days/hours needed in the office, time spent on the road and ability to adapt the home environment for telework. Employees must be fully aware of the criteria before applying. It should be clear, for instance, that teleworking cannot be a substitute for day care.

Employees who are denied access to the telework program should have the option of a ***third-party review*** from outside their immediate department. One successful example of this kind of review is a tripart panel made up of a union nominee, a management nominee and a neutral participant chosen by the two nominees (Oregon) .This type of review helps to assure employees that selection for the telework program is not arbitrary but, rather, based on a clear set of

This task force defines telework as:

A work arrangement whereby selected employees are allowed to perform the normal duties and responsibilities of their position through the use of computers or telecommunications, at home or another place apart from the employees' usual place of work.

There are three main categories of telework: regular, recurring; brief or occasional; temporary or emergency. All three types are valid teleworking programs that should be included when negotiating a telework program with the employer.

criteria that is assessed for each potential teleworker.

For a telework program to be successful, there must be different means for ***collection of feedback*** from employees who telework and those who choose not to telework. Online surveys, employee forums and interviews are good examples of mechanisms to solicit employee feedback on telework. Feedback might also include reports from teleworking employees, from citizens or others that might be affected (positively or negatively) by a government employee teleworking. This feedback should be continuous to provide the union and management with a clear picture of how the telework program is progressing.

An initial ***training program*** should be set up to provide telework information to both managers and employees simultaneously. Management and employees may have additional needs for training; however these subsequent trainings should be put forth separately. There should be a concentrated effort to make telework institutionalized throughout government and not based on one supervisor or another. Employees who telework should not be concerned that if their supervisor changes, their telework plan automatically will be revoked.

Individual teleworking plans are voluntary and should have a ***provision for termination*** at any time by the employee or the agency. Such a termination procedure should allow for appeals to guarantee fairness and equity and prevent arbitrary decision making. This protects the employee, the manager and the public.

Unions should ***monitor and sign off*** on all individual telework plans to assure that employee rights are being maintained. The union is responsible for insuring that no employee inadvertently relinquishes union rights or undermines the collective bargaining agreement. For instance, a teleworking employee's performance reviews should be no different in scope from that of a non- teleworking employee. No employee should have the option of waiving leave time or altering the wage base. It may become necessary, where applicable, to bargain over issues including: payment for equipment, security of a database, setting up Internet lines or phone lines, cell phones and flexible scheduling.

Unions should take a pro-active stance to help employers overcome concerns and misconceptions regarding telework. Managers often are reluctant to give up control over the work environment and feel that they are unable to "supervise" telework employees. In the 21st century, our work processes are transforming. We can concentrate on *how* the work gets done without getting bogged down in *where* the work is done. The task force sees this as an important distinction for the public sector services that our members provide. The quality of the work product can be improved through telework programs. Managers need to evaluate work based on results, not hours in the office. Managers need to understand the benefits of teleworking and work through their "old school" fears. Unions can sponsor informa-

tion sessions on telework that are open to employees at every level of the organization. Employers in the public and private sector who have successfully implemented a telework plan can be brought in to discuss the benefits and challenges of the programs. If a telework program is to be successful, all staff must be comfortable with the process. The union can facilitate this with management and supervisory counterparts.

In conclusion, telework is an idea whose time has come. Public sector employers and unions who have taken the time to plan and institute extensive telework programs report considerable success. The state of Arizona maintains that 15 percent of the state workforce teleworks at least twice a month. This has resulted in a noticeable change in the air quality in Maricopa County, and the employees are very happy with the option. Morale and retention both are up. Telework can be a win/win proposal if done correctly. The union and management may need to work to alleviate citizen and politician concerns regarding perceptions that telework hinders supervision and therefore facilitates reduced workloads and employee laziness. Teleworking is part of the technological wave of the 21st century and can be beneficial to citizens and workers alike, but it must provide seamless coverage to the quality services that the public has come to expect from its dedicated public employees.

Telework can be a win/win proposal if done correctly.

BENEFITS OF TELEWORKING

Employees

Improved work environment
Improved morale and job satisfaction
Greater degree of control over the work product and responsibility
Greater lifestyle flexibility
Less commuting time and stress
Increased productivity
Reduced transportation and parking costs

Community

Less traffic congestion
Less gasoline consumption
Fewer vehicle emissions
More job opportunities for differently abled, part time and semi-retired people
Increased numbers of jobs in rural areas

Public Administration

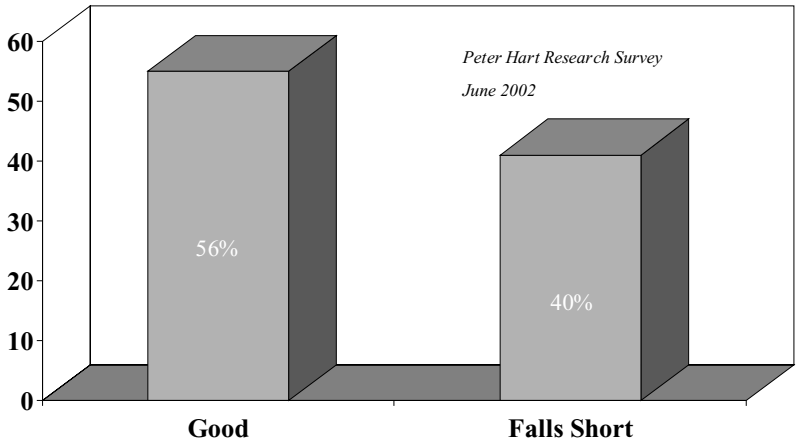
Increased ability to attract and retain valuable employees
Improved employee morale and job satisfaction
Enhanced employee job performance
Reduced office and parking space requirements
Increased access to new labor markets
Less sick leave and absenteeism
Better public image

(Reproduced, in part, from *Telecommuting: An Alternate Route to Work;* Washington State University Energy Program)

Training

As we examine the workplace of the future and the digital government landscape, one thing has become apparent: the training component necessary to transform government into a technological leader, is virtually nonexistent in the public sector workplace. With few exceptions, public employers provide very little meaningful technological training for their employees. In the private sector, 10 percent of the human resource budget is invested in employee training. The public sector, however, struggles to devote 2 percent of its human resource budget on training opportunities.

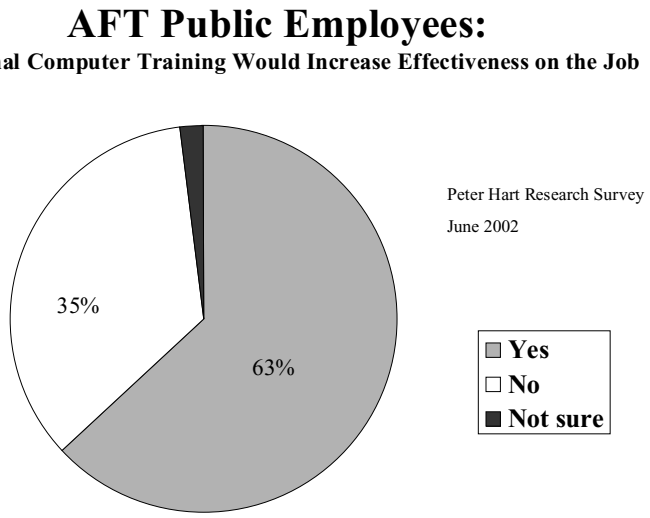
AFT Public Employees:
Training on Computers and Technical Equipment



The work in the public sector is dynamic and constantly changing. This change often requires extensive training and retraining. Employees and governments are feeling pressure to advance their work processes to rival the private sector. This cannot happen without adequate training for the workers who are expected to fulfill these tasks. Because the task force feels strongly that the public sector training that does exist is often inadequate for all adult learning styles, this section will review the different adult learning styles as well as discuss innovative training programs in the public and private sectors (See, Appendix D)

Digital government provides new ways for the citizenry to access government. Job assignments and job descriptions are changing very quickly. For example, to fully utilize new technology, many job assignments that previously have been done face-to-face or on the telephone are conducted online. Unemployment Compensation in some states has moved from a face-to-face dialogue with a state

worker to a form completed by the user on line in the Labor Department office. Other functions are moving from a hand-written form, to a hand-held Palm Pilot. Some natural resources departments have equipped employees with hand-held Pilots to complete immediately necessary forms in state parks. Although both of these examples represent exciting change in the public sector and may save considerable time and money, they require hours of training to master the new technology. Each job redesign represents new challenges for public workers. The transition to a digital government should be seamless to the workers involved in this challenge.



For these new digital changes to be successful, public employees must be trained and made to feel comfortable with new technology. The success of any change is directly related to preparation. Training takes place best when the learner is ready to accept the new information or behavior. Many learning theorists believe that there exists a "teachable moment", and that this "readiness to learn" is linked to a developmental stage in the life of the learner. Most workplace learning takes place within a "teachable moment" that is linked to demands or required tasks of the job.

Employees who are fully trained and feel comfortable with the new work processes will have a greater investment in the success of the project. It is in government's best interest to maintain a fully trained and competent workforce.

Learning maybe less than optimal if the learner does not see the relevance of the training to the tasks, or when the training is too far in advance of application of the newly learned skill or behavior. In other words, the learning or training must be timely.

Employees who are fully trained and feel comfortable with the new work processes will have a greater investment in the success of the project. It is in government's best interest to maintain a fully trained and competent workforce. Public employees who feel that their employer is taking their career development seriously are more likely to stay with their employer. Ongoing employee career development must be a priority for public sector managers.

Training in the public sector is often an "add-on" consideration, something addressed after the new technology has been purchased,

leaving the employee anxious about the changes to their work environment. Training must be included in any strategic business plan before changing over to new technology in the public sector. Training on new technology should never be an add-on but should, instead, be considered a major component of structural and organization change in the public sector. Adequate resources should be made available to allow for appropriate employee training. If public employees have collective bargaining, training resource language should be negotiated into agreements.

It is important for both the union and management to understand that employees may have different training needs and that each employee learns differently. The necessity of today's worker to learn continuously new technological skills at an ever-increasing pace demands that the union have a clear understanding of the implications of learner styles, locus of control and of teaching strategies.

The definition of learning style is "that consistent pattern of behavior and performance by which an individual approaches educational experiences"….It is the composite of characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment" (Noel p. 2).

Many studies utilizing many different learning styles, have been conducted in the field of education and business. Within the field of education, there are at least 30 different instruments for assessing learning styles (Noel p. 2). In the field of business, research done by David Kolb indicates that business managers favor a style of learning that differs from that of many other professionals (Kolb).

Training among the Fortune 500 companies has moved to "learner-centered environments." These self-study interactive training sessions offered over the Internet determine a user's learning style with a brief, but sophisticated, pre-course self-assessment that branches off into exercises customized for the learner. This mass Internet customization makes accommodating different learning styles a reality (Goldstein).

Closely related to learning styles is the concept of locus of control. Locus of control is a dimension of personality that explains the degree to which people believe that they, rather than external forces, determine their own lives (Cook, Hunsaker, Coffey p.176). People who believe that they can determine their own fates – especially within their own work environment – are better able to cope with stress and change. (Lefcourt, p. 2).

Workers with an internal locus of control will feel that they are in control of their lives. They recognize the role they play and the consequences of their actions; therefore they realize that they can be held accountable by others for their decisions. Workers with a strong internal locus of control will take responsibility for their own learning, and providing these workers with an understanding of their unique

Training is one thing, but learning is quite another. For learning to take place, organizations must move beyond "spray-and-pray" training—traditional group sessions that can send dazed workers out of the classroom thinking: "I occupied a chair. I passed a quiz. I have a certificate in my personnel file. Therefore I am trained." Our experience has taught us that adults come to work with different learning styles, and training simply won't take hold unless each learner's style is addressed and respected.

J. Goldstein, president and CEO of PBS *The Business Channel*

learning styles will support and foster a willingness to be held accountable for the learning. Numerous instruments are available to assess the individual locus of control attributes of employees. http://www.queendom.com/tests/personality/lc_access.html

It is helpful if some sort of assessment of an individual employee's learning style and locus of control is completed prior to designing a training program for the employee. This would not be tied to any discipline and would not be a "test" of the employee, but should allow the employee and the training officer to determine what type of training would be best for the employee based on the job title/description. Some employees work best with one-on-one training, others prefer a classroom setting, and still others learn best on their own with the Internet tools (See Appendix D). An employee who is not comfortable working on the Internet, for instance, should work with a supervisor to insure that none of the training is offered via the Internet until that employee is ready to learn from this training mode.

When public administrations are in the midst of a budget crisis, training funds become the first victims of the budget ax. What is the union's responsibility to deal with training during these times of limited revenue? The public continues to expect that they will receive a quality digital government product despite the fact that management provides no money for the necessary training. Unions have an obligation to assure that the membership is prepared to deal with changes in the job descriptions and work. We must use the limited training dollars wisely.

The public continues to expect that they will receive a quality digital government product despite the fact that management provides no money for the necessary training.

Any training that can be **negotiated through collective bargaining** is optimal. The New York State Public Employees Federation negotiates career development and professional development training funds in their contract. Often securing training funds through a union contract is not an option, and the union must think outside the box to provide high- quality training opportunities for employees.

One model for unions to consider is the **industrial union model**. In this model, the union acts as the central body through which all employee training occurs. Unions have partnered with universities, community colleges and private businesses such as Compuworld to accomplish this goal. Some locals have negotiated with community colleges or private sector business for low-cost tuition for technology classes. Others have negotiated with the state to offer vacant seats in university computer classes to state workers for free. Unions can institute distance education courses for a particularly important topic. This course might take place in the union hall and be free for all union members.

Public administrators and managers often argue that once they spend thousands of dollars to train an employee, the employee promptly leaves public service. In some cases, this may be a valid complaint and may lead some managers to punish all public workers who seek additional training. There have been a number of different approaches to this particular problem.

One strategy is to work with the employee on their career development by putting in place **a plan for training and development**. Once accomplished, the employee signs a training contract with the employer for any extensive training outside of what is needed to do the job on a daily basis. For example, this type of training contract could be used with employees who seek additional training to continue their education, learn a new computer program for future professional career moves or learn a new language. It would not be used in situations where employees need training to maintain a high level of service to the taxpayer – as is the case when the employer introduces a new program in the job title and the employee needs training to understand it. This training contract outlines the length of service necessary to "repay" the employer for the cost of the training. For example, County Planner John Doe and Supervisor Jane Smith work out a plan to improve John's skills and train him for the future. John will need $8,000 worth of training from the local community college. Doe signs a contract with Smith indicating that he will stay on board with the County Planning Division for two years after he receives this training. If Doe leaves before the contractually mandated time, he will have to repay the training loan. This accomplishes two things: the employee recognizes how vital this training is to his success, and the agency is more likely to fund the ongoing training, which legitimates the training and adds credibility to the training plan process.

A training compact can be accomplished through **general contract language** as well. Some local unions have a provision that indicates that if an employee receives more than $400 of state-provided training and leaves the agency within 18 months of receiving said training, the employee is obligated to repay the training cost.

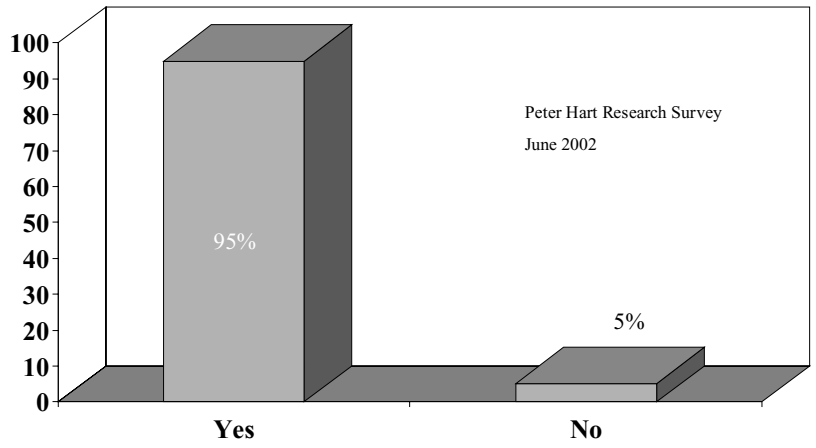
Another training strategy for public employees is **apprenticeships**. Employees share knowledge with each other, and time is scheduled through the week for this to occur. Public employee mentoring can also be helpful for employees who need one-on- one assistance.

Lastly, providing training can be an economic development option. City, county, state and federal employees in an area can **pool resources** to afford technology programs that will benefit all public workers. Location, not who you work for, can be used as a basis for providing training.

The Role of the Union in the Digital Age

There is no doubt that public employment in the 21st century has changed forever given the events of September 11, 2001. The age of digital government affects employees in their work, as well as their unions. As a union of professionals in the digital age, AFT Public Employees recognizes the changing needs of our membership and the need for union locals to adjust their thinking on related issues – communicating with the membership, and worker training to name just a few.

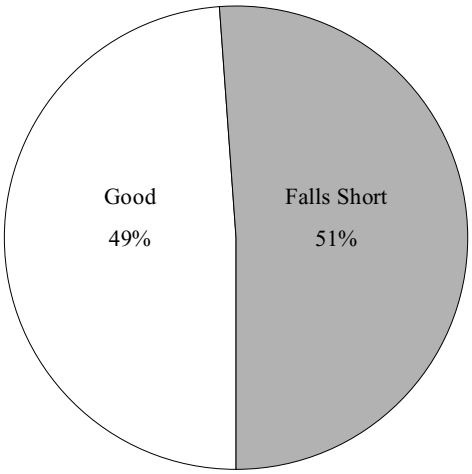
Ninety-five percent of our membership has access to the internet and e-mail either at home or at work – or both. In recent polling, union members indicate a strong preference for receiving union information electronically. (Hart, 2002)



Ninety-five percent of our membership has access to the internet and e-mail either at home or at work – or both. In recent polling, union members indicate a strong preference for receiving union information electronically. (Hart, 2002) Our union must address these preferences and adapt to the changing technology as well. The digital age requires unions to have web sites and employee list serves that provide members with the information they need and encourage greater participation in the life of the union. As our society changes and accepts the new technology, our members expect their union to keep pace and take advantage of changing opportunities for communication and involvement.

AFT Public Employees:

How would you rate the tools and resources necessary to do your job?



Peter Hart Research Survey
June 2002

The internet is a major asset for union mobilization efforts. It offers an essentially free tool for communicating with the membership and potential members. This is a tool that can help us deal with the huge geography that is often a major feature in the representation of large groups of public employees. The world wide web can also assist unions in training efforts, allow greater interaction on workplace issues, provide member feedback on important union issues, and provide instantaneous updates on union activities and programs. By monitoring changes, the union can be in the best position possible to recommend appropriate training and protections for public employee professionals.

The internet is a major asset for union mobilization efforts. It offers an essentially free tool for communicating with the membership and potential members. This is a tool that can help us deal with the huge geography that is often a major feature in the representation of large groups of public employees.

Recommendations of the AFT Public Employees Task Force on Digital Government

Employee involvement in the evaluation of technology at the work site is an essential ingredient in the continuous process of improving services.

1. Our union should encourage discussions at all levels of the organization about the changes taking place in government workplaces as the result of changes in computer hardware, software and other technology. These discussions should focus on the requirements for improving government services and improving public employee workplaces. Appropriate levels of employee involvement in the design of the workplace, the flow of work and the selection of software and computer systems are central to this process. Employee involvement in the evaluation of technology at the work site is an essential ingredient in the continuous process of improving services.

2. Our union should work at all appropriate levels of the organization to encourage the development of acceptable telework plans to meet the needs of our members and to improve the effectiveness of government services. The establishment and execution of telework programs will be different for each state government and for different agencies of government, but in general, these programs will be most effective where there is employee involvement in the planning, development and execution of the technology plan. This process can be facilitated through a cooperative labor management program and meaningful collective bargaining. The establishment of appropriate telework programs as well as employee safeguards and protections are appropriate topics for collective bargaining negotiations. Where employees lack meaningful collective bargaining rights, legislation may need to be pushed for the establishment of meaningful telework policies with appropriate safeguards and protections.

3. Active health and safety committees should be established at appropriate levels of the union to monitor the health effects and impact of technology on our members. These committees should have the training and support necessary to assess the impact of new technology on the health and well-being of our members. The committees should then make assessments that include:

   § Determining any adverse health effects on workers when organizations implement new technologies in the workplace.

   § Surveying the membership to determine the prevalence of injuries and illnesses associated with ergonomic hazards (i.e., poor work station design, sedentary work, repetitive motions, etc.).

- § Surveying the membership for symptoms and illnesses associated with poor indoor air quality.

- § Conducting initial walk-around surveys of buildings to determine sources of poor indoor air quality and other factors such as noise and poor lighting.

4. Our union, at the appropriate levels, should work with area university programs to document health and safety problems among members and to devise strategies for solutions to identified problems. For instance, many problems can be alleviated by the introduction of adequate ergonomic furniture and the attendant training on its use.

5. Our union should encourage the establishment of joint labor-management health and safety committees to address all of these issues in a systematic way. For instance, the union and management counterparts should establish a renovation committee for each agency that undergoes renovations. Renovations should be planned in advance with the help of the committee to incorporate all known and anticipated hazards. Fresh-air ventilation issues must be addressed with the union in any renovation. Development plans must detail aspects of the office environment that threaten workers' health and safety, including everything that can be inhaled or transmitted in the air. Chronic indoor air quality and environmental quality issues should be addressed as well.

6. Our union must provide clear explanations and information to our members regarding their privacy rights with the use of the internet, e-mail and other technology. Increasing security requirements for the use of technology and the increasing prevalence of security throughout our society will necessarily involve questions about the level of privacy protection necessary to protect employees and provide quality services to the public. The increasing use of biometrics and personal employee information raises serious concerns by our members and our union must be prepared to safeguard their rights in this changing environment. Employee involvement and assessment will be necessary to determine the appropriate levels of security and privacy protection. Updated information on contractual, legal and statutory obligations of labor and management will be an important asset to our union as we work to improve government services and provide necessary privacy protections to our members.

7. Our union should collect and disseminate best practices, contract language and legislation that deals with technology in government work places across the country. This information can help promote ideas for more effective government services and for improving employee involvement in the decisions effecting their work.

8. Our union, at all levels, must advocate for more effective employee training and professional development to help our members deal with the rapidly changing demands of government workplaces. Through regular member surveys and expanded interaction with the diverse membership of our union, we can be better prepared and expert in the needs of public employees in dealing with new technology. Appropriate technological training is the obligation of the employer and where it is not being provided our union must be an effective advocate for improvements. Our union can facilitate training opportunities by providing information on available training both at the workplace and outside the workplace. In some cases our union may also have the capacity and resources necessary to provide this training directly either in cooperation with management or on its own.

Appendix A
Telecommuter Applications

Are available in printed copy of publication.
To order, call the national office at 202/879-4549.

Appendix B

Examples of State Procedures and Statutes relating to Digital Government

Statute exerpts from Wisconsin

19.31 Declaration of policy. In recognition of the fact that a representative government is dependent upon an informed electorate, it is declared to be the public policy of this state that all persons are entitled to the greatest possible information regarding the affairs of government and the official acts of those officers and employees who represent them. Further, providing persons with such information is declared to be an essential function of a representative government and an integral part of the routine duties of officers and employees whose responsibility it is to provide such information. To that end, ss. 19.32 to 19.37 shall be construed in every instance with a presumption of complete public access, consistent with the conduct of governmental business. The denial of public access generally is contrary to the public interest, and only in an exceptional case may access be denied.

19.32(2)
(2) "Record" means any material on which written, drawn, printed, spoken, visual or electromagnetic information is recorded or preserved, regardless of physical form or characteristics, which has been created or is being kept by an authority. "Record" includes, but is not limited to, handwritten, typed or printed pages, maps, charts, photographs, films, recordings, tapes (including computer tapes), computer printouts and optical disks. "Record" does not include drafts, notes, preliminary computations and like materials prepared for the originator's personal use or prepared by the originator in the name of a person for whom the originator is working; materials which are purely the personal property of the custodian and have no relation to his or her office; materials to which access is limited by copyright, patent or bequest; and published materials in the possession of an authority other than a public library which are available for sale, or which are available for inspection at a public library.

19.32(3)
(3) "Requester" means any person who requests inspection or copies of a record, except a committed or incarcerated person, unless the person requests inspection or copies of a record that contains specific references to that person or his or her minor children for whom he or she has not been denied physical placement under Ch. 767 and the record is otherwise accessible to the person by law.

19.35(1)(am)
(am) In addition to any right under par (a), any requester who is an individual or person authorized by the individual, has a right to inspect any record containing personally identifiable information pertaining to the individual that is maintained by an authority and to make or receive a copy of any such information. The right to inspect or copy a record under this paragraph does not apply to any of the following:

19.35(1)(am)1.
1. Any record containing personally identifiable information that is collected or maintained in connection with a complaint, investigation or other circumstances that may lead to an enforcement action, administrative proceeding, arbitration proceeding or court proceeding, or any such record that is collected or maintained in connection with such an action or proceeding

230.13 Closed records.
230.13(1)
(1) Except as provided in 230.13the secretary and the administrator may keep records of the following personnel matters closed to the public:

230.13(1)(a)
(a) Examination scores and ranks and other evaluations of applicants.

230.13(1)(c)
(c) Dismissals, demotions and other disciplinary actions.

230.13(1)(d)
(d) Pay survey data obtained from identifiable

nonpublic employers.

230.13(1)(e)
(e) Names of nonpublic employers contributing pay survey data.

230.13(2)
(2) Unless the name of an applicant is certified under s. 230.25 , the secretary and the administrator shall keep records of the identity of an applicant for a position closed to the public, except as provided in
230.13(3)
(3) The secretary and the administrator shall provide to the department of workforce development or a county child support agency under that would otherwise be closed to the public under this section. Information provided under this subsection may only include an individual's name and address, an individual's employer and financial information related to an individual.

Wisconsin statutes can be found at http://www.legis.state.wi.us/rsb/stats.html

§ *Selections from the Wisconsin Department of Workforce Development IT and Internet Resource Use Policy*

Personal Use of IT Resources
Employees are permitted to make limited personal use of IT resources. Supervisors are responsible for ensuring that personal use of IT resources is consistent with all department policies and work rules. If an employee is not sure whether use of an IT resource is permitted, he or she should ask his or her supervisor to obtain permission. Supervisors should determine the appropriateness of personal use of IT resources with their supervisor as required.

A good rule of thumb is to not use IT resources for any purpose you would not want your supervisor or someone other than the intended viewer to see. Information stored on departmental equipment or systems is not considered private and may be subject to disclosure under Public Records laws as required by litigation. All personal data or files will be stored on an employee owned floppy disk.

In addition to complying with the rest of this policy and all other policies of the department, personal use must be at no cost to the state and must be limited to break time, lunch time, or less than 30 minutes before or after work when the employee has access to the work site. (This policy does not authorize any change to work site access policies.)

Personal use before or after work for more than 30 minutes per day should take place only with a supervisor's approval.

Authorized Personal Use of IT Resources

The degree or extent of personal use during work time must be negligible or minimal. Examples of types of authorized personal use include but are not limited to:

- § Composing and printing a letter/recipe
- § Developing resumes
- § Conducting research associated with coursework the employee is participating in
- § Sending e-mail (without attachments) to an individual
- § Notifying several individuals of department related ad-hoc activities through the use of e-mail or a printer. (E.g. picnics, holiday parties, retirement or sporting events)
- § Reading and deleting personal e-mail received
- § Using excel to develop personal financial spread sheets
- § Storing information on an employee-owned floppy disk
- § Accessing free information on the Internet including but not limited to: news/sports/financial information, papers/magazines; travel information; weather, information on hobbies, kids projects, future purchases, and related outside interests.

§ *Selections From North Dakota University System*

Computing Facilities Procedures

The Electronic Communications Privacy Act does allow system administrators or other campus employees to access user files in the normal course of employment when necessary to protect the integrity of computing facilities or the rights or property of the institution. For example, system administrators may examine or make copies of users' files which have been misused. These files may be subject to search by law enforcement agencies under court order if such files contain information which may be used as evidence in a court of law. The campus police are considered institutional administrators for the purposes of FERPA.

Procedural Guidelines for Electronic Communications

Subject to the prior restrictions, HECN or institutional electronic communication services may be used for incidental personal purposes provided such use does not: 1) interfere with NDUS operation of information technologies or electronic mail services, 2) burden the NDUS with incremental costs, or 3) interfere with the user's employment or other obligations to the College, University or NDUS.
Users of NDUS computing facilities should be aware that because of the difficulty in determining whether an electronic file was intended for personal or NDUS business, all electronic files which reside on NDUS computers may be deemed to be State records and, as such, may be subject to the open records laws of North Dakota unless an exception applies.

Regardless of who created the original electronic file, the file shall be deemed to be in the possession of a user when that user has effective control over the location of its storage. Receipt of electronic mail may be excluded from this to the extent that individuals do not have control over messages sent to him/her.

Enforcement of NDUS Policies for Students, Faculty, Staff, and Other Authorized Users

Minor infractions of these policies are generally resolved informally by the unit administering the accounts or network. Minor infractions are those in which the impact on the computer or network resource is minimal and/or the infraction is of short duration. Resolution of the infraction will include referral to the Code of Student Conduct, staff or faculty handbooks, or other resources for self-education about appropriate use. In the case of students, a copy of the resolution will be sent to the campus judicial officer.

Repeated minor infractions or more serious misconduct may result in immediate loss of computer access privileges or the temporary or permanent modification of those privileges. More serious violations include, but are not limited to, unauthorized use of computing facilities, attempts to steal passwords or data, unauthorized use or copying of licensed software, use of another's account, harassment or threatening behavior, or crashing the system. Policy violators will be referred by the system administrator to the campus judicial officer for further action.

The NDUS will work closely with other organizations and individuals responsible for security of their computing facilities in order to ensure a safe and secure computing environment for the global computing community. However, any information shared will be subject to the laws of North Dakota, the United States, and the policies of the NDUS.

Any offense which violates local, state, or federal laws may result in the immediate loss of all computing privileges and will be referred to appropriate College or University offices and/or law enforcement authorities.

NDUS computing facilities users are responsible for using system resources wisely. Use that is judged excessive, wasteful, or unauthorized may result in denial of access to computing facilities and may subject the user to appropriate disciplinary and legal procedures.

General Information

The NDUS makes every effort to provide secure computing facilities. It must be recognized, however, that such measures are not foolproof. Therefore the security of an individual's electronic files cannot be guaranteed.
Users should be aware that normal back-up procedures are employed for disaster recovery on NDUS systems. Therefore, if a user removes a file, it may still be retrievable by the system administrators. This also means that even though the user may have removed an electronic file from NDUS systems, a copy may still exist. Likewise, even though the sender and recipient of electronic communications have discarded their copies of a file or message, a copy may still exist. These backup procedures are for disaster recovery purposes and the backups may or may not be retained for an extended period. Administrators of the systems are not required by this policy to restore files for users. They will, however, oftentimes do so as a courtesy to the users.

Appendix C
Examples of contract language

Wisconsin Professional Employees Council/AFT
Language in tentative contract – 2001-2003

Regarding Employee Security and Privacy

Section 3 Personnel Lists

2/3/2: Notwithstanding the provisions of ss. 19.31-19.36, Wis. Stats., the Employer will not release any information relating to the names, addresses, social security numbers, home addresses, home telephone numbers, or other information protected by ss. 19.31-19.36 and 230.13, Wis. Stats. or any federal laws, of employees covered by this Agreement, to any individual, entity, or any labor organization(s) except for WPEC, unless required to do so by the Wisconsin Employment Relations Commission, or a court of law. The Employer will notify the employee and the Union at least 10 days prior to any information being released under this Section.

Regarding employee and union use of e-mail

Section 6 Telephone and E-Mail Use

2/6/2: Local Union officers and stewards may use their existing state assigned E-mail for conducting Union business only as authorized under the Agreement and provided that such use does not interfere with or disrupt normal business operations. No political campaign literature or material detrimental to the Employer or the Union shall be distributed. In addition, employees may use E-mail to communicate with a Union representative(s) and the Employer regarding disciplinary or grievance-related issues. This provision does not obligate the Employer to expand E-mail access nor limit agencies from developing or modifying their own policies and procedures for E-mail use. This provision shall expire with the expiration of the 2001-2003 Agreement unless the parties mutually agree to extend.

From the Alaska Public Employees Association 1999 – 2002 Contract

9.12 E-mail Communications

The Employer recognizes the Association's right to communicate with its members through the internet. Bargaining Unit Members may use their State computer to communicate with each other, and/or the Association, provided such use does not interfere with official state use, or the performance of the Bargaining Unit Member's job duties.

MEMORANDUM OF AGREEMENT
BETWEEN
GOVERNOR'S OFFICE OF EMPLOYEE RELATIONS
AND
PUBLIC EMPLOYEES FEDERATION

SUBJECT: Telecommuting in New York State Agencies

INTRODUCTION

Advances in technology in the workplace have led to the exploration of determining how best to utilize these advances to diminish air pollution and highway congestion created through commuting. Two recent New York State statutes, the New York State Clean Air Compliance Act of 1993 and the State Telecommuting Act of 1993, identify "telecommuting" as one of a number of alternative methods for achieving a reduction in the number of single-occupant vehicles traveling to the worksite. Studies have also shown that implementation of telecommuting programs has increased the ability of the employer to attract and retain valuable employees and improve productivity.

The Public Employees Federation (PEF) and the Governor's Office of Employee Relations (GOER) support and encourage this exploration of advanced technology in the workplace through telecommuting projects. Because of the work force and workplace ramifications, PEF and GOER believe that telecommuting programs should be developed in the agency labor/management process, within the context of the principles detailed in this Memorandum of Agreement.

The following is an Agreement reached between the State of New York Governor's Office of Employee Relations and the Public Employees Federation on telecommuting. Its purpose is to:

1. support development and implementation of telecommuting programs to address both environmental and worklife concerns; and,
2. establish bilateral guidelines designed to protect the rights of employees involved in telecommuting projects and offer managers the necessary flexibility to operate a successful telecommuting program.

TERMS OF AGREEMENT

I. Representation
   - *No permanent employee will be laid off solely and only as a direct result of their or their agency's participation in a telecommuting project.*
   - While an agency is free to determine if and where telecommuting is programmatically desirable, *the specifics related to employee involvement in the telecommuting program must be developed in the agency labor/ management forum.*
   - This agreement does not waive any rights PEF has under the Taylor Law or any applicable statutes to negotiate over terms and conditions of employment.

II. Administrative/Programmatic Issues
   - *Employee participation in a "telecommuting" project is voluntary.*
   - Telecommuting is defined as a formal, working arrangement of specified duration which designates a specific number of days per workweek or payroll period that employees will work from their home or other alternate site.
   - A range of tasks and functions might be considered appropriate for telecommuting (e.g., reading, report writing, etc.). Equipment, supply needs, and the responsibilities of both the employee and the employer should be specified within the parameters of the telecommuting program.
   - Objective, consistently applied employee selection criteria based

on operating needs and employee interests will be utilized. Generally, open application of volunteers in all suitable job titles should be allowed. Agencies are encouraged to establish a review process, beyond the supervisor level, for employees who volunteer and are denied. An employee not selected will be made aware of reasons for non-selection.

- *A procedure for the employee's withdrawal from the telecommuting program will be established by mutual agreement between PEF and the agency.* A recommended standard is a 30-day notice by either the employee or the agency unless there is a mutual agreement on a shorter period or if an emergency exists.
- Telecommuting assignments should be consistent with the employee's normal workday, job duties, and responsibilities, and should be clarified with the employee prior to commencement of the telecommuting assignment. The Public Employees Federation and the agency should jointly monitor the program.
- Appropriate transitional training for both the telecommuting employee and their supervisor should be provided to assist in the transition to partial off-site work. This training should include, but not be limited to, potential increased or reduced employee cost resulting from telecommuting. *The union must be offered an opportunity to review training curriculum and may attend during general presentations.*
- Agencies, to the greatest extent possible, should allow flexibility in the employees choice of which days to telecommute. *However, no more than four (4) days in any payroll period should be telecommuting days under normal circumstances.*

III. Conditions of Employment

- All current law, rule, regulation, and contract provisions remain in effect for those employees who volunteer to participate in a telecommuting project, except as they may be modified by written agreement between GOER and PEF.
- Telecommuting should not be considered as a substitute for child or elder care nor should an agency mandate or monitor such arrangements. Employees are expected to make such arrangements for child or elder care, so as not to adversely impact telecommuting workflow and productivity.
- *Reasons for and notice of access to the employee's home worksite must be discussed and developed in the labor/ management forum.* Participating employees must be made aware of such arrangements prior to beginning a telecommuting assignment.
- Injuries occurring while the employee is working at home, whether on State equipment or employee owned equipment, should be considered work-related injuries subject to concurrence by the Workers' Compensation Board and the State Insurance Fund.

IV. Fiscal Impact on Employees

- Employees are responsible for safeguarding State equipment. Employee's liability for State equipment damaged or stolen in/from the employee's home will be determined by investigations of the circumstances of the damage or theft. In each case, PEF will be notified of such investigations. *Employees will not incur any financial liability unless found to be negligent; however, no disciplinary action will result from such a finding.*
- All current overtime provisions remain applicable for employees

volunteering to telecommute. If allowed, a telecommuting employee can only work overtime that has been properly authorized by an appropriate agent of the appointing authority.

V. Grievability
- Any dispute arising from the interpretation of this Agreement may be submitted through Step Three of the State/PEF grievance process. However, those sections or phrases hereof that are set in italic print and underlined may proceed through Step Four of the grievance process in accordance with the provisions of Article 34 of the State/PEF Agreement.
- The term "developed," as used in this Memorandum of Agreement, is meant to be read in the context of the meet and confer labor/management process.

VI. Duration
- At the request of either party, this Agreement shall be subject to review and can be amended upon mutual agreement.

For the State:	**For PEF:**
John Currier	Roger E. Benson
Executive Deputy Director	President
Governor's Office of Employee Relations	Public Employees Federation
Date: February 13, 2001	Date: February 13, 2001

Appendix D

It is also important to remember that "learning-style instruments are best used as tools to create awareness that learners differ and as starting points for individual learners' continued investigation of themselves as learners. (Hiemstra and Sisco, 1990 p.240).

Teaching Strategies complement learning styles.

Eclectic learning styles require diverse teaching strategies. According to Russell Robinson*, Helping Adults Learn and Change,* "Purposeful learning occurs when individuals experience a problem or recognize a gap between where they are and where they want to be and then institute a self-inquiry in which the learner draws on whatever resources are available (teacher, literature, one's own or another's experience) to acquire the learning deemed necessary to close the gap. All education is self-education."

Trainers or teachers must provide the learners with a "cafeteria" of approaches or instructional techniques to the content. Gary Dickinson in *Introduction to Teaching Adults,* holds that "the instructional technique is a process used by the instructor to establish a relationship between the learner and the material to be learned. It is the way in which the instructor helps the learner to achieve a learning task." The following are some teaching strategies or instructional techniques.

I. Presentation type strategies are teaching techniques in which the major objective is to convey information.

- *Lecture*—A speech or lecture is a well-prepared oral presentation on a topic by a qualified person. This technique is effective if used by a talented speaker, and deadly if used by the inexperienced presenter.
- *Symposium*—a series of short presentations by two to five persons qualified to speak on related topics or on various phases of the same topic.
- *Demonstration*—A carefully prepared presentation that shows how to perform an act or use a procedure
- *Tutorials*—Viewed as something the adult education teacher utilizes to enhance the learner's ability to acquire the knowledge or skills desired through practice of audio, video or computer aided examples.
- *Interview*—A presentation in which an interviewer asks questions of one or possibly two resource persons before and audience.
- *Dialogue*—a discussion by two people competent in a subject area and capable of communicating effectively with each other.
- *Panel*—A small group of persons, usually about six, who sit around a table and discuss a topic in which they have special knowledge.

II. Action type strategies are teaching techniques in which the learners are physically as well as intellectually active during the learning process.

- *In-Basket*—A simulation strategy in which items that might appear in a particular job position's box are presented to participants, who must then make a decision on the proper strategy for responding to each item.
- *Case Study*—A description of a real and relevant situation that is complex enough to warrant analysis. A case must be real in the sense that the actual situation portrayed or the various real or imagined elements combined into a single study reflect the reality of human interaction. It can present an existing problem or a hypothetical problem.
- *Simulation*—The use of a process to model a process. The situation or problem is artificially created to allow the learner to discover the process of "solving" the created problem through trial and error.
- *Role Playing*—an educational strategy effective in helping participants understand the motivation behind their own behavior and that of others plus the emotions that can be aroused by such behavior. The unique feature of the role-playing lies in its ability to reflect the thinking-doing-feeling nature of the adult learner.

III. Interactive strategies are teaching techniques, which rely heavily on discussion and sharing among participants.

- *Discussions*—Small group discussion as a learning tool involves three basic

elements: (a) a group of people, (b) brought together for face-to-face oral communications, (c) for the purpose of sharing knowledge or making a decision.

- *Participation Training*—the purpose of participation training is to teach students how to learn more effectively from the discussion process. This is done by involving participants in a learning discussion and then having them reflect upon the process they experienced.
- *Fishbowl*—A participation training strategy, which involves group members in observations of one another. While some group members discuss a topic or perform a behavior related to the assigned task, other members observe them. The observers may be assigned to watch for certain types of behavior, to listen for specific type of content, or to observe certain group members. After the active group members have completed their activity, the observers will provide feedback to the group.
- *Expanding Group*—While most discussion groups remain constant in size, the expanding group strategy allows the size of the group to change during an activity period. Groups start with a small number and are increased in size with each round of the activity.
- *Buzz Groups*—Small clusters of learners are temporarily grouped together for a short period to address a topic presented by a facilitator simultaneously allowing several students to explore ideas with other learners and relate new ideas from the teacher and fellow students to prior experiences.
- *Brainstorming*—An interactive strategy used to generate ideas or to help determine the exact nature of content to be discussed. This approach encourages a group of people to think creatively about topic and to expand upon ideas of fellow group members.
- *Listening Teams*—Small groups (4-7) of learners who are assigned to listen for specific information during a presentation. The assignment of topics prior to the presentation provides the listener a structure for organizing the information presented. The division of labor among the group allows the listeners to specialize in one aspect of the presentation with the assurance that others are critically analyzing other aspects of the presentation. Through discussions, all points of discussion are shared.
- *Audience Reaction Team*—Similar to the listening team approach, however, members of an audience reaction team need not restrict their remarks to the end of the a presentation. They may interrupt the presenter at any point to seek clarification or to direct the trend of the presentation the needs or interests of the audience.
- *Colloquy*—A simple definition or the word *colloquy* is "to talk with." As a structure for a learning situation, it retains the basic notion of talking together but establishes a format that makes such conversing feasible among members of a large audience. Combining some of the features of the panel and the forum does this.

Seaman, Don F., and Fellenz, Robert A. *Effective Strategies for Teaching Adults:* New York: Macmillian Publishing Company, 1989

Bibliography

Accenture. *E-Government: Rhetoric vs. Reality – Closing the Gap.* (April 2001) http://www.accenture.com/xd/xd.asp?it=enWeb&xd=industries/government/gove_method.xml

Allen, Bridget. "Spy in the Sky: is Workplace Privacy on the Wane?" http://www.careerbuilder.com

Associated Press. *Leavitt Sued over E-mails. (*March 21, 2002)

Berberich, Jim. *Department of State Electronic Mail Opinion.* Florida Department of State Memorandum. http://dlis.dos.state.fl.us/barm/email.htm

Barr, Stephen. "This Much is for Sure: E-Government will be Different". *The Washington Post".* (June 7, 2000) http://www.washingtonpost.com

Bonnett, Thomas W. *Competing in the New Economy: Governance Strategies for the Digital Age*. USA: Xlibris Corporation, 2000.

Bureau of National Affairs *Government Employee Relations Report* (39:1918) 741-778.

Buswell Robinson, Cheryl. *"Surveillance and Nurses: The Use and Misuse of Electronic Monitoring".* Journal of Research for Nursing Practice. http://www.graduateresearch.com/buswell.htm (3/25/02)

Carroll, James. "Maryland: Using the Internet". *State Government News.* (Nov/Dec 2001). http://www.csg.org

Center for Digital Government. *Digital State 2000: How State Governments are using Digital Technology*. Progress and Freedom Foundation. http://www.pff.org/publications/digitalstate2001.pdf (7/01)

Center for Technology in Government. *And Justice for All: Designing Your Business Case for Integrating Justice Information.* Albany: University at Albany, SUNY. 2000 http://www.ctg.albany.edu

_____ *Four Realities of IT Innovation in Government.* Albany: University at Albany, SUNY. http://www.ctg.albany.edu

_____ *Insider's Guide to Using Information in Government*. Albany: University at Albany, SUNY. http://www.ctg.albany.edu/guides/usinginfo/

_____ *Making a Case for IT Investment*. Albany: University at Albany, SUNY. http://www.ctg.albany.edu/case_for_IT_investment.html (7/20/01)

_____ *Making Smart IT Choices – A Handbook*. Albany: University at Albany, SUNY. http://www.ctg.albany.edu/resources/smartit.pdf (7/20/01)

_____ *Some Assembly Required: Building a Digital Government for the 21st Century*. Albany: University of Albany, SUNY. http://www.ctg.albany.edu/research/workshop/dgfinalreport.pdf (11/16/01)

_____ *Technology Choices Matter*. Albany: University at Albany, SUNY. http://www.ctg.albany.edu/guides/usinginfo/Technology/technology.htm (10/15/01)

_____ *Tying a Sensible Knot: Best Practices in State-Local Information Systems*. Albany: University at Albany, SUNY. June 1997. http://www.ctg.albany.edu/resources/pdfrpwp/iis1.pdf (12/01)

Cohodas, Marilyn. "Peopleware and Productivity". *Governing* (February 1998). http://www.governing.com

Committee on Governmental Affairs, United States Senate. *Government at the Brink: Volume I: Urgent Federal Government Management Problems Facing the Bush Administration.* Senator Fred Thompson, Chair. (Washington DC) June 2001.

Cook, C.W, P.L Hunsaker & R.E. Coffey. *Management and Organizational Behavior* Massachussetts: Irwin McGraw-Hill, 1997.

Cook, Terry. "It's 10 O'Clock: Do you know where your data are?". http://www.techreview.com/articles/dec94/cook.htm (1/10/02)

Costantinou, Marianne. "Identity Politics". *The San Francisco Chronicle.* (March 3, 2002).

Deloitte Consulting. *E-Government's Next Generation: Transforming the Government Enterprise Through Customer Service.* http://www.dc.com/research (11/15/01)

Douglas, Merrill. "Building Blocks". *Government Technology.* (September 2001) http://www.govtech.net

Fountain, Jane E. *Building the Virtual State: Informational Technology and Institutional Change*. Washington DC: Brookings Institution Press, 2001.

FPMI Communications Inc. *Managing Cyberspace in the Workplace*. Huntsville, Alabama: FPMI Communications, Inc, 2000. http://www.fpmi.com

Gest, Ted. "The Cyber Rap Sheet". *Governing* (September 2001). http://www.governing.com/9privacy.htm (9/7/01)

Goldstein, J. "The Case for Learning Styles". *Training and Development* (September 1998) 36.

Gould, Martin. *Building an Inclusive E-Government Agenda for All Americans*. National Council on Disability. Unpublished paper (July 24, 2001).

_____ Switzer Seminar Series Remarks. Michigan State University. (10/4/01); http://www.ncd.gov/newsroom/testimony/switzer_10-4-01.html (11/13/01)

Greenwald, Judy. "Employers advised to balance privacy, risk management needs; E-monitoring poses challenges". *Crain Communications* (November 19, 2001)

Gurwitt, Rob. "Behind the Portal". *Governing* (August 2001) http://www.governing.com

Hafer-Satz, Meg. *Telecommuting: An Alternate Route to Work. A Step by Step Guide.* Washington State University. http://www.www.energy.wsu.edu/telework/tools.htm

Halstead, Aaron. *Cyberspace Privacy and the Workplace.* Presentation to the Wisconsin Professional Employees Council Annual Convention. (April 18, 2002).

Hanlong, Kevin. "State Required to Save E-mails, but no Oversight". *Nebraska Journal Star* (April 8, 2002) http://www.journalstar.com

Hartman, Virginia F. "Teaching and learning style preferences: Transitions through Technology". *VCAA Journal 9*. 18-30.

Heaphey, James. "Your Employer Can – And Will- Read Your Work E-mail". *Hampton Daily Press* (December 17, 2001) http://www.dailypress.com

Hecker, Daniel E. "Employment Impact of Electronic Business". *Monthly Labor Review* (May 2001)

Hiemstra, R., and Sisco, B. *Individualizing Instruction: Making Learning Personal, Empowering, and Successful.* San Francisco: Jossey-Bass, 1990

Hiller, Janine S. and France Belanger. *Privacy Strategies for Electronic Government.* PricwaterhouseCoopers Endowment for the Business of Government. (January 2001). http://www.endowment.pwcglobal.com/publications_grantdetails.asp?GID=60

Hollis, Mark. "Gov Bush vows battle on identity theft, computer crimes". *Ft. Lauderdale Sun Sentinel* (August 22, 2001) http://www.sun-sentinel.com

Holmes, Douglas. *E.Gov E.Business Strategies for Government*. Finland: Nicholas Brealey Publishing, 2001.

Horrigan, John and Lee Rainie. *Getting Serious Online*. Pew Internet and American Life Project. Washington DC. http://www.pewinternet.org (March 2002)

International City/County Management Association. *Is Your Local Government Plugged In? Highlights of the PTI/ICMA 2000 Electronic Government Survey.* http://www.icma.org (7/20/01)

International Telework Association and Council. "*Number of Teleworkers Increases by 17 Percent"*. News release. http://www.telecommute.org/twa/twa2001/newsrelease.htm (2/26/02)

Kolb, D.A. "Management and the Learning Process". *California Management Review 18*. (Spring 1976), 21-31.

Labor Occupational Health Program. *Collective Bargaining for Health and Safety*. Berkeley:
University of California, 2000. http://socrates.berkeley.edu/~lohp.

Larsen, Elena and Lee Rainie. *The Rise of the E-citizen: How People Use Government Agency's Websites*. Pew Internet and American Life Project. Washington DC. http://www.pewinternet.org (April, 2002)

Lassman, Kent. *The Digital State 2001.* The Progress and Freedom Foundation. http://www.pff.org (2/15/02)

Lefcourt, H.M. *Locus of Control: Current Trends in Theory and Research:* New Jersey: Lawrence Erlbaum Associates, 1982.
Lefler, Dion. "Is County E-mail a Public Record?"*The Wichita Eagle* (11/19/01) http://www.wichitaeagle.com

Legnini, Marilyn "Information Privacy – A Key Element in E-Government". Testimony Provided to OMB from the Department of the Interior (accessed February 2002)

Leigh, Andrew and Robert D. Atkinson. *Breaking Down Bureaucratic Barriers: The Next Phase of Digital Government.* Progressive Policy Institute Technology and New Economy Project (November 2001). http://www.ppionline.org/documents/digigov_Nov01.pdf (11/30/01)

Levin, Charles. "Cyber-dealing with government starts to click, but slowly". *The San Diego Union Tribune* (May 30, 2000)

LexisNexis News Search. "Risk of Computerized Documents" *The Lexington Herald Leader.* (January 10, 2002)

Leyden, Peter. "Dawn of a Second Renaissance". *Minneapolis Star Tribute* (June 25, 1995)
McDermott, Kevin. "State's Ability to Track Web Users is Issue". *St. Louis Post Dispatch* (January 4, 2002).

McDermott, Patrice. "Ignore e-records at your own risk". Federal Computer Week (April 17, 2000) http://www.fcw.com/fcw/articles/2000/0417/pol-erecs-04-17-00.asp

McDonald, Greg. "Technology Helps States Boost Efficiency" *Stateline.org* (2/21/02); http://www1.stateline.org/story.do?storyId=223705

McGregor, McCance "Virginia's Information Security; State Government is Online but is it Secure?" *The Richmond Times Dispatch (*March 25, 2002) http://www.timesdispatch.com

Microsoft Business. *Mobile Government: Empowering Citizens and Employees on Any Device.* http://www.microsoft.com/business/articles/gov/egov/decsolutions.asp

Moore, Cathleen and Mark Jones. "Comdex: E-learning touted as next killer app". Co*mputerworld* (November 15, 2001) http://www.computerworld.com/softwaretopics/software/story/0,10801,65737,00.html

National Association of Counties. *2000 E-Government Survey*. http://www.naco.org

National Association of State Chief Information Officers. *Creating Citizen-Centric Digital Government: A Guide for the States.* Ver 2001. http://www.nascio.org (7/15/01)

National Policy Institute. *Building a Digital Workforce: Part 1 Raising Technological Skills.* November 2001. http://www.npa1.org

_____*Building a Digital Workforce: Part 2 Reaching Out to Underserved Communities.* April 2002. http://www.npa1.org

Netherton, Nan. *"Washington Adopts Teleworking Guidelines, Flexible Work Hours for State Employees"* Government Employee Relations Report BNA. (10/16/01)

Noel, Jana. *Developing multicultural educators*: Addison Westley Longman, 1997

O'Looney, John. *The Future of Public Sector Internet Services for Citizen Participation and Service Delivery.* Carl Vinson Institute of Government: University of Georgia. http://www.cviog.uga.edu/govtech/SurveywriteupNSF.htm (10/2/01)

Patterson, Darby. "Leaders Emerge". *Government Technology (*January 2002). http://www.govtech.net

Perlman, Ellen. "Thinking Big" *Governing* (August 2001) http://www.governing.com

_____ "Playing Together". *Governing* (August 2001) http://www.governing.com

Peter D. Hart Research Associates Inc. *AFT Public Employees Membership Poll* (May/June 2002).

PRNewswire Association. "Datakey Smart Card Technology Deployed to Enhance Security and Authentication at a US State Government Agency". (April 10, 2002) http://www.prnewswire.com

Pritchard, Kenneth H. *Telework: Employment Issues.* Society for Human Resource Management. April 2001. http://www.shrm.org (11/20/01)

Sander, Todd. *E-Government Risks*. Presentation to US Conference of Mayors, December 8, 2000.

Schorr, Herbert and Salvatore Stolfo. *Towards the Digital Government of the 21st Century: A Report from the Workshop on Research and Development Opportunities in Federal Information Services.* http://www.isi.edu/nsf/final.html (7/21/01)

Seaman, Don F., and Fellenz, Robert A. *Effective Strategies for Teaching Adults*: New York: Macmillian Publishing Company, 1989.

State Capitals Newsletters: Employee Policy. *Wisconsin Assembly committee approves wide ranging privacy bill with guidelines on releasing personnel files.* (January 21, 2002) page 7.

The Council for Excellence in Government. *E-Government: The Next American Revolution.* September 2000. http://www.excelgov.org/egovpoll/index.htm (7/20/01)

Thibodeau, Patrick. "Congress Eyeing Uniform Driver's License Standards". *Computerworld*. (April 16, 2002)

Towns, Steve. "Pulling IT Together". *Government Technology* (January 2002). http://www.govtech.net

Ulstrup, Leif. “Managing Government’s Customer Relationships”. *Call Center CRM Solutions*. (June 2001)

U.S. Office of Personnel Management. *Telework Works: A Compendium of Success Stories.* Report of a Special Study. May 2001. http://www.telework.gov/status-summary.htm. (2/26/02)

Vega, Gina and Louis Brennan. *Managing Telecommuting in the Federal Government: An Interim Report.* PricewaterhouseCoopers Endowment for the Business of Government. June 2000. http://www.endowment.pwcglobal.com/publications_grantdetails.asp?GID=10

Verton, Dan. “IT Shops Balance Security, Privacy”. *Computerworld* (February 25, 2002). http://www.computerworld.com

West, Darrell M. *Assessing E-Government: The Internet, Democracy, and Service Delivery by State and Federal Governments.* Brown University. September 2000. http://www.brown.edu/Departments/Taubman_Center/polreports/egovtreport00.html (1/8/02)

Williams, Robert. “My Experience with Anthrax Infested Computers”. *Windows Advantage.* http://www.windowsadvantage.com/tech_edge/12-03-01_anthrax_computers.asp

World At Work. Newsline. *Telecommuting Recommended as a Way to Help Federal Employees Cope.* http://www.worldatwork.org/newslinenews/generic/html/newsline-Sept28-4.html (10/3/01)

Zelznak, Rick. *Telework in the State of Arizona.* In-house Presentation to Arizona Government Information Technology Agency. June 19, 2001. http://gita.state.az.us/downloads/telework/telework_files/outline.htm (2/21/02)