

DETAILED FINDINGS

Access to Technology at School

While some types of electronic technology are universally available to teachers today, others have yet to become standard equipment in public schools. Virtually all teachers have access to a photocopier (97%), but only three in ten (28%) are able to use a fax machine, a fixture in today's office environment, at their workplace.

In the classroom itself, half of teachers (52%) now have a computer, while four in ten (41%) have a television set. Fewer report having a cable TV hookup (34%) or a classroom VCR (24%). While not present in every classroom, these instructional resources are widely available to public school teachers. Roughly nine in ten teachers (88%) have access to computers at school; even higher proportions have access to televisions (95%) and VCRs (98%). More than six in ten (62%) say their school gets cable TV.

In most schools today, the technologies of the past have not been completely replaced by newer technologies. Despite the prevalence of photocopiers, as many as two in three teachers (65%) report that mimeograph or "ditto" machines are still being used at school.

Both the high-tech computer modem and the ordinary telephone are absent from most classrooms. Very few teachers have a computer modem in their classroom (4%), although four in ten (39%) say they can use a modem somewhere at the school site. Only 12% of teachers have a telephone in their classroom; hardly any teachers (1%) have a classroom telephone equipped with voice mail.

Based on their responses to a series of questions measuring access to 10 types of technology, most teachers work in the "medium-tech" environment described above: Computers are generally available at the school site, if not in the classroom; TVs and VCRs are widely available, while modems and fax machines are generally unavailable. (NOTE: For a description of the way the scale measuring access to technology was created, see Technical Appendix.) The remaining one-third of teachers divide almost equally between a high-tech (15%) and a low-tech school environment (18%).

Those who teach in high-tech schools typically have computers in their classrooms (82%) and access to fax machines (69%) and modems (94%) at the school site. Even in high-tech schools, however, telephones in the classroom are the exception, not the rule (33%). High-tech environments are most likely to be found at the senior high level, as well as in larger schools, suburban schools and in more affluent school districts.

Those who teach in low-tech schools generally have televisions (76%) and VCRs (97%) at their disposal, but are highly unlikely to have a computer in the classroom (9%), or access to a fax machines (8%) or modem (6%). Only about half of these technologically disadvantaged teachers (51%) are able to use a computer at any location on the school site. As expected, low-tech environments are more prevalent in lower income school districts. Low-tech schools are more often found in large cities than in small town and rural communities.

Schools unable to provide adequate technology for classroom instruction may be failing to take advantage of skills teachers have already acquired on their own. More than half of regular classroom teachers (54%) have a home computer. Teachers in low-tech school environments are almost as likely to have a personal computer at home as teachers in more technologically sophisticated schools.

STATEMENT FOR THE RECORD

on behalf of

THE NATIONAL SCHOOL BOARDS ASSOCIATION

on

S. 1822
TELECOMMUNICATIONS IMPROVEMENTS

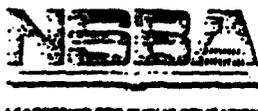
to the

Senate Committee on Commerce, Science and Transportation
Subcommittee on Communications
253 Russell Senate Office Building
Washington, D.C.

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I. INTRODUCTION

The National School Boards Association speaks on behalf of public education nationwide and represents 95,000 school board members who endeavor daily to provide an excellent public education to every child in the country. School board members are the elected and appointed officials responsible for ensuring that our nation's public school children are given the best opportunity to succeed in an increasingly complex world. NSBA and school board members recognize that an integral part of providing that opportunity lies with the effective use of technology in the classroom.

We are facing a watershed moment in our history that stands to have an impact on how we function as a society, how we live, how we exchange ideas, and importantly, how we learn. The "information superhighway" promises to be an invaluable resource for our nation's school children. However, in order for the superhighway to work for schools, the system must be focused educationally, all classrooms must be connected, and schools must have total and affordable access.

II. PRIORITY ONE: CONNECTING CLASSROOMS TO THE SUPERHIGHWAY

How do we bring the education information superhighway into the lives of every school child? The Clinton Administration is proposing that every classroom be provided with two-way voice, data and video communication by the year 2000.

NSBA supports that goal and believes that it must be a key feature of any legislative initiative. Clearly, for this critical goal to be realized decisive legislative action must take place.

NSBA asks that Congress seize this moment to establish a concrete framework in policy. The process of bringing the information superhighway to every classroom will require ongoing public and private partnerships and funding sources that can only be developed by congressional action. This process should begin immediately, including assurances that traditionally underserved areas, such as rural and poor school districts, are made a high priority.

Furthermore, while the broadest vision of the information superhighway is one of infinite lanes and "unlimited" capacity, it is clear that this is likely to be the adult phase of this process. In its infancy, however, capacity and access will be more limited. With education as a priority in superhighway development, a significant portion of capacity must be reserved for public and educational use. Highly

affordable access to that "public right-of-way" must be guaranteed to educational institutions.

Also important to schools will be the relative interconnectability of the networks. Many states, localities, and school districts have already launched their information highways, making significant investments in particular systems or technologies. It is imperative that those divergent delivery systems be interconnectable and that educators and students have easy access to all networks. The goal of interconnectability should be achieved with no one technology arbitrarily dominating the superhighway because of legislative or regulatory action. Rather, states should work with localities and school districts to choose the technology that best serves their needs.

III. MAKING THE SUPERHIGHWAY AFFORDABLE FOR SCHOOLS

Affordability will be critical to the success of the education information superhighway. America's schools are not Fortune 500 companies. They operate on inflexible budgets that do not allow for major investment or pricing policies to cover innovation. To ensure affordability, Congress should look to those who stand to profit from the superhighway. Local and long-distance telephone companies, the cable and satellite industries, and any other corporations providing information technology must be required to provide the complete connection of all classrooms to

the superhighway without cost to schools. As these industries vie for legislative and regulatory relief from current constraints on competition, the gratis connection of the nation's classrooms must be part of the industry's entry fee to this public market. With the privilege of being allowed to offer these enormously profitable services comes a public responsibility to the education of our next generation.

Furthermore, to ensure that schools will be able to fully utilize the superhighway on an ongoing basis, the lowest preferential rates must be offered to educational institutions. These rates need to be predictable and unrelated to usage time in order to accommodate the typical budget process used by schools. Affordable access also must be made available educational institutions that are creating programs for use among schools or other educational institutions.

Finally, with the explosion of information that will soon reach the classroom door, assurances must be made that data placed on the highway for educational purposes rests in the public domain and other information is subject to fair use, the first-sale doctrine and other user protections found in copyright law. Educational information providers should not be able to restrict access by charging royalties or fees to school districts that use and disseminate information for strictly educational purposes. Raising funds from schools with copyright fees and royalties runs counter to the very spirit of an educational information superhighway.

IV. FOSTERING WISE-USE OF THE SUPERHIGHWAY

The potential horror-story of the information superhighway is the "500 channels and nothing on" scenario. The superhighway will be of little use to school children and teachers unless a broad variety of information and educational resources are available. Those resources should come from diverse public and private sources and, with an interactive voice, data and video network, from students and teachers themselves.

In addition, research and development of high-quality educational software and programming will be critical to creating an education superhighway. Financial incentives must be made available to software developers and other producers as part of this legislation to facilitate the development of educational applications and programming.

Teacher training also will be invaluable to the superhighway's success. It is appropriate that funding be provided to ensure that our teachers, administrators, and school board members are fully versed both in the new technologies and in teaching strategies that incorporate them. Without this ongoing training, our investment in communications technology will never reach its potential to provide effective, expansive, and creative educational opportunities.

V. CONCLUSION

As Congress crafts legislation that will both launch and govern the information superhighway for years to come, education must be a central concern that is carefully examined and articulated in the legislation. Lawmakers have an historic opportunity to ensure that all of our nation's school children have access to the information superhighway – as both creators and receivers of the bounty that will be available. The National School Boards Association looks forward to working with the members of the Senate Commerce, Science and Transportation Committee on the development of this critical legislation.

CERTIFICATE OF SERVICE

I certify that the "REPLY COMMENTS OF THE AMERICAN LIBRARY ASSOCIATION, THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS, THE NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, NATIONAL EDUCATION ASSOCIATION, AND NATIONAL SCHOOL BOARDS ASSOCIATION" were served by first-class mail this 29th day of June, 1994 to each addressee on the attached list.



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