

NORTH SCHUYLKILL SCHOOL DISTRICT
REPORT ON NETDAY'S 2006 SPEAK UP EVENT

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NS Technology Survey



STUDENT AND TEACHER VIEWS ON TECHNOLOGY & EDUCATION

PROJECT TOMORROW - NETDAY

NETDAY'S 2006 SPEAK UP EVENT

NetDay is a national nonprofit with a ten year legacy of building local school and community capacity around technology use in education. In the fall of 2005, NetDay merged with Project Tomorrow, a regional nonprofit in Orange County, California, with a successful track record of adopting and promoting innovative approaches to science education. As a new organization, Project Tomorrow-NetDay celebrates its new focus: promoting science, math, and technology as key levers for developing 21st century skills.

Speak Up Events are annual online surveys that provide students and teachers a voice into national and local policies that impact education. In 2003, 2004, and 2005 NetDay hosted surveys for K-12 students and teachers with a special focus on their views of technology use for learning. The objectives for the 2005 survey were to continue our legacy of tracking technology use by students and teachers and to begin to explore opportunities to promote science learning.

By participating in the survey, students and teachers are contributing to local policy – each participating school and district has free online access to their own data – and to the national dialog about 21st century learning.

The Speak Up surveys are developed with input from a Student Advisory Council representing students from all across the United States, teacher and administrator advisors, as well as our network of educational non-profit partners and friends around the nation. With an eye towards trends and key issues, the surveys aim to collect stakeholders' ideas and suggestions for education decisions that impact their futures.

All schools and districts were invited to participate in the survey, receiving invitations through website postings from Project Tomorrow-NetDay and their network of over 75 Speak Up Partners and Speak Up sponsors: BellSouth Foundation and Dell. A single school contact registered each school for participation and students and teachers accessed the surveys online from school or from home. The surveys were open between October and December 2006.

The surveys included four grade-appropriate online surveys for K-2, 3-5, 6-8, 9-12, and a teacher survey. Each survey included 20-40 multiple choice questions and 2 open-ended responses. The survey took approximately 20 minutes to complete.

This report summarizes North Schuylkill's 2006 data. The national report, garnered from 148,812 student surveys and 14,783 teacher surveys, is scheduled to be released in March 2007. It will be shared with decision-makers in the United States Department of Education, members of Congress, and federal, state, and local policy-making groups to inform their work. North Schuylkill is already using its 2006 data for school and district technology plans, to plan new professional development strategies, and to develop ways to integrate technology into the classroom.

NORTH SCHUYLKILL SPEAK UP PARTICIPATION: STUDENT AND TEACHER PROFILES

Geography: All 50 states, DC, Puerto Rico, Guam, and Department of Defense schools world wide

Total Participation: 148,812 students, 14,783 teachers (through December 4, 2006). The national report will be released in March 2007. This was the most extensive technology survey ever undertaken by the North Schuylkill School District. 1,492 students participated. This is 71% of the student body, K-12.

NORTH SCHUYLKILL STUDENTS

Grade Distribution

- Ø K-2 263 students (18%)
- Ø 3-5 304 students (20%)
- Ø 6-8 460 students (31%)
- Ø 9-12 465 students (31%)

Gender Distribution:

- Ø Female 676 (45%)
- Ø Male 816 (55%)

NORTH SCHUYLKILL STAFF

Assignment

- Ø Grades K-2 25 (17%)
- Ø Grades 3-5 24 (17%)
- Ø Grades 6-8 20 (14%)
- Ø Grades 9-12 52 (36%)
- Ø District wide 23 (16%)

Student and Teacher Self –Rating

Overall students and teachers are most likely to rate themselves as average tech users. This is consistent with national results.

Thinking about other students (teachers) do you consider yourself...

	Teachers	Grade 9-12	Grade 6-8	Grade 3-5	Grade K-2
Advanced Tech User- more expert than most at school	22%	18%	17%	23%	26%
Average Tech User- the same as most at school	58%	76%	76%	60%	60%
Beginner- below the skills of most at school	19%	5%	5%	15%	13%

Home Computer Use

- § 102 students with a computer but no internet (6%) K-12
- § 92 students do not have a computer at home (6%) K-12
- § 91 students 6-12 report not having internet access at home (10%). Of these students, 42 report having a computer.
- § 412 students K-5 report having a computer with internet access (73%)
- § 387 students in grades 6-8 report having a computer with internet access (84%)
- § 796 students 6-12 report having a computer with internet access (86%)
- § 429 students 9-12 report having a computer with internet access (92%)
- § District-wide (K-12) 1208 students or 81% report having a computer with internet access.

What Kind of Computer Access Do You Have at Home?

	K-2	3-5	6-8	9-12	6-12
Computer with DSL, Cable or fast internet access (not wireless)			43% or 189	36% or 167	38%
A computer with DSL, Cable or fast internet access (wireless)			31% or 135	34% or 157	32%
A computer with dial up or slow internet access			14% or 63	18% or 85	16%
A computer with no internet access	12% or 32	10% or 28	5% or 22	4% or 20	5%
I do not use a computer at home	10% or 26	6% or 17	5% or 24	5% or 25	5%
I have a computer with internet access	76% or 191	83% or 221	n/a	n/a	

FINDINGS: PREPARING FOR THE FUTURE

North Schuylkill's students are concerned about their futures, in high school, in college, and in the workforce. There is one strong voice coming through from their survey responses: They believe that having technology skills will help them find success.

- § 85% of students in grades 6-12 believe technology skills are necessary for doing well in school.
- § 69% of students in grades 6-12 believe that technology skills are necessary for success in college.
- § 68% of students in grades 6-12 believe that technology skills are necessary for getting a job
- § 26% of students in grades 6-12 believe that technology skills are necessary for being a good citizen.
- § 44% of students in grades 6-12 believe that technology skills are necessary for being happy.

GOOD TECHNOLOGY SKILLS ARE NECESSARY FOR WHICH OF THE FOLLOWING?

	Grades 6-8	Grades 9-12	Teachers
Doing well in school	77	72	69
Finding a job	65	70	73
Success in college	71	66	76
Being well informed	50	54	64
Making money	51	49	30
Keeping in touch with family/friends	65	63	32
Being happy	43	45	15
Being a good citizen	24	27	16
None of the above	0	4	1

DO YOU THINK YOUR SCHOOL IS DOING A GOOD JOB PREPARING YOU TO COMPETE FOR JOBS AND CAREERS IN THE 21ST CENTURY.

	9-12	National 9-12	Teachers	National
Yes	33%	37%	40%	47%
No	27%	22%	9%	14%
Not Sure	21%	22%	42%	23%
No Opinion	17%	17%	7%	4%

17% of students in grades 6-8 identified “knowing how to use technology” as the skill being the most important for their future.

Students in grades 9-12 rank “knowing how to think critically” as the most important skills they need for their future (18%).

66% of the students in grades 6-8 believe that schools should teach them skills they need for future jobs 61% of the students in grades 9-12 believe that schools should teach them skills they need for future jobs.

Knowing how to think critically (23%), knowing how to solve problems (18%) and knowing how to be a good worker (18%) were the top three skills teachers believe are important for their students’ future.

North Schuylkill’s teachers rank the following as the top three skills essential for students to graduate with

- § Effective Communication Skills 72%
- § Experience solving complex problems and thinking through new ideas 65%
- § Ability to think creatively 60%

Effective communication skills and experience solving complex problems were also identified as the top skills nationwide, in the same order of importance.

FINDINGS: TECHNOLOGY DEVICES & INTERNET TOOLS

Our nation's students don't think they're doing anything special. They're going about their business using the tools available to them. The survey findings show students and teachers have become accustomed to using technology for research, for personal projects, for entertainment, and most-importantly, for communication. Students are indeed the trendsetters leaving even the more tech-savvy teachers to catch up with their innovative uses of technology.

Top technology products shared by both teachers and students include the desktop computer, the cell phone, and the DVD or CD burner. Game playing is still very popular with the video game player ranked second for students in each grade level, K-5. Cell phone use replaces game playing as the second most popular tech product for students in grades 6-12.

The Internet and communication tools frequently used both by teachers and by students include email, bookmarked websites, search engines, and research sites. Instant messaging has become the favorite online communication tool for students in grades 6-12. Personal websites, such as MySpace.com are maintained by 52% or 57% of North Schuylkill's students in grades 6-12.

Which of these technology products do you use on a weekly basis?

	K-2	3-5	6-8	9-12
Desktop computer	100%	79%	84%	89%
Cell phone	22%	51%	69%	84%
Video game player	63%	67%	68%	61%
Mp3 player or iPod	4%	34%	61%	62%
DVD or CD burner	2%	43%	51%	69%
Digital camera	11%	31%	51%	56%
Laptop	14%	30%	23%	26%
Scanner				
Hand held device PDA	n/a	29%	15%	16%

GRADES K-2

- § Students in grades K-2 are having fun with technology but clearly using it with all seriousness.
- § K-2 students reported using a desktop computer (100%, 263) , a cell phone (22%, 60), and a video game (63%, 168) in the past week.
- § 11% reported using a digital camera, 14% a laptop, 49% an electronic book like a Leap Pad and 2% a DVD or CD burner. (2%, 7)
- § 90% of K-2 students say they have a computer they can use at home.
- § 10% (18 students) of K-2 students have their own email accounts, primarily emailing their friends, parents, and other family members.

- § The home telephone is still their favorite communication tool (48%), but this is closely followed by the preferred mode of their older peers: the cell phone (43%).
- § Outside of school 96% of K-3 students use computers in their free time.
- § They play games (80%); visit favorite websites (67%); listen to music (33%); use software to draw pictures, make cards, or movies (24%); talk or email with friends or family (4%).

GRADES 3-5

- § Like their younger peers, students in grades 3-5 are using a wide range of technology devices.
- § Between 79% of students in this group responded that they had used a desktop computer, cell phone (51%), or video game player (67) in the past week.
- § North Schuylkill’s third to fifth graders also reported using these technology products: digital camera (31%); DVD or CD burner (43%); and MP3 player (like an iPod) (34%, compared to only 4%, K-2). The increased use of devices for specific purposes suggests both increased availability as well as increased sophistication of students younger than grade 6.
- § The most popular internet tool among this age group is using online game (78%).
- § Outside of School 94% of students in grades 3-5 say they use computers in their free time.
- § They play games just as much as their older peers (78%); visit favorite websites listen to music (42%); talk or email with friends or family (30%); and use software to draw pictures, make cards, or movies (36%).

GRADES 6-12

- § Over 72% of the students in grades 6-12 report using IM on a weekly basis.
- § 58% report using e-mail, primarily emailing their friends, parents, and family.
- § 51% of 9th-12th grades report using computers and the internet for playing. 64% of their younger counterparts in grades 6-8 use it for this purpose.
- § Top technology products for students in grades 6-12 are desktop computers, cell phones, DVD or CD burners, and a video game players. Students in this age group are using more kinds of technology, and they're using it more regularly.

What is your favorite tool for communicating? (Choose One)

	K-2	3-5	6-8	9-12
Instant Messaging	0%	12%	43%	41%
Cell Phone	43%	26%	23%	30%
Home Telephone	48%	37%	18%	12%
Cell phone for text messaging	0%	7%	8%	10%
e-mail	8%	9%	3%	1%
Letter writing	0%	6%	1%	1%

Cell phones, email, and IM are not the only tools students are using to communicate. They are sharing, joining, and meeting up on personal websites, such as MySpace. 57% of students in grades 6-12 report updating their personal websites on a regular basis.

WHICH OF THESE INTERNET TOOLS DO YOU USE ON A WEEKLY BASIS?

	Grades 9-12	Grades 6-8
IM	79% 369 students	64% 297
Search Engine	64% 302	38% 176
E-mail	63% 295	53% 244
Personal networking site like MySpace or Xanga	63% 293	50% 232
Specific websites already bookmarked	54% 252	45% 207
Online games	51% 240	62% 287
Podcasts or iTunes	33% 155	36% 169
Web blogs	22% 104	19% 90
News websites	20% 94	11% 51
Discussion boards or chatrooms	19% 89	19% 90

In Your Free Time How Do You Use Technology?

	9-12	6-8
Created a personal webpage, like MySpace	55%	45%
Made new friends	52%	36%
Played games with other people in other locations	44%	38%
Relied to a blog	37%	17%
Created a blog	33%	15%
Worked on group projects for school	26%	22%
Shared music I created online	19%	13%
Posted a video online	18%	8%
Created a podcast	7%	3%

FINDINGS: ONLINE COMMUNICATION AND SAFETY

Access to inappropriate websites (68%), privacy and security (63%) and safety from online predators (63%) were the three top concerns North Schuylkill’s teachers share about technology and students. This is a legitimate given the increasing student use of online communication tools.

Do you communicate with students using online tools?

	6-8	9-12	3-5
Yes, students from my school	60% 280 students	65% 306	43% 132
Yes, students in my community who don't go to my school	28% 132	44% 208	16% 49
Yes, students in other parts of the country	13% 61	25% 120	6% 19

432 students in grades 6-8 report having online friends they communicate with on a monthly basis. 457 students in grades 9-12 report the same. Students reporting to have online friends were asked...

How many online friends do you have you never met face-to-face?

	6-8	9-12
None	45%	29%
1-10	19%	22%
10-20	13%	16%
20-50	10%	12%
More than 50	10%	19%

30% of students in grades 3-5 report communicating online with someone they never met face-to-face.

Who Talks to you about online safety?

	K-2	3-5	6-8	9-12
Teachers	100% 263	54%	65%	43%
Parents	39% 103	56%	65%	46
Friends	3% 10	24%	21%	14%
Nobody	0	9%	8%	29%

Which of these are problems for kids at your school?

	6-8	9-12
Kids finding websites with bad content	35%	34
Online bullying (cyberbullying)	30%	27
Plagiarism and cheating	26%	38
Too much advertising and spam	23%	32
Not enough access for all students to technology	23%	36
Safety from online predators	21%	20
Protection of privacy	19%	29
Too much time on computers	16%	13
Not enough girls using technology	5%	10
None of the above	20%	16

FINDINGS: TECHNOLOGY FOR LEARNING AND TEACHING

Students are using technology tools for research, for completing school projects, and to practice for tests or hone basic computer skills. Teachers are using technology tools for lesson preparation, record keeping, communication, and research. While data showcases students using technology naturally for their needs; their biggest frustrations center around not being able to use the tools they need, how they want, when they want, and where they want.

What are the main obstacles you face in using technology at your school?

	Teachers	9-12	6-8	3-5
Computers don't always work	62%. <i>This compares with 36% nationally</i>	47% <i>41% national</i>	41%	42% <i>Top response for this age group</i>
Lack of time in school day	59% <i>50% national</i>	41%	29%	
Not enough computers	49% <i>39% national</i>	26%	14%	
Computers not always available or convenient to use	30%	52% <i>37% national</i>	32%	

The top “obstacles” reported by students in grades 9-12 were rules against using my cell phone, e-mail or IM (61%)

48% of the students in grades 6-8 responded “the teachers control when they use computers,” followed by “rules against using cell phones, e-mail and IM.”

Students in grades 6-12 report they want to be able to use their cell phones at school. Student responses show that the majority think that cell phones should be allowed at school in order to connect with parents about activities and rides home after school and in the event of an emergency. Only about 1% of North Schuylkill’s students, grades 6-12, stated cell phones should not be allowed in schools.

Where students were given a choice of ten things they would change at the school if they were principal, allowing students to use cell phones, IM, and email at school is the most popular answer among 6th to 12th grade students.

Highlights of Teacher Survey Results

79% of North Schuylkill’s staff think student performance and achievement has been enhanced either very much or somewhat by their use of technology for schoolwork and homework.

52% of the teachers reported they have seen their student’s engagement in learning enhanced by technology.

The primary use of technology used by teachers in their classroom (21%) is for online research. The second most popular use (18%) is using drills and other practice software.

The top teaching resource from the internet used by teachers in the last 12 months has been a lesson plan or other resource found online (43%).

40% of the teachers reported communicating with parents using e-mail

62% report that they do not regularly communicate electronically with students.

68% of the teachers strongly agree with the statement that technology has given them access to more accurate and up-to-date information. 44% believe it allows them to better meet the varying needs of students.

If you were principal at your school what is the ONE thing you would change about how technology is used at your school today?

9-12

Allow students use cell phones, IM and e-mail 22%
Provide a laptop that they can take home 16%
Let students take classes online 14%

6-8

Allow students to use cell phones, IM and e-mail 35%
Provide a laptop to each student that they can take home 17%
Purchase more or better computers 11%

3-5

Give students a laptop they can take home 25%
Buy more or better computers, software, printers, and digital cameras 21%
Have faster internet access 20%

K-2

Computerized whiteboards in every classroom 96%
Wireless laptops for every student that can be taken home 84%
Parents, teachers, and students use e-mail or instant messenger to communicate 84%

What is the best way for you to show what you have learned?

9-12

Standardized tests 15%
Projects where I demonstrate what I've learned 14%
Online tests 13%

6-8

Standardized tests 20%
Online tests 16%

3-5

Take a test on paper 16%
Take a test on a computer 11%
Write about what I know 8%

K-2

Take a test on a computer 91%
Make a poster or draw a picture 6%
Take a test on paper 1%

Which of these statements about technology apply to you?

9-12

It helps me find the most accurate and up-to-date information 57%

It helps me understand concepts and learn skills 54%

It helps me complete my schoolwork more efficiently 54%

6-8

It helps me find the most accurate and up-to-date information 56%

It helps me complete my schoolwork more efficiently 55%

It helps me understand concepts and learn skills 52%

3-5

It helps me find information 55%

It helps me understand and learn at school 53%

It helps me get better grades 44%

I learn new things on my own 41%

K-2

It helps me understand and learn at school 100%

It helps me get better grades 100%

It's more fun 100%

Other Highlights

- § 79% of K-2 students like to use computers to practice math skills (How do you like to learn math)
- § 99% of these student identified using computers is important to learn before graduating from high school.
- § 26% of K-2 students want to be a doctor or nurse when they grow up. This is also the top pick of students in grades 3-5 (17%)
- § 51% of students in grades 3-5 like to learn science by doing experiments. Their favorite way to learn math (49%) is to use computers to practice math skills.
- § Students in grades 6-8 like to learn math by practicing basic skills doing problems in their textbook. (44%) Their second most popular choice is using computers to practice math skills. (41%)
- § Their top choices for learning science are to visit places where they can see science in action, learn science that will help them in a job in the future, and to conduct research on the internet.
- § The most popular career choice for students in grades 6-8 was a “biologist, ecologist or medical doctor.” (18%)
- § 49% of students in grades 6-8 report spending a lot of time worrying about tests and grades (49%)
- § 81% of the students in grade 6-8 that online research is the most common use of technology at school. This is followed by learning basic computer skills (keyboarding, word processing, etc.) – 55%
- § The favorite source of 9-12 for learning about current events is TV news (30%). For 6th-8th grades friends (28%) are their favorite source, followed by TV news (26%)
- § Students in grades 9-12 rank knowing how to think critically as the most important skills they need for their future (18%).

MAJOR THEMES OF NATIONAL FINDINGS

2006 NetDay Survey results will be released in March 2007. The following are major themes of last year's survey:

- ü Students are setting trends with their use of technology both in school and out of school. They are innovative users of technology, adopting new technologies to support their learning and their lifestyles.
- ü Communication is a key motivator for students and drives their use of technology for learning and for personal use. The result is an explosion of communications tool use and the desire to transcend communications obstacles. Sixth grade is the tipping point when students begin to show their enthusiasm for using technology for communication.
- ü Younger students are continuing to adopt more sophisticated technologies in the footsteps of their older siblings. Their use of devices designed for specific purposes suggest increased availability as well as increased sophistication of young students.
- ü Students and teachers want access to up-to-date technology tools at school and they want it to be available when they need it. Their main frustrations result from restrictions to technology use for learning tasks.
- ü Teachers' professional use of technology is approaching a comfort level but is not keeping up with the advances in how kids are using technology. Despite conventional wisdom, our data does not show significant differences between how younger teachers and older teachers are approaching their technology use.
- ü Students are strong believers in the power of technology to enrich their learning experiences. They have ideas about their futures that include using technology tools for learning and preparing themselves for a competitive job market.