

Dryden Central School District

Technology Plan 2009-2012



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Prepared by:

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Introduction

It is nothing new to assert that the world is changing rapidly and technology is leading the charge. Everyone is affected by this change – students, parents, teachers, and business. The basic need in education has not changed. The district must provide our children with a quality education in a world where some experts suggest that broadband Internet access may as much as double each year for the next five years.

The Dryden Central School District is located in the southern part of central New York State in Tompkins County. The District encompasses an area of 110 square miles and serves a population of about 1900 students. The student body is socially, culturally and economically diverse. 93% of our student population is white. One-third of our students qualify for free and reduced meals. The population has varied educational needs and learning styles. Access to and experience with educational technology outside the school is wide-ranging.

We currently have 3 elementary schools and 1 middle/high school. Cassavant and Freeville elementary schools are connected to the main campus by a VPN using a free Time Warner Cable connection. The Dryden elementary school is connected to the main campus through a Time Warner fiber connection. The main campus (middle/high school) is connected to TST BOCES through a Time Warner fiber connection. TST BOCES is connected to OCM BOCES through a fiber connection.

The school district has taken steps over the last several years to develop a robust technological infrastructure that can support the use of instructional technologies in the classroom. Local area networks for all buildings have been improved to current standards, and classroom, lab, and administrative desktop computers have been upgraded as well. Mobile computing has expanded, and file, print, and information servers have been installed to give students, teachers, and administrative staff access to the information and resources necessary to be successful in their work. This plan focuses on the effective use of this technology to improve student learning.

Necessary basic skills provide students with the tools they need to be successful in today's technological workplace. However, it is not sufficient to teach these skills in isolation. The Dryden CSD Technology Plan adopts Instructional Technology Standards that are articulated into curriculum development at all levels. In this way, the important connection between basic skills and technology is maintained.

Any successful implementation of new technologies within the district relies on professional development, support, and promotion, also addressed in the plan. Professional development will be focused on the outcomes of the curriculum development process. The acquisition, support, and promotion of technology on campus will have this same focus, student achievement.

Finally, technology's power can be felt most strongly in its ability to improve both the quantity and quality of communication, collaboration, and access to information. In keeping with the goals of the district Board of Education, this improved communication and community involvement, are addressed in this plan.

The plan will focus on one major initiative:

To make improvements in the assessment and use of technology across the K-12 curriculum.

This goal will be supported by:

- Professional Development, Promotion and Support
- Communication, Collaboration and Access
- Infrastructure/Hardware/Software Maintenance and Acquisition

The district will work towards this goal using the strategies listed on the following page.

The district will look for improvements that should occur from the use of technology by students, teachers and parents in:

1. Competency with technology hardware and software.
2. Seamless integration such as students and teachers naturally choosing to use a form of technology for presentation (PowerPoint, podcast, digital photos, KidPix, video, etc.)

The district will monitor achievements and/or successes that can be attained using technology through:

1. Best Practices Form: as teachers use the technology, they must fill out a form indicating technology integration.
2. Email-based problem-solving for school**tool** and other software/hardware issues. Staff will conference via email to pool knowledge and solve problems around technology.

The district will increase staff and student competency with technology through:

1. Staff :
 - a. Professional Development opportunities
 - b. Providing access via Citrix for home use of software
 - c. Atomic Learning via the Internet
 - d. Ongoing technology use surveys
 - e. Establishing a Lead Teacher Program
2. Students:
 - a. Atomic Learning via the Internet
 - b. Providing awareness of and access to home use of software via Citrix
 - c. Technology-integrated Classes –
 - i. Elementary Level: regularly scheduled computer lab time for all classes, learning-based computer games
 - ii. Currently: 6th grade Keyboarding for all students and multiple high school courses (i.e. CAD, Media Arts sequence, Business sequence)
 - iii. Propose High School MS Office Basics class as requirement for graduation
3. Parents
 - a. school**tool** overview and information sharing during yearly Open Houses
 - b. school**tool** Administrator available to answer questions on the telephone and through email
 - c. Atomic Learning via the Internet

The district will provide additional Internet and telecommunications options for classrooms or public areas by:

1. Increased number of computer stations to accommodate classes and additional students and teachers in the Library Media Center.
2. Mobile wireless laptop carts available for use in the educational environments by students and teachers for integrated lessons, special projects, and activities.
3. Projectors available to all classrooms creating a setting where access to the Internet is readily available.

The district will develop and integrate the technology through:

1. Professional Development
2. Ongoing surveys

The district will assess technology needed for the future to maintain or enhance the current instructional or library environment by:

1. Ongoing equipment and software updates
2. Ongoing assessments and surveys
3. Reviewing different sections of the technology plan during each monthly district technology committee meeting
4. Assessing the current technology plan annually for adjustment and revision

Professional Development, Promotion, and Support

Technology can help create new and rich learning environments in the classroom. Educators must integrate technology, align it with student learning standards, and use it effectively to engage students. Professional development is necessary to effectively integrate technology into the curriculum. This plan for the next three years is based on data gathered from a survey taken by district employees in June 2008.

These topics will be addressed in monthly faculty meetings with a goal of one half hour devoted to each topic.

- Internet Safety
- Training on copyright and licensing
- Digital Etiquette

These topics will be addressed through a variety of staff development opportunities, such as a Superintendent's Conference Day, and BOCES and Dryden Teachers' Center workshops. Several classes will necessitate a computer lab while others can be held in classrooms and may utilize the mobile wireless laptop carts. Some classes will be held all day with the morning for beginners and the afternoon a follow-up to practice what has been learned.

- PowerPoint / Beg. & Adv.
- Excel / Beg. & Adv.
- Word 2007 / Beg. & Adv.
- Word 2003 / Beg. & Adv.
- Library Data Bases / Overview
- Creating MP3 Files and Burning CD's / Overview
- Search Engines / 1 hour
- Web 2.0 – Podcasts, Blogs, Wikis, Social Networking / 1 hour
- BOCES Curriculum Resource Center / 1 hour
- Video Streaming / 1 hour & Podcasting / 1 hour “Cutting Age Tech in the Classroom”
- Digital Camera / half day
- Atomic Learning / 2 hrs.
- Elmo and Presentation Stations / 2 hrs.

These are basic workshops that all staff should attend:

- Dryden OnLine (all features) / 2 hrs.
(Email, calendars, file sharing, web publishing, bookmarks, etc.)
- MyLearningPlan / 2 hrs.
- schooltool (all features) / 2 hrs.

The following could be offered by the Teachers' Center:

- Digital Camera
- Smart Board
- Digital Audio
- Tech "Mom" courses
- Collegial sharing, "buzz" sessions, sharing circles
- ThinkFinity

In addition to this plan, we will:

- Ensure that new teachers are trained in the use of necessary technology resources during new teacher orientation workshops.
- Provide workshops to teachers during new teacher orientation to insure that all new teachers are trained in the use of necessary technology resources.
- Provide all staff a District Technology Information Book which is updated annually and available on the district website.
- Continue to receive staff development support from BOCES through School Improvement and Model Schools.
- Continue to receive staff development support from local universities such as Cornell University, TC3, and SUNY Cortland.
- Continue to participate in the School Library System (SLS), which is regionally led by the TST BOCES.
- Involve Assistant Superintendent for Curriculum, Instruction, and Assessment to coordinate and implement technology integration into the curricula and collaborate with the Professional Development Committee.

Communication, Collaboration, and Access

The development of technology tools that support communication and collaboration have given rise to rich online communities. These communities can provide opportunities for teachers to become learners, students to facilitate conversation, and all community members to extend the learning environment. One vehicle used for this is Dryden OnLine, our email, communication and collaboration software. Another vehicle we use is school**tool**, our student management system. Key objectives to this initiative are to continue to:

- Develop online communities using Dryden OnLine, giving faculty, staff, and students the ability to augment communication and collaboration with peers. Investigate other possible uses of Dryden OnLine such as FirstClass ED.
- Implement the new features in Dryden OnLine providing podcasting, RSS feeds and blogging for websites.
- Encourage the use of parent access to the student management system, giving all parents the ability to view their students' records with a secure connection via the Internet. Records included are student grades, attendance, class assignments, discipline and demographics. This parent access also gives parents the ability and links to communicate with their students' teachers.
- Maintain district websites including general information and event calendars for each school building.
- Provide workshops for teachers to augment their classes online.
- Survey the faculty, staff, and students to assess needs and prepare changes to the technology plan.
- Participate in the inter-library loan through TST-BOCES including all TST-BOCES component schools and the South Central Organization of Library Systems.
- Provide faculty, staff and administrators access to the student management system which allows entering and viewing of attendance, grades, discipline and demographics.
- Collaborate with the Dryden Teachers' Center, the Professional Development Committee and TST-BOCES School Improvement to provide ongoing staff development.
- Increase equitable access to technology through the use of the mobile wireless laptop carts and other technologies (i.e. document cameras and LCD/DLP projectors). Currently this equipment is in heavy demand throughout the school year.

Infrastructure/Hardware/Software Maintenance and Acquisition

Maintaining a network infrastructure requires planning, vision, and a commitment from the community to support acquisition of technology consistent with the educational objectives of the district. Key objectives to meeting this initiative are the following:

- Provide a yearly inventory of hardware/software in the district for review each year. The Technology Services staff will review the inventory and provide a maintenance plan for the following year. This plan will then be used to develop the equipment replacement budget for the following year.
- Maintain network/server infrastructure, implementing new technologies as determined by the Information Technology Department and the Technology Committee.
- Develop a 3-year budget for technology acquisition and maintenance. This plan should address all aspects of technology use in the district, improve services, and save money for the district. Additionally, the budget should provide long-range financing for future growth and maintenance, as well as for technology upgrades. The budget information provided here includes training and support made available through the district's participation in the TST-BOCES Model Schools Program and School Library System.
- Assure that all of the classrooms have access to LCD/DLP projectors for sign-out through the computer labs. Each general purpose computer lab and the MS/HS library has LCD/DLP projector systems. Each of the general purpose computer labs and libraries has a multimedia computer equipped with a scanner and DVD writer.
- Support approximately 650 networked computers on campus, serving labs, libraries, offices, and all classrooms. The campus network also provides access to online research databases, regional union library catalogs, the Internet, printing services, and file storage services. Other peripherals are available for student and staff use including scanners, printers, projectors and cameras.
- Maintain general use labs in the high school, middle school and main elementary school.
- Maintain four special purpose labs in the high school: an Art Lab; a CAD Lab; and two Business Labs.
- Maintain the middle school special purpose keyboarding lab.
- Maintain the Cassavant and Freeville Elementary schools libraries' computers and wireless laptop carts.
- Maintain the wireless laptop carts in the high school, middle school and main elementary school for use in the educational environments by students and teachers for integrated lessons, special projects, and activities.
- Maintain each schools' multimedia carts consisting of: computer/laptop, projector and document camera.
- Utilize our robust infrastructure to run our VoIP (voice over IP telephones), public address system, and door and camera security systems.

Budget

The included 3-year budget follows the format provided by the district, and includes all technology-related budgets. The budget lines approved for use by the Dryden CSD Office are as follows:

Budget Title	Explanation
State-Aided Hardware (222)	Monetary Amount provided by the state for approved hardware purchases
Local Purchase Hardware (200)	Money requested to supplement State Aided Hardware and provide for life-cycle replacement.
State Aided Software (460)	Monetary Amount provided by the state for approved software purchases
Contractual (400)	Contracting outside vendors
Contractual Services (440)	Consulting/support costs
Technology Repair (449)	Repair of district technology, including audiovisual equipment
District Travel (475)	Reimbursement for in-district travel for department staff
Conference (479)	Professional conference fees/travel for department staff
General Supplies (501)	Cost of supplies for the department and district related to technology
Local – Software Purchases (462)	Recurring fees for software, hardware, maintenance licensing/support

Dryden Central School District Technology Budget (preliminary)

Prepared 10/30/08

(Subject to annual BOE review and approval)

	2007-2008 Actual	2008-2009 Approved	2009-2010 Projected	2010-2011 Projected	2011-2012 Projected	Funding Source
Staffing and In-Service						
In-Service Training	95,086.00	110,566.00	121,622.60	133,784.86	147,163.35	Budget / Grant
Professional Development	188,761.00	168,834.00	185,717.40	204,289.14	224,718.05	Budget / Grant
Technical Support Training	12,436.48	5,000.00	5,000.00	5,000.00	5,000.00	Budget
Software						
Instructional Software	34,964.22	30,275.00	30,275.00	30,275.00	30,275.00	Budget
Hardware						
Instructional Hardware	103,776.83	185,949.17	98,200.00	98,200.00	98,200.00	Budget / Grants
Servers	24,596.34	10,000.00	10,000.00	10,000.00	10,000.00	Budget
Power Backup system upgrade	12,290.00					Budget
Maintenance and Connectivity						
Technology Support Staff	167,140.00	207,417.00	228,158.70	250,974.57	276,072.03	Budget
BOCES Network Specialist	13,727.00		27,624.00	30,386.40	33,425.04	Budget
BOCES SASI	95,855.00					Budget
BOCES Regional Network	69,540.00	69,540.00	69,540.00	69,540.00	69,540.00	Budget / eRate
Contractual	12,436.48	10,000.00	10,000.00	10,000.00	10,000.00	Budget
Telecommunications						
BOCES Telephone / telephone support	73,343.05	73,996.20	81,395.82	89,535.40	98,488.94	Budget / eRate
Cell phones	3,218.50	4,250.00	4,675.00	5,142.50	5,656.75	Budget / eRate
CNYRIC Support Services						
Financial Services	42,475.00	42,758.00	47,033.80	51,737.18	56,910.90	Budget
Data Warehousing	10,869.76	11,448.84	12,593.72	13,853.10	15,238.41	Budget
Test Scoring	5,452.58	5,131.28	5,644.41	6,208.85	6,829.73	Budget
Other						
Supplies through BOCES bid	9,996.65	6,000.00	6,000.00	6,000.00	6,000.00	Budget
Other Supplies	10,837.23	14,208.35	15,000.00	15,000.00	15,000.00	Budget
Repairs / Maintenance	4,862.04	8,500.00	5,000.00	5,000.00	5,000.00	Budget
e-Rate Expenditures	\$94,966.01	\$96,061.03	\$101,147.03	\$106,741.64	\$112,895.70	
All Other Expenditures	\$896,698.15	\$867,812.81	\$862,333.42	\$928,185.36	\$1,000,622.50	

Technology Survey

Dryden Central Schools' Technology Survey June 2008		
Please choose your building(s).		
Answer Options	Response Frequency	Response Count
Cassavant Elementary School	7.3%	21
Dryden Elementary School	37.4%	108
Freeville Elementary School	8.3%	24
High School	30.1%	87
Middle School	27.7%	80
District Office	3.5%	10
Transportation/Bus Garage	2.1%	6
Maintenance	1.0%	3
<i>answered question</i>		289
<i>skipped question</i>		0

Dryden Central Schools' Technology Survey June 2008		
Are you faculty or staff?		
Answer Options	Response Frequency	Response Count
Faculty	65.1%	188
Staff	34.9%	101
<i>answered question</i>		289
<i>skipped question</i>		0

THE FOLLOWING RESPONSES ARE FROM TEACHERS

Dryden Central Schools' Technology Survey June 2008		
Please check all of the statements with which you agree.		
Answer Options	Response Frequency	Response Count
I use technology applications such as word processors and spreadsheets to produce materials for use with my students.	88.7%	165
I use Internet resources to find materials relevant to my curriculum.	96.8%	180
I use presentation software and hardware within my classroom.	47.3%	88
I use e-mail to contact peers and experts both inside and outside of the district.	97.8%	182
I use e-mail to communicate with parents and students.	89.8%	167
I use technology to maintain student records (e.g., electronic gradebook, etc.).	61.8%	115
I use technology to monitor student performance (e.g., electronic portfolios).	25.8%	48
I can recognize the ethical use of technology.	93.5%	174
I model the ethical use of technology with my students.	78.0%	145
Other (please specify)		9
<i>answered question</i>		186
<i>skipped question</i>		103

Addendum 1

Dryden Central Schools' Technology Survey June 2008		
How has technology impacted your students' achievement? Please check all of the statements with which you agree.		
Answer Options	Response Frequency	Response Count
Technology increases my students' motivation.	81.2%	151
My students use technology to acquire basic skills.	65.6%	122
My students use technology to become more critical thinkers.	39.2%	73
My students use technology to help them construct new knowledge.	62.9%	117
My students use technology to solve relevant, real-life, problems.	37.6%	70
My students use technology to discover concepts and prove relationships.	38.2%	71
My students use technology to communicate knowledge and information.	67.2%	125
Other (please specify)		19
<i>answered question</i>		186
<i>skipped question</i>		103

Dryden Central Schools' Technology Survey June 2008						
Please check all that apply.						
Answer Options	I currently use for instruction	I would like to use for instruction	My students use for my class	I would like my students to use for my class	I currently use for non-instructional purposes	Response Count
Word Processing (Word)	152	5	61	16	85	179
Spreadsheets (Excel)	53	17	15	10	69	122
Presentation software (PowerPoint)	64	39	42	25	27	132
Database creation software (Access)	10	19	5	9	27	56
Web page creation software (HCK, DreamWeaver)	29	30	8	13	36	86
Graphics/illustration software	40	29	22	8	26	82
Special Applications for Reading, Math (Reader Rabbit, FastType, Number Munchers, etc)	38	21	19	15	3	77
Graphing Calculators	19	6	11	2	8	29
Document Cameras (Elmo)	13	39	4	12	6	58
Scanners	46	17	16	3	26	73
SmartBoard	11	44	1	19	3	60
Digital Cameras	66	18	16	11	59	106
Mobile Lab	47	17	36	14	3	77
Web-based Educational Games	53	22	28	13	4	83
Internet	146	13	69	15	68	169
Online Encyclopedias	64	16	42	13	17	96
Digital Scientific Equipment (probes, microscopes, etc)	7	15	4	9	5	25
Computers	131	12	72	15	66	147
Managing files	60	10	19	4	56	103
Using the network	81	5	40	3	52	110
Other (please specify)						9
<i>answered question</i>						183
<i>skipped question</i>						106

Addendum 1

Dryden Central Schools' Technology Survey June 2008							
Please rate your skill level regarding the following:							
Answer Options	I don't know what I'm doing	Basic	I can usually figure it out	Advanced	I would like more training	N/A	Response Count
Word Processing (Word)	1	18	66	98	0	0	183
Spreadsheets (Excel)	27	62	67	21	0	5	182
Presentation software (PowerPoint)	28	40	62	45	0	5	180
Database creation software (Access)	81	39	24	5	0	24	174
Web page creation software	68	63	28	9	0	9	178
Graphics/illustration software	68	48	28	9	0	20	173
Special Applications for Reading, Math (Reader Rabbit, FastType, Number Munchers, etc)	27	30	46	16	0	48	167
Graphing Calculators	63	19	9	11	0	66	168
Document Cameras (Elmo)	66	28	20	6	0	44	164
Scanners	31	48	53	20	0	19	171
SmartBoard	78	32	18	5	0	33	166
Digital Cameras	9	43	73	40	0	9	174
Mobile Lab	30	33	45	30	0	27	165
Web-based Educational Games	12	35	64	30	0	23	164
Internet	1	19	80	79	0	1	180
Online Encyclopedias	11	23	65	44	0	21	164
Digital Scientific Equipment (probes, microscopes, etc)	53	20	11	5	0	75	164
Computers	4	28	80	55	0	5	172
Managing files	15	43	61	44	0	9	172
Using the network	8	37	72	47	0	4	168
Other (please specify)							4
<i>answered question</i>							183
<i>skipped question</i>							106

Dryden Central Schools' Technology Survey June 2008					
I would like more training in:					
Answer Options	Yes	No	I don't know	Response Count	
Word Processing (Word)	34	117	14	165	
Spreadsheets (Excel)	82	66	21	169	
Presentation software (PowerPoint)	75	81	11	167	
Database creation software (Access)	82	44	37	163	
Web page creation software	123	32	15	170	
Graphics/illustration software	79	47	30	156	
Special Applications for Reading, Math (Reader Rabbit, FastType, Number Munchers, etc)	38	93	24	155	
Graphing Calculators	24	105	25	154	
Document Cameras (Elmo)	85	52	19	156	
Scanners	63	74	20	157	
SmartBoard	109	32	18	159	
Digital Cameras	64	80	12	156	
Mobile Lab	44	89	21	154	
Web-based Educational Games	57	83	12	152	
Internet	38	111	8	157	
Online Encyclopedias	28	112	13	153	
Digital Scientific Equipment (probes, microscopes, etc)	19	108	24	151	
Computers	48	94	13	155	
Managing files	77	68	14	159	
Using the network	58	76	19	153	
Other (please specify)				4	
				<i>answered question</i>	176
				<i>skipped question</i>	113

Dryden Central Schools' Technology Survey June 2008							
Please check all that apply regarding the creation and dissemination of educational information.							
Answer Options	I currently use for instruction	I would like to use for instruction	My students use for my class	I would like my students to use for my class	I currently use for non-instructional purposes	Response Count	
Email	86	3	30	14	129	177	
Self-created web pages	21	55	10	19	37	110	
Streaming audio or video	27	67	10	25	9	104	
Blogs	3	32	2	21	13	53	
Podcasts (audio or video)	6	59	3	22	8	77	
Wikis (editable webpages)	6	41	7	15	9	61	
Other (please specify)						8	
						<i>answered question</i>	180
						<i>skipped question</i>	109

Dryden Central Schools' Technology Survey June 2008		
Please check all that apply regarding your understanding of ethics and the use of educational technology.		
Answer Options	Response Frequency	Response Count
I am not aware of any ethical issues surrounding computer use.	7.2%	13
I know that some copyright restrictions apply to computer software and online resources.	65.6%	118
I know and enforce the school's technology policies and guidelines, including its Internet Acceptable Use Policy.	81.1%	146
I am aware of other controversial aspects of technology use (data privacy, equitable access, and free speech issues, etc).	64.4%	116
Other (please specify)		2
<i>answered question</i>		180
<i>skipped question</i>		109

Dryden Central Schools' Technology Survey June 2008		
Please check all that apply regarding your own research and evaluation of technology use.		
Answer Options	Response Frequency	Response Count
I have not attempted to determine whether the use of instructional technology has made a difference in my students' learning or classroom climate.	61.7%	111
I gather, use and/or share anecdotal information and observations about student use of technology in my classroom.	40.0%	72
I use action research and aggregated data to accurately determine whether the technology and methodology I am using has an impact on how well my students learn.	5.6%	10
I participate in formal studies of the impact of technology on student learning conducted by professional groups and academics.	3.3%	6
I have designed such studies as part of my own professional education.	4.4%	8
I report electronically and in print the findings of my research to other professionals.	8.9%	16
Other (please specify)		6
<i>answered question</i>		180
<i>skipped question</i>		109

THE FOLLOWING RESPONSES ARE FROM STAFF

Dryden Central Schools' Technology Survey June 2008		
Please check all of the statements with which you agree.		
Answer Options	Response Frequency	Response Count
I use technology applications such as word processors and spreadsheets to produce materials for use in my job.	61.4%	62
I use Internet resources to find materials relevant to my job.	75.2%	76
I use presentation software and hardware within my job.	27.7%	28
I use e-mail to contact peers and experts both inside and outside of the district.	82.2%	83
I use e-mail to communicate with coworkers and/or parents.	89.1%	90
I use technology to maintain student records.	41.6%	42
I use technology to monitor student performance.	24.8%	25
I can recognize the ethical use of technology.	70.3%	71
I model the ethical use of technology with my peers.	56.4%	57
Other (please specify)		6
<i>answered question</i>		101
<i>skipped question</i>		188

Addendum 1

Dryden Central Schools' Technology Survey June 2008				
Please check all that apply.				
Answer Options	I currently use for my job	I would like to use for my job	I would like more training	Response Count
Word Processing (Word)	67	4	17	80
Spreadsheets (Excel)	50	5	25	66
Presentation software (PowerPoint)	26	10	23	51
Database creation software (Access)	20	7	25	46
Web page creation software	12	11	23	39
Graphics/illustration software	11	9	23	39
Graphing Calculators	3	3	11	17
Document Cameras (Elmo)	3	4	10	17
Scanners	13	7	14	30
SmartBoard	3	6	13	22
Digital Cameras	25	5	16	42
Mobile Lab	11	2	9	22
Web-based Educational Games	13	6	4	22
Internet	68	2	12	76
Online Encyclopedias	25	4	8	36
Digital Scientific Equipment (probes, microscopes, etc)	3	1	5	9
Computers	68	1	14	77
Managing files	48	1	15	57
Using the network	59	2	15	68
Other (please specify)				6
				97
				192

Dryden Central Schools' Technology Survey June 2008							
Please rate your skill level regarding the following:							
Answer Options	I don't know what I'm doing	Basic	I can usually figure it out	Advanced	N/A	I would like more training	Response Count
Word Processing (Word)	10	19	33	28	3	0	94
Spreadsheets (Excel)	20	25	19	19	10	0	93
Presentation software (PowerPoint)	33	12	17	12	14	0	88
Database creation software (Access)	39	15	18	2	13	0	88
Web page creation software	43	10	10	5	19	0	87
Graphics/illustration software	43	12	9	3	20	0	87
Graphing Calculators	37	6	4	1	35	0	83
Document Cameras (Elmo)	34	4	10	1	34	0	83
Scanners	24	18	21	4	19	0	86
SmartBoard	39	1	9	1	30	0	80
Digital Cameras	13	21	23	11	17	0	85
Mobile Lab	27	6	8	6	34	0	81
Web-based Educational Games	21	11	21	4	23	0	80
Internet	6	18	36	27	2	0	89
Online Encyclopedias	12	15	25	12	18	0	82
Digital Scientific Equipment (probes, microscopes, etc)	32	4	7	1	36	0	80
Computers	7	26	38	20	1	0	92
Managing files	16	21	27	14	11	0	89
Using the network	13	20	34	15	6	0	88
Other (please specify)							0
<i>answered question</i>							96
<i>skipped question</i>							193

Dryden Central Schools' Technology Survey June 2008		
Please check all that apply regarding your understanding of ethics and the use of educational technology.		
Answer Options	Response Frequency	Response Count
I am not aware of any ethical issues surrounding computer use.	11.6%	11
I know that some copyright restrictions apply to computer software and online resources.	72.6%	69
I know and enforce the school's technology policies and guidelines, including its Internet Acceptable Use Policy.	78.9%	75
I am aware of other controversial aspects of technology use (data privacy, equitable access, and free speech issues, etc).	56.8%	54
Other (please specify)		0
<i>answered question</i>		95
<i>skipped question</i>		194

THE FOLLOWING RESPONSES ARE FROM STAFF

Dryden Central Schools' Technology Survey June 2008	
If you have additional comments you would like to add, you can use the following area to enter them. When typing comments, please DO NOT enter line breaks. Type your comments as a single paragraph. Once again, please be assured that your comments are confidential.	
Answer Options	Response Count
	50
<i>answered question</i>	50
<i>skipped question</i>	239

Number	Response Text
1	The computers (especially the mobile lab) are extremely slow and unreliable at the Elementary school. The mice are also unreliable. 30 new computers is a start but they all need to be replaced. It would also be nice to have keyboard covers that we could clean for the heavy use computers.
2	I'd like to be able to use the ELMO that our middle school has at our disposal in the Math Department. I think it would make things a heck of a lot easier sometimes for this chalk and chalkboard guy.
3	I'm a little frustrated with everything being so linked to the network. I am operating with a crummy old computer and have been without a working computer in my room on at least three occasions, sometimes for more than a week at a time. Thank god I keep a paper gradebook and I don't rely on grading software. I know I am not the only one with these frustrations. Personally aside from the Internet use for information and word processing aspects of technology and all the money being spent does not seem to have any great impact on my students in my classroom. As state mandates and requirement continue to change there is less time to try and incorporate all this technology in the classroom. The state regents material can be taught fine without all the new bells and whistles.
4	This survey was written in very nice large fonts. I really appreciate this.
5	I hope I will be allowed to house a CTX projector and cart in my room next year as I use this equipment for approximately 50% of the teaching days. The amount of use will only go up as I integrate the use of a digital microscope next year. I find our technology staff is very helpful, approachable and patient. I especially appreciate that Wendy is willing to post reminders on when and how to update current gradebook terms so that the information is viewable on parent connect. These reminders are helpful with the busy schedule we all keep.
6	The area of technology is expanding so quickly that I feel I cannot keep up personally with new methods of use in the classroom. I also find that when I have wanted to use a projector that the time required to go get it, set it up and then hope everything functions as desired can be factors that prohibit my use of the technology. I am anxious to learn more and hope that the district will be able to support my learning through instruction and available hardware.
7	The computers are painful to use. They are so slow which make using technology in your classroom unreliable. It is impossible to get into the MS computer lab and the mobile lab is a waste of time to use.
8	I would love additional training opportunities in excel and will need training in schooltool.
9	I see the value in classroom teachers using technology to help their students with research and other skills. I am not sure how technology use best fits into the Academic Intervention Service area. I realize that this is an issue that should probably be looked into. It seems as though AIS teachers would have to be very selective in how, when and why they would be using technology when working with students. I think it is topic that should be discussed at a variety of levels (ex. within the Reading department, by classroom teachers, by administrators, etc.)
10	Workshops for staff throughout the year would be beneficial to everyone's on-going education rather than workshops only on superintendent conference days.
11	I would love to see buildings have more computers in the classrooms so students can use them for centers and for the more advanced students to type some of their written work. It is very hard for primary students to share computers but is extremely important for them to have the exposure. I like that we have technology curriculum/standards for our students...but it is extremely difficult for teachers/me to be responsible and teach one more thing. It would be great if we had a technology teacher in our lab to teach lessons and we are there to support them.
12	This survey would have been much faster if my computer wasn't so slow! At the elementary schools the computers are old and inefficient to the point that it hampers my ability to use the technology I want/need to use. We need to commit more money to improving the computers in classrooms and making technology more available to students. I would love a smart board!
13	From Leonello
14	I am not an instructional teacher, but I do use technology every day in my office and it is very beneficial to have. I don't think I could be as productive or efficient without technology. Anything that this district can do to continue our growth in this area would benefit us as professionals as well as our students. With the amount students know about technology in they could probably teach us a thing or two.
15	Being a Title 1 teacher I have limited time with my students. I feel I need to spend all of that time teaching decoding, comprehension, and the appreciation of books and good literature.

	I think classroom technology certainly has a place in education, for teachers and students, but I feel my time with students is better spent concentrating on books. I do appreciate e-mail when communicating with my colleagues...it saves a lot of time. I also use the Internet to find interesting lessons, ideas, book lists, information to use in particular subject areas, and creating some worksheets for my students.
16	I hope that we will continue to update the hardware and software at the elementary level at all buildings. I would love to have an Elmo at our level also.
17	These surveys give have given us false hope in the past - feels like we waste our time explaining what we need but our needs are not addressed. I was all excited to think we would finally all be getting new computers at DES this summer, but found out this week only 30 rooms at DES will actually get a new computer, and specifically which 30 will be based on random drawings rather than proven use/needs. Ughh!
18	A very high priority for me for next year is learning the new School Tool program. I would like to be able to accurately keep my grades (currently I use InteGrade Pro). I would also like to know how to send progress reports to parents electronically (in the interest of conservation and communication).
19	One of the key issues regarding use of technology and professional development is reaching each teacher at their level. Some teachers need introductory, structured offerings and instruction, while other teachers need the time to develop and access this technology in order to effectively use it in the classroom. There is so much potential to reach students at their level with multiple entry points and various assessment strategies; there is just not enough time to create and implement these meaningful learning experiences. The promise is there, as you can teach essential life skills (effective/appropriate use of Internet, word-processing, data management/manipulation, etc) embedded in content lessons.
20	Having to share a room and rarely being able to use it I am not able to use technology and other resources that may be helpful for my students. I also do not have access to programs that may be beneficial for student instruction. I use technology mostly for reports, correspondence with teachers and creation of work for students.
21	My limited use of technology is a result of limited access to it.
22	The technology at Cassavant is difficult because: *none of the games/programs work * the mobile lab takes 45 minutes to set up and get running * we have one computer per class
23	The biggest obstacle to my technology use is the slow network data transfer rates. I usually wait to get data and absolutely cannot stream applets, simulations or videos, many of which would be useful in my teaching. There are many tradeoffs using Citrix, which while it provides a management and security aid, makes using individual computers slow and sometimes very inconvenient.
24	The technology book is so long I am not sure of all that is in it, so I did not mark that one. I believe I am doing what I should with my computer.
25	I believe the web page for Transportation can be a very valuable tool for parents and students and would like to provide updated information for the next school year.
26	The one thing I am concerned with regarding technology in the district is the length of time it takes to use technology. In the past year, these computers take significantly longer periods of time to complete the designated task. If there was any way the processing units could improve speed and performance, I would become less frustrated. Basically, these computers are much slower than in the past.
27	I try to incorporate technology in the ELA and Math lessons I am a part of in the classrooms I work in. I work with teachers who are sometimes uncomfortable with technology, and together we try to expose kids to tech uses they may be unfamiliar with. However, the reality of teaching in the elementary school is that tech is not always a priority. Part of that is due to frustration that we have some equipment limitations, and it takes time to get kids to the lab and set up. More than that though is the pressure to have students practicing reading, writing, and math skills. We can't afford to spend too much time away from those important basics. I think as a whole the intermediate faculty is doing a better job of trying to do more. The tech lab schedule seems to work well and Mary Parkhurst is helpful, too. I would like to see more up-to-date equipment that can be used in the classroom for demonstration purposes (LCD, ELMO, Smartboard) and interactive lessons. As an aside, our electrical supply in each room is largely inadequate to be very mobile. We have very few plugs in some rooms. //I appreciate the efforts of the Tech Committee. Just a note FYI: I was told all the records kept this year in the tech lab regarding what teachers taught in there would be thrown out because we are "starting over." I found that surprising because I would think the information might be useful somehow!
28	This only took 5 minutes to complete.... Good luck gathering data from everyone! Janet
29	Learning to use technology in the classroom can best be supported by the frequent availability of technology. When there are a limited number of such items as projectors or Elmo's, experimenting with their use on a regular basis is impossible. The housing of such tools in one teacher's room is also a deterrent for other teachers to request their use; hence it appears that these items are not in demand.
30	I would like to find a way that we could improve our technology, especially at the garage where I could be connected to a bus and wirelessly print findings or email while still connected. I am concerned about switching to an Internet phone system and the dependability of it with our alarm systems calling out, is there going to be a backup system to use in emergency if Internet is down? I would like to see our school do a good study before switching over.
31	I have no comments at this time.
32	I am afraid that many people, now-a-days use email to voice their displeasure with something/attack people...because in person, they would never have the guts to say it. This has caused many a hard feelings. It should be emphasized over and over again about the need to not use email to solve personal problems or attack someone. Our Tech staff, top to bottom is amazing. I do think that we may need another person besides Shirley to assist with day to day problems. We are light years ahead of most districts

33	It is often frustrating at DES to use the computer lab due to so many slow, out dated computers. If I ask my whole class to look at a web site it can be painfully slow. It would be impossible without the aide in the computer lab. I hope the district is not considering removing that position. With so much of our school work and communication being computer driven now, we need better access to printers. I work in one corner of DES that is exceptionally far from any printer/copier! Thanks for reading my comments!
34	Thanks for having transportation part of your survey
35	I really want to learn about how to use technology in my instruction, but have little time for research. I wish we had some more programs to help me succeed. It would be nice to have a Supt. Conf. day regarding technology.
36	I have always hoped to have at least one computer in my room which can be used for student research or individual lessons. I would also like to have keyboards for composition and teaching class piano. It is just a dream.
37	With the change to Office 2007 and a new student recordkeeping software over the summer, I will need some training to update current knowledge. Although I do some student web page development in my class, it is very basic. I plan to incorporate the Smart Board and Podcasts into my curriculum for next year. Having a morning for technology workshop training and the afternoon to create a lesson using the application would be most beneficial.
38	I am a substitute teacher in the Dryden District.
39	I would like more training to better knowledge and to help the rest of the staff.
40	For being a college graduate in the computer field, I am now computer-ignorant. I would have been very interested in learning some basic computer use at one of the staff training days (superintendent days). I think most, if not all, staff members have access to the school network even if it is just for email.
41	Just to reiterate a previously made comment, there is a lack of depth in our technology opportunities within the district. Once a teacher has had basic level training, there are usually no opportunities for any higher levels to advance. In addition, we make the mistake of providing training but never providing any application time. The concepts learned in a training are meaningless if we never have a chance to apply them to our real work situations and then to share our experiences with each other. If we looked at the same model in the classroom, our students would never advance. I would also like to add that more communication needs to happen in our district around technology issues. We need to be taught what systems are in place, how to navigate them and what the nuances that are specific to Dryden are. When I first began teaching here, I had never even heard of a server space. I didn't know how to use it, organize it, etc. and didn't receive adequate training on it prior to me using it with students. I learned it happenstance, questioning, and screwing up. Apart from that, I think our district does a very good job trying to stay on top of ever changing technology. I appreciate all that we have access to, it is one of the things I love about teaching in Dryden.
42	In the primary grades I find that technology is best used as enrichment. I use the Internet to answer the students' questions or for additional info on a topic we are studying about. I wish we had enough user friendly computers for students to do word processing or that we had some software for students to play education games. Also, I know there are web sites that have education games but I don't know what they are.
43	The mobile labs are great but too often we encounter problems. Sometimes the versions of Word are not compatible or a computer dies for no discernible reason. Because the mobile labs are valuable, I think it's worth putting some money and time into upkeep/upgrades.
44	I appreciate the cheerful helpfulness of D. Speer with student questions, equipment, and presentations.
44	If we had more computers, I would use them more with my students. For example if each student had a computer in my classroom, I could use them daily.
45	It's very difficult to be told you must use the computer lab with the limited knowledge that I have. It would be nice to have a computer person to teach my class or grade level when we come in. This would help ensure that all students are getting the same thing and are prepared when they get to the middle school/ high school level. We are told no games, yet games can be very educational. It would be nice to have the games that go with the math program so that students could play them at school and at home.
46	For this year I completely gave up on using the computer lab with my students because some times of the day were completely taken up for a certain purpose (keyboarding) and I wasn't able to take all my classes. I have never been trained to use the laptops and it has been very problematic in the past (wasted a lot of my class time for nothing). I had developed a whole set of instruction based on Word and the Internet which fit nicely into my curriculum, so I was disappointed about the situation. I'm a bit intimidated about the whole thing, actually. I know what is available, but taking a class to the C-Lab and knowing how to operate everything in front of the kids can be a little daunting. Other teachers that I have spoken with about this feel the same way.
47	It would be beneficial to have more than 1 computer in our primary classrooms (as a 1:20 ratio does not work) with additional training (suggestions) of how to incorporate technology in the classroom. What is available to help teach and review concepts in reading, spelling, math, etc?
48	I am eager to learn about and use an Elmo in my classroom, streaming video, and podcasts. I'd also like more time to learn about setting up and using a webpage. Thanks.
49	VERY little time to actually read email and that is the only thing I use computer for.
50	The use of technology has become so popular that it is difficult to get a time slot for the computer lab or reserve one of the mobile labs. There are times when even though I have reserved the small mobile lab several weeks ahead of time there are only 3 laptops available. Other teachers are using projectors or the smart board and a laptop goes with each piece of equipment. Several other teachers and I have had to stop assigning certain projects because we are unable to get computer lab time or one of the mobile labs. I believe that finding ways to integrate technology into the curriculum is exciting. It makes many assignments more interesting for the students.

Student Learning - Standards

The International Association for Technology in Education (ISTE), a leading organization advocating high-quality technology education in the United States, has produced a set of six standards for instructional technology. Over the years, leading educators developed these standards, known as the National Educational Technology Standards for Students (NETS-S) to identify the basic technological skills all students should acquire to be successful in our changing world. For the Dryden Central School District, adoption of these standards is only a starting point. As the standards are incorporated into the curriculum development process, they will be further articulated and revised to meet the needs of our students. All teachers will further develop these standards and provide a student-learning focus for technology acquisition, integration, and professional development efforts.

It is critical to articulate these standards into curriculum development throughout the district. Only in this way will students make the connection between technology and the skills necessary to be successful in the world of the future. If these skills are presented in isolation, they cannot become tools for learning in all disciplines.

National Educational Technology Standards for Students (NET-S)

1) Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

2) Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

3) Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

4) Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

5) Technology research tools

- Students use technology to locate, evaluate, collect, and create meaningful information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

6) Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.

Students employ technology in the development of strategies for solving problems in the real world. Dryden Central Schools intended implementation of these NET-S standards is mapped as shown on the following page.

K-12 Technology Standards Dryden Central Schools

Standard 1

Learners will demonstrate understanding in the operation of technology systems. [Aligns with NET-S #1.]

- ❑ Students show an ability to use technology.
- ❑ Students show a basic understanding of the nature and operation of technology systems.

Standard 2

Learners will use technology to access and communicate information. [Aligns with NET-S #3, 4, & 5]

- ❑ Students use technology to enhance learning, increase productivity, and promote creativity.
- ❑ Students use technology to process data, report results, prepare publications, and produce other creative works.
- ❑ Students use a variety of media to communicate information and ideas to diverse audiences.
- ❑ Students use technology to locate, evaluate, and collect information from many sources.
- ❑ Students select appropriate media for specific tasks.

Standard 3

Learners will demonstrate an understanding of the social, ethical, and human issues associated with the use of technology. [Aligns with NET-S #2]

- ❑ Students understand the ethical, cultural, and societal issues related to technology.
- ❑ Students practice responsible use of technology systems, information, and software.

Standard 4

Learners will use technology resources to solve real-world problems and make informed decisions. [Aligns with NET-S #6]

- ❑ Students use technology resources for solving problems and making informed decisions.
- ❑ Students employ technology in the development of strategies for solving problems in the real world.

The above Technology Standards are based on the International Society for Technology in Education (ISTE) Standards.

The focus of the K-12 Technology Standards document is on computer knowledge and skills which include the following:

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Computer Components & Terms ▪ Keyboard Recognition ▪ Mouse Control ▪ Network Access ▪ Content Related Software <ul style="list-style-type: none"> ▪ Organizing Information ▪ Desktop Publishing ▪ Multimedia | <ul style="list-style-type: none"> ▪ Digital Information Resources ▪ Word Processing ▪ Evaluating Information Resources ▪ Acceptable Use ▪ Technology & Society ▪ Electronic Citation ▪ WebLogs and Podcasts |
|--|---|

Dryden Central Schools intended plan to integrate these standards into the curriculum is mapped at: <http://www.dryden.k12.ny.us/Departments/itdept/currntplan.doc>

Conclusion

The Dryden Central School District is poised to become a regional leader in the use of instructional technology to improve student learning. Development of a clear plan that focuses on the use of information and technology is key to realizing this goal. Student learning standards, professional development and support, improved communication and collaboration through the use of technology, and the maintenance of our infrastructure are critical to this plan, and will help the Dryden Central School District prepare our students for the future.

E-Rate Requirements Verification Sheet

Requirement 1

An establishment of clear goals and realistic strategies for using telecommunications and information technology to improve education and/or library services.

Page(s):

1	2	3	4	5	6	7			

Requirement 2

A professional development strategy ensuring staff will know how to use information technology to improve education and/or library services.

Page(s):

1	2	3	4	5	6				

Requirement 3

Included assessment of telecommunications services, hardware, software, and other services that will be needed to improve education and/or library services.

Page(s):

2	3	6	10	11	12	13	14	15	16
17	18	19							

Requirement 4

District provided budget to acquire and **maintain** the hardware, software, professional development, and other services that will be needed to implement the technology plan strategy.

Page(s):

7	8	9							

Requirement 5

An evaluation process enabling the district to monitor progress towards specified goals and make mid-course corrections as needed.

Page(s):

2	3	6	10	11	12	13	14	15	16
17	18	19							