

# "The Internet, Technology and Teachers"

## Executive Summary

### May 2001

Since NetDay launched efforts to bring the Internet and technology to K-12 schools in March 1996, there has been significant progress in connectivity levels in schools and classrooms. According to our survey results, nearly all teachers say they have access to computers and the Internet in their schools today and almost as many report having access in their classrooms. However, as our study reveals, access is not being translated yet into actual usage for achieving educational goals.

In this survey, NetDay identifies how teachers are utilizing their Internet connections and computers and their comfort levels with integrating these tools into lessons and classroom activity. The survey also probes teachers' beliefs on the role of technology in their own professional development, lesson planning and instruction.

With NetDay's 2001 mission to connect every child to a brighter future by helping educators meet educational goals through the effective use of technology, the information provided by this survey will be used to develop specific programs that address today's challenges in education technology. NetDay is sharing this information with organizations, associations, government agencies and companies interested in education so that collectively we can better address the challenges facing educators today in their use of technology to achieve education results.

#### About the Survey

The survey was commissioned by NetDay and conducted by Lake Snell Perry & Associates in conjunction with the Tarrance Group. The survey reached 600 public and private school teachers nationwide by telephone between January and February 2001. Professionally trained and supervised interviewers conducted all interviews. Telephone numbers were drawn randomly from a list of education professionals. The sample was geographically stratified based on the proportion of teachers in each state and the margin of error is +/- 4 percent.

#### Key Findings

##### ***Finding #1***

*Teachers' attitudes and viewpoints on the role of technology and the Internet in education have dramatically changed in the past couple of years. Teachers today value technology and are comfortable with the Internet and computers.*

Over nine out of ten (94%) teachers said they are comfortable using computers and 87% of them are comfortable using the Internet. Geographically, urban teachers are more comfortable using computers - 65% are very comfortable compared to 54% of suburban and 54% of rural teachers. The majority of teachers believe that the Internet has become important to teaching in the past two years - 48% feel that it has become very important.

Three-fourths of teachers agree that the Internet is a tool to use to conduct research for standards-based instruction and 84% of the teachers say it improves the quality of education - nearly half say it has improved the quality a lot. Seventy-seven (77%) of teachers believe that their peers without Internet access are at a disadvantage and an overwhelming 64% disagree that the Internet takes away from other important educational skills.

Despite the high comfort levels and strong positive attitudes, 67% of the teachers acknowledge that the Internet is not well integrated into their classroom.

## **Finding #2**

*Teachers primarily use the Internet as a research tool - a big electronic encyclopedia - and other uses of the Internet (communications, professional development, and classroom projects) are not fully realized yet by teachers. At this point, the potential of technology and the Internet as a revolutionizing educational tool has not been effectively leveraged for educational results.*

Over half of teachers (55%) turn to the Internet as a research or information gathering tool for lessons and 58% of teachers said that the Internet has helped them reach their research and resource goals. Teachers who use the Internet for class projects are the most likely sub-group to say that the Internet has become extremely important to teaching in the past two years.

Smaller percentages of teachers are using the Internet for communications with other teachers (42%) or helping their students with projects and questions (41%). Within the sub-group of teachers using the Internet to help their students with projects, a majority (56%) state that they frequently use the Internet for class projects and nearly a third say it has become extremely important to teaching. One-quarter of these teachers teach in private and parochial schools.

Secondary uses of the Internet include professional development, planning activities and monitoring student work. A small percentage of teachers, 20%, said they use the Internet to communicate with parents. Teachers are least likely to use the Internet for chat rooms, on-line classes or posting lesson plans online.

Over two-thirds (67%) of teachers said that the Internet is a good resource and moderately helpful, but hasn't changed the way they teach. The Internet has had a greater impact on the teaching of private and parochial school teachers - 40% said it has impacted their teaching compared to 27% of public school teachers.

A majority of teachers are reluctant to include the Internet when building new or updating current lesson plans or in classroom activities. Despite comfort levels, 57% of teachers do not include the Internet in new lessons or in classroom projects and only 38% of teachers update existing lessons plans with materials found online. According to those teachers we surveyed, over half (52%) of private/parochial schoolteachers integrated the Internet into classroom activities and lesson plans compared to 40% of public school counterparts. Amongst public school teachers, the middle school teacher sub-group is the most likely group to use the Internet within instruction. Overall though, only 1/3 of teachers - public and private - are integrating the Internet successfully into their classroom instruction.

## **Finding #3**

Teachers face significant obstacles to using the Internet as an integrated education tool and resource. While time is the largest obstacle, an underlying issue may be the lack of sophisticated school leadership on how to best support teachers' efforts when using technology.

Although nearly all teachers report having access to the Internet, the vast majority of teachers (78%) cite lack of time as their greatest barrier to using the Internet within the classroom. Quantitatively, 60% of teachers spend less than 30 minutes a day online. Less than half of teachers surveyed, cite lack of equipment, speed of access and lack of technical support as secondary barriers to going online. In the third tier set of obstacles, teachers cite lack of knowledge about how to use the web effectively, inappropriate materials on the web, lack of knowledge about good access, lack of good lessons that use technology, and too much information as reasons for not logging on. When questions arise, teachers are most likely to turn to colleagues and peers to find answers. Only three percent said they turn to their school site principal for support or help with questions.

Thirty-two percent of teachers cite lack of leadership from principals or administrators as a hindrance to incorporating the Internet more in education. This suggests the need for principals to receive more support on how to best utilize technology to support education.

Although teachers value the Internet and use it to reach their personal research goals, nearly three-fourths (73%) said they do not feel pressure to integrate the Internet into their classrooms. Teachers who feel pressure tend to use the Internet in the classroom have been doing so for less than 1 year, teach in private or parochial schools or are older men.

Additionally, among teachers who agree they are being encouraged to use the Internet, 28% said the pressure came from district administrators, 26% said colleagues and peers and 14% listed students, but only 10% cited principals as the pressure points. Only 2% indicated feeling pressure from parents.

## Conclusions

Teachers recognize the value of technology within education and are comfortable using the Internet and computers. They turn to computers and the Internet to when conducting research and see the Internet primarily as a reference tool. However, they have not fully exploited the potential of these new technologies to improve their own productivity, to personalize learning or to impact student achievement. One challenge educators face today is how to integrate the Internet and technology in their classroom activities, lesson planning, and daily activities, and move way from only using it as a reference guide or research tool.

Teachers today need focused professional development on how to integrate technology into their instructional plans and how to use technology to improve assessment and accountability within their own classroom. This type of professional development is different. It is a skill-based technology training, something that has been pervasive in school and districts, and is an ongoing effort that involves modeling and mentoring within a supportive and forward-thinking school community. These findings suggest education technology stakeholders need to share methods on how to integrate technology, lessons learned from individual experiences, and collaborate on gathering results on the impact of technology on educational achievement.

Time was the most common barrier listed by teachers as to why they are not utilizing the Internet and technology more frequently. These findings suggest that if teachers have more time to spend online, they may be better positioned to integrate materials found online into lesson plans and to incorporate the Internet into classroom activities. Furthermore, additional time online may allow teachers to leverage technology to assist with other daily duties, including organization, communication with students and parents, and professional development.

## NetDay Approaches

Many of the findings suggest that an underlying issue may be the lack of sophisticated school site leadership on how best to support teachers in their quest to improve education with technology resources. NetDay is addressing this issue with a new national and state-level, public service awareness campaign that will begin in the fall of 2001.

The NetDay Leadership Campaign for Education Technology will create a new national awareness around the need for effective leadership in our K-12 schools for education technology. Through the state-level Leadership Summits on Education Technology, leaders from education, community, government, and business will create a new knowledge base of how to develop, nurture and promote effective models of leadership. By sharing information from the Summits and real stories from successful leaders through [www.NetDay.org](http://www.NetDay.org) and [www.NetDayCompass.org](http://www.NetDayCompass.org) collectively, we will develop a new paradigm for technology decision-making and teacher support in our K-12 schools.

The survey also highlights that teachers are still not realizing the full potential of the Internet or technology and a majority of them are not integrating these tools into the learning environment.

The NetDay Community Initiatives programs are working to directly facilitate the use of technology in the classroom and school. These lessons learned and methods are shared through [www.NetDayCompass.org](http://www.NetDayCompass.org) with the education community at large.

The NetDay Community Initiatives programs are creating models of excellence within five (5) Empowerment Zone communities on how best to use technology to achieve educational results. This effort is the result of several public-private partnerships that leverage local resources to build sustainable capacity within the schools and the community. Lessons learned and "real stories" from these model schools are shared via [www.NetDayCompass.org](http://www.NetDayCompass.org) and through the NetDay Leadership Summits, teachers are sharing their stories and building up their own learning networks. The focus in the NetDay Community Initiatives is on leveraging technology resources at the school site so that every child benefits from a high quality education and an opportunity to participate in the information-intensive economy. More information about the specific programs within the NetDay Community Initiatives can be found at [www.NetDay.org](http://www.NetDay.org).

NetDay is a national 501(c) 3, education technology organization headquartered in Irvine, CA. Our mission is to connect every child to a brighter future by helping educators meet educational goals through the effective use of technology. More information about NetDay programs can be found at [www.netday.org](http://www.netday.org) or at [www.netdaycompass.org](http://www.netdaycompass.org).