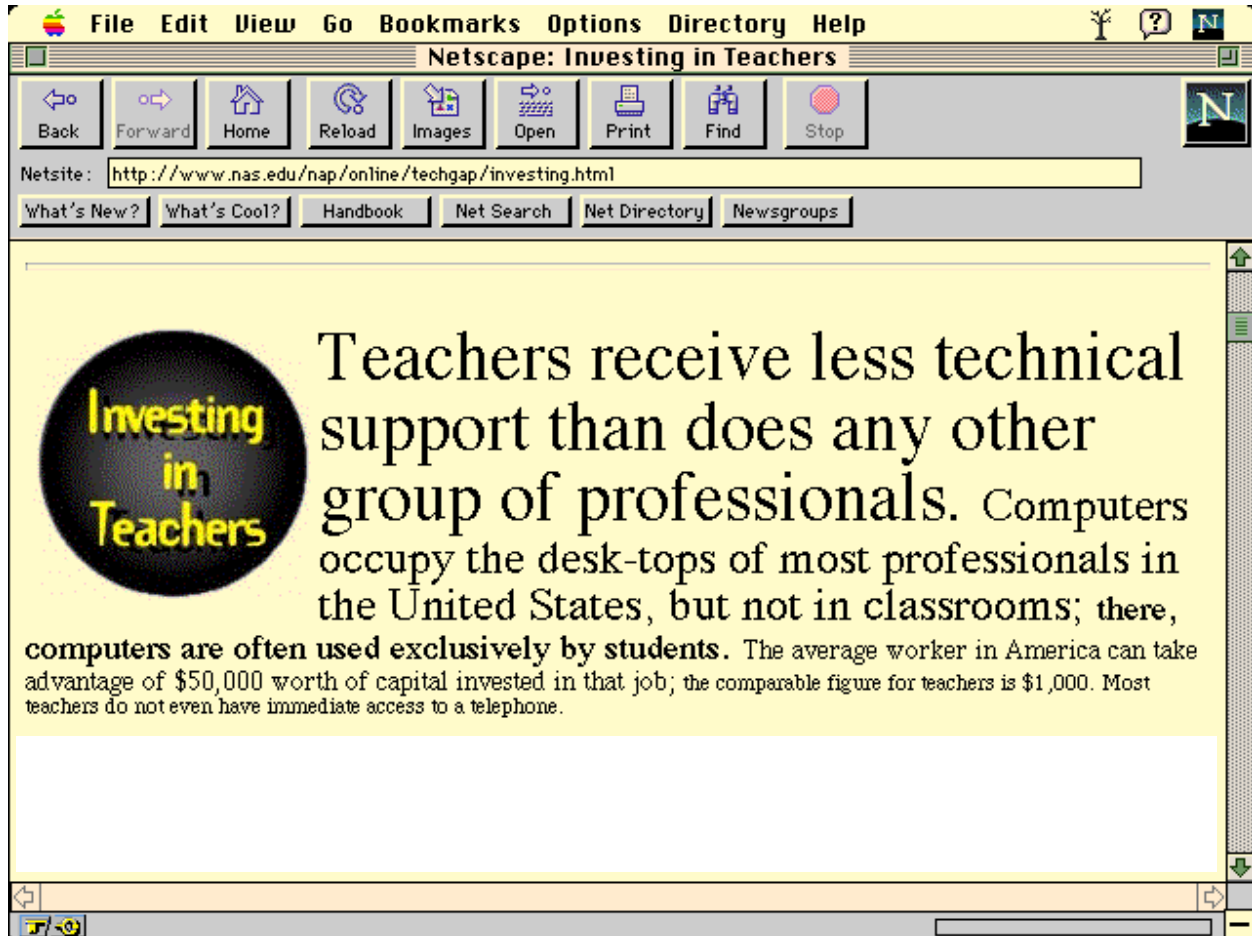


# **INTRODUCTION**



# INTRODUCTION



This opening paragraph of the chapter “Investing in Teachers” is from the World Wide Web report *Reinventing Schools: The Technology is Now!*, electronically published by the National Academy of Sciences (NAS). The publication (a ‘must read’) can be accessed on the WEB at:

<http://www.nas.edu/nap/online/techgap/welcome.html>

The WEB address of this particular chapter of the report is displayed in the Netsite field near the top of the figure. The opening paragraph is, if not alarming, certainly cause for concern.

Studies continue to indicate that educational technology has not yet lived up to its promise and has not yet fulfilled its potential in many school districts. One of the primary reasons for technology’s shortcomings is **insufficient technical support** within school districts. In reference to teachers, the NAS report states: “...as true professionals, they deserve the technological

## The Missing Element: Technical Support in Texas Schools Districts

support that professionals need to do their jobs.” A comparative example emphasizes the point: At one facility of a commercial airline company there are 15,000 computers. To provide software support for the users there is a staff of 50. That’s one software support person for every 300 machines. At one school district with over 50,000 students there are 10,000 computers. There is a staff of 6 to provide software support for the users. That’s one support person for every 1667 machines. Consider further that one of the support personnel at the airline company indicated that the support staff of 50 was insufficient.

According to the latest Office of Technology Assessment (OTA) publication, Teachers and Technology: Making the Connection (1995), some states and organizations that grant technology funds are requiring that schools seeking technology funding apportion 30%-40% of the budget for technical services, which includes training, maintenance, and user support. Respondents in a survey conducted on the Internet by D. Verne Morland (D. V. Morland & Associates, Educational Technology Consulting, Kettering, Ohio; 513/262-5345; ab156@dayton.wright.edu) indicated that 41% of the technology budget should be used for services. The respondents in that survey also indicated that, in reality, schools/districts are using only 19% of the budget for technical services. One implication here is that the amount budgeted for user support and training should be doubled. Quoting from the NAS report: “In the long run, for technology to succeed, as much time and money must be invested in teachers as is invested in the actual hardware and software.”

A study conducted by Henry J. Becker at the University of California, Irvine, found that **teachers are four times more likely to be exemplary computer users when there is a full-time technical support person at the campus.** “The essential link for empowering all teachers with the ability to make effective use of technology is someone in every school dedicated, full-time, to technology.” (Pearson, 1995) Similar statements are found in the OTA report: “...teachers consistently report that having a person at the school site who can help them makes all the difference in the likelihood of their going further with technology - someone who is knowledgeable about technology and can help them with questions or problems....The inevitable technical and logistical problems that arise with technology are one reason many teachers feel the need for onsite assistance.”

Many school districts have a telephone “hotline” for teachers to call with technical problems, but, if you have ever called technical support at any company for help with a computer application, then you know that it can be frustrating and of limited assistance. Besides that, most teachers don’t have a phone in their classroom, so they can’t be in front of their misbehaving computer to try various suggested fixes that the hotline specialist might offer.

When school districts do not furnish technical support to their teachers, class instruction suffers. “Even experienced technology-using teachers can find themselves preoccupied with trouble-shooting hardware and software problems, rather than assisting students in their learning activities.” (OTA, 1995) [In fact, this is probably more true of teachers with greater technology experience; teachers with less experience likely will “give up” quicker.] The OTA report continues: “As do most individuals dealing with new technologies, teachers also need informal

assistance - often with a kind of immediacy that does not lend itself to afterschool telephone calls. This kind of assistance might include help setting up equipment or trouble-shooting hardware and software problems in a classroom - the more 'nuts and bolts' kind of technical support." Thus, there is a vital need for a campus technologist to provide timely solutions to technology problems in order to minimize interruptions in the learning process.

Unfortunately, OTA data indicates that only 6% of elementary schools and 3% of secondary schools had a full-time technical support person (no teaching duties) in 1989, and the percentages were not significantly different in 1992!

School districts often use "insufficient funding" as the rationale for not having more technical support personnel on staff. But, a few Texas school districts have observed that, by adding technical staff members who provide increased teacher training and user support, they have maximized effective use of the technology. These districts have re-examined budgets, adjusted funding priorities, and hired a full-time technical support person for nearly every campus within the district. These visionary school districts have shown that, by careful financial planning and by setting proper budgetary priorities, the goal of more effective use of technology can be attained. Profiles highlighting some of these progressive school districts are included in a later section.

