

enacted federal telecommunications legislation. Within the federal/state framework established for advancing universal service goals and objectives, schools and classrooms, health care providers, and libraries are to have access to both basic and advanced telecommunications services at discounted rates.

The priority reflected in the federal and state mandates is a clear recognition of the integrative, community-building potential of advanced telecommunications technologies. Education is at the top of the list--everybody's list--because an accessible, effective education system is the most powerful integrative force in the society, working to mitigate and to overcome societal tendencies toward economic and social polarization.

For this reason among others, technology in the schools must not be elevated in status or viewed as an end in itself. Fundamentally, the priority we give it is a sober recognition that technology applications which enhance the effectiveness of education --especially in opening up of new educational vistas for children and families having to overcome largely negative educational environments in their homes and communities-- also advances the integrative, community-building potential of a technologically advanced telecommunications system. In this respect, the Superintendent's new framework for the regionalization of technical services opens the door to full community participation in how technology in the schools is to advance the historic mission of our public school system.

The Task Force believes the mission of the ten CTAP regional councils needs to be buttressed by fostering within each region the development of community-based technology applications centers (CTACs) which have applied access to state-of-art telecommunications technologies. Structurally, within the framework of CTAP, the CTACs would:

In the same vein, we cannot expect parents who have little or no opportunity to understand, work with, or benefit from new information technologies to give priority to technology in the schools when their main problems may be keeping food on the table, their children healthy and the drug pushers at bay. What many teachers, administrators and families require in common are meaningful opportunities to understand and experience the capabilities of the technologies in addressing educational needs from their respective perspectives. For many families living on the edge of society, telecommunication technologies have educational values which transcend internalized applications that are school-focused to the exclusion of other community-based applications.

In short, teachers, administrators, parents and others with a community interest in education and related technology applications having high social and community value need to be provided with opportunities through the CTACs to (a) gain "hands-on" experience with the educational potential of advanced technology applications, (b) identify applications which they value and which will assist them in carrying out their respective educational responsibilities, and (c) participate in cooperative community-based efforts to aggregate effective demand to develop and deploy the advanced technologies, cutting across the established domains of community-based applications.

In a competitive environment for interactive, multi-media communications, the mission of the CTACs should be viewed as competitively neutral market-building for telecommunications products and services. The Task Force anticipates that competitive providers of products and services will be eager to provide access to technologies for "hands-on" experiences with applications determined to be valuable by participants in the programs and projects of the CTACs. Development of the Centers, their design and structure to meet

local needs, largely paralleling the organization of technical assistance, should be left in the hands of the ten Regional CTAP Councils and their Coordinating Councils.

While there are many reasons why it is important for the CTACs to reach out to involve community groups and institutions in the areas in which they serve, foremost is the role communities play in determining the importance and value of technological innovation in our educational system.

In a public education system, the value of technology is rooted in the way applications mesh with the education function in society to enhance learning, individual opportunities and the quality of community life. Standards for technology training and deployment are critical elements of a technical assistance program, but the ultimate value of technology is established in the process of its development and deployment by those who experience its usefulness.

In this respect, the utilization of technology to address educational objectives is a value-added process that demands a closer link of schools and community, as indicated throughout this report. Financial support for technology in the schools is not likely to exceed the value communities see in integrating advanced technology throughout the education process. One way, and perhaps the best way, to provide for the underpinning of financial support of technology application in education is to involve the community more effectively in determining how technology can enhance the quality of education, and to do so cost effectively.

The CTACs are intended to help build a broader base of community involvement in the development and deployment of technology applications in education. To the extent that they do so effectively, technology may also become a vehicle for bridging the gap in community support that has sanctioned the gross underfunding of our public education system.

4.4 Establish communication links between home/school

Implicit in the Task Force's recommendation to buttress the CTAP's restructuring of technology assistance by establishing functioning CTACs is the priority to be given to using advanced telecommunications technologies to develop effective communication links between home and school.

In many communities, especially in poverty-ridden areas of central cities, meaningful communication links do not exist. Further, declining incomes of wage-earner families over the past two decades, requiring more spouses to enter the labor market, is exacerbating home/school communication problems over a broad spectrum of the society. There is an urgent need to develop new ways of establishing communication linkages which are compatible with the changing structure of both employment and the State's work force.

Using the CTACs to address these communications issues will go a long way toward developing a broader understanding of the capacity to telecommunications technologies to address pressing problems which are education-related. It is this kind of focused, largely community-based development of technology applications, that will build broad-based support for deploying the advanced technologies throughout the education system to enhance the quality of education cost-effectively.

Even more fundamentally, a focus on home/school communications will bring into sharper perspective major equity issues limiting the educational use of the new technologies were compatibility of home and school learning environment is necessary. Environments that are lacking in the home and communities cannot be left to market forces to

be overcome. The CTACs, having a market-building function, are needed to help identify public policy options for meshing home and school learning environments that will garner broad community support.

Telecommunications and Technical Infrastructure Section: 4.7 Use CTAP for assistance in establishing requirements, for implementation, for training.

In the restructuring of technical assistance under CTAP, each of the regional centers will be in position to make recommendations affecting the development of telecommunication infrastructure and how it is to be utilized, including the adoption of training standards and the provision of training.

It is important to recognize that the development and deployment of infrastructure is to be driven by market forces under the competitive policies of the new federal telecommunications law enacted by Congress. While the mandate of the new national telecommunications law requiring providers to respond to requests of schools for services at reduced rates will be helpful, the new law does not give schools authority to require providers of telecommunications products and services to meet specific needs or standards that are not part of the services they are offering in the area. . What the CTAP Centers can and must do, utilizing the proposed CTACs where feasible, is to develop working relationships with providers that are applications-oriented so that competitors have a market incentive to make the infrastructural investments required by the schools. Competitors have to see the profitability down stream of investments in infrastructural development and deployment before they will make them.

The interfacing of CTAP regional centers with competitive providers is the only way in which technical infrastructure

requirements can be addressed effectively. Through their technical assistance programs and projects, the Centers should have a working knowledge of how school districts are progressing with technology applications. In much the same way in which major corporations establish interfacing links to providers in developing technical infrastructure requirements for utilization of advanced technologies, the CTAP Centers need to assume responsibility for providing the interfacing linkages to the schools. As in relationships with the "high end" of markets for telecommunications products and services, "learning-by-doing" is an important mode of operation.

Across the board, "learning-by-doing" should be a driving force behind using technology in education.

4.9 State should explore the possibility of favorable telecommunications rate structures for schools and non-profits (tech centers, community-based centers) as state level group discounts.

Note This issue takes on new importance as a result of the enactment of federal telecommunications legislation containing the so-called Snow-Rockefeller Amendment, which targets schools, health care, and libraries for reduced rates within the framework of rather complex provisions for advancing "universal service" in a competitive environment. This requires careful review before a position should be staked out by the Task Force.

The Snow/Rockefeller amendment is complex because identification of the services and funding of reduced rates is to go through a federal-state joint board process called for by the legislation to implement universal service requirements. This will involve both the FCC and the State CPUC. But I am sure that the Legislature will want to get involved.

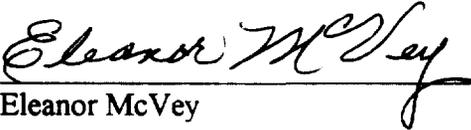
As I understand it, the reduced access rates apply to both basic and advanced services. The costs are to be internalized and

requirements can be addressed effectively. Through their technical assistance programs and projects, the Centers should have a working knowledge of how school districts are progressing with technology applications. In much the same way in which major corporations establish interfacing links to providers in developing technical infrastructure requirements for utilization of advanced technologies, the CTAP Centers need to assume responsibility for providing the interfacing linkages to the schools. As in relationships with the "high end" of markets for telecommunications products and services, "learning-by-doing" is an important mode of operation.

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Comments of the Alliance for Public Technology" were served this 12th day of April, 1996, by first class mail, postage prepaid, on the parties of the attached list


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