



Grandville Public Schools

TECHNOLOGY PLAN

District/School: Grandville Public Schools
3839 Prairie Street SW
Grandville, Michigan 49418
616-254-6570

District Code: #41130

Start Date: July 2008

End Date: June 2011

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ISD: Kent Intermediate School District

URL: <http://www.grandville.k12.mi.us>

Technology Plan Summary Sheet

District: Grandville Public Schools
Address: 3839 Prairie Street SW, Grandville, Michigan 49418
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Start Date of Plan: July 1, 2008
Next State Review Date: June 30, 2011

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Technology Advisory Group

Chairpersons

Amanda Jones, Technology Supervisor
Timothy Purkey, Assistant Superintendent

District Members

Ellen Akhurst, Special Education Teacher and Parent,
Century Park Learning Center
Diann Baer, Teacher, South Elementary
Jessica Crampton, Director of Student Services
Shannon Giles, Speech Pathologist, West Elementary
Robert Groenleer, Teacher, Orion Alternative High
Scott Joseph, Assistant Principal, High School
David Martini, Principal, West Elementary
Scott Merkel, Principal, Cummings Elementary
Brian Mulder, Teacher, East Elementary
Jason O'Callaghan, Teacher, Century Park Learning
Center

Barb Parker, Elementary Media Specialist
Nathan Peltz, Teacher, Cummings Elementary
Deb Reese, Assistant Superintendent of Finance
Kristy Rieger, Teacher, High School
Sue Sanders, Teacher, Grand View Elementary
Peggy Slattery, Teacher, High School
Connie Stark, Supervisor of Human Resources
Edwin Vaandering, Teacher, Central Elementary
Chris VanderSlice, Assistant Principal, Middle School
Pam VanVelsen, Teacher, Riverbend Elementary
Dave Weick, Teacher, Middle School

District Mission Statement

It is the mission of the staff and community of Grandville Public Schools to provide each child with an exceptional base and the skills for lifelong learning:

**“GRANDVILLE PUBLIC SCHOOLS ...
LEAD TO LEARN, LEARN TO LEAD”**

Information and communication technologies have a significant impact on the way people learn, work, communicate, and play. The implementation of technology is essential in the teaching and learning process. We must discover ways to provide students with appropriate knowledge and skills. We must equip them for the workplaces that are found in our community and in the world. The Technology Advisory Group is committed to developing and revising a plan for Grandville Public Schools that will take our students into the future.

Technology Mission Statement

In the Grandville Public School District, the learning community will be technology literate life-long learners. Learners will be able to interact successfully in a technological environment to achieve their personal, educational, and workplace goals. They will skillfully use technology to access, retrieve, and use information school-wide, community-wide, nationally, and internationally.

District Profile

Grandville Public Schools encompasses over 50 square miles and serves eleven schools including eight elementary buildings, one middle school, one high school, and one alternative high school. The majority of the school district is in Kent County, with outlying areas reaching into neighboring Ottawa County, extending beyond the city of Grandville into the cities of Grand Rapids, Walker, and Wyoming, and the townships of Byron, Georgetown, Jamestown, and Tallmadge.

Over 700 employees support our eleven schools and various departments of Grandville Public Schools including 411 certified teachers, administrators, and special services employees. Enrollment for Grandville Public Schools at the spring 2007 count totaled 6,032 students. Elementary schools registered an enrollment of 3,108, middle school 906, high school 1,881, and Orion Alternative High School an additional 137 students. Seventeen percent of our population is eligible for our Free and Reduced Lunch Program. Approximately 91% of our high school students pursue higher education after graduation.

The ethnic composition of the student population was 86.72% White/Caucasian, 5.90% Hispanic/Latino, 3.65% Black/African American, 3.22% Asian, and less than 1% American Indian and Hawaiian/Pacific Islander. Approximately 8% of the student population receive special education classroom services, an additional 3% receive speech only services.

School Buildings			
Central Elementary 4052 Prairie Street SW Grandville, MI 49418	East Elementary 3413 30 th Street SW Grandville, MI 49418	South Elementary 3650 Navaho Court SW Grandville, MI 49418	Grandville High School 4700 Canal Street SW Grandville, MI 49418
Century Park Learning Center 5710 Kenowa Avenue SW Grandville, MI 49418	Grand View Elementary 3701 52 nd Street SW Grandville, MI 49418	West Elementary 3777 Aaron SW Grandville, MI 49418	Orion Alternative High School 4900 Canal Street SW Grandville, MI 49418
Cummings Elementary 4261 Schoolcraft SW Grand Rapids, MI 49534	Riverbend Elementary 0-9181 Kenowa Avenue SW Grand Rapids, MI 49534	Grandville Middle School 3535 Wilson Avenue SW Grandville, MI 49418	
Support Buildings			
	Administration Building 3839 Prairie Street SW Grandville, MI 49418	Transportation/Maintenance 4100 Kenowa Avenue SW Grandville, MI 49418	

Today's Student . . .

- must multi-task and stay connected
- needs responses, 24/7
- sees technology as an everyday part of life
- likes learning with his/her friends using the Internet and computers
- creatively processes information to find new solutions to a problem

When he/she use to . . .

- use paper, pencil, and typewriter
- use textbooks and workbooks
- use chalkboards and whiteboards
- use atlases and globes
- use an overhead or opaque projector
- be reluctant to answer
- struggle to hear
- view filmstrips and 35mm movies
- learn in a classroom setting

He/she now can use . . .

- laptops, Tablet PC's and computers
- digital media and eLearning
- interactive presentation tools
- GPS, Map Quest, and Google Earth
- document cameras and LCD projectors
- classroom response systems
- classroom amplification
- DVD/VHS projections
- distance learning and online education

Historical Perspective

In February 1994, a group representing all buildings in the Grandville district convened to develop a technology plan for the district. As a result of that effort, the community was presented with a proposal for an enhancement millage to fund the plan. The millage was approved, and the first phase of the plan was implemented.

In February 1996, a similar group met to revise and update the technology plan. Priorities were established for the expenditure of the remaining millage funds, and the second phase of the 1994 plan was implemented.

In the spring of 1997, community members, staff, administrators, and Board members met to develop a new strategic plan for the district. One of the goals in the strategic plan called for the review and revision of the technology plan document. By the time the technology planning committee assembled again, many changes had taken place in the district. The new high school had opened, the junior high had become a middle school and moved into the former high school, and a sixth grade facility opened in the old junior high building as Prairie View Junior Middle School.

In the fall of 2001, the technology committee was reconvened as the District Technology Advisory Group. A new building was built to house Orion Alternative Middle/High School in 1998 and in the fall of 2001, Century Park Learning Center was opened.

In the fall of 2003, the technology committee worked to establish necessary technology changes. The changes included replacing the Macintosh computers that were seven to eight years old, improving the Network Infrastructure between buildings, expanding the wireless access and distance learning technologies to the entire district. The initial bond proposal failed with a surprising 2:1 ratio. District leaders polled the community to determine the path the public would support. During this time, the technology committee had revised the K-12 Technology Standards. The School Board adopted the standards in December of 2003.

In the winter of 2004, the School Board approved expenditures for replacing the elementary classroom and computer lab workstations with Windows computers, to supply the buildings with workstations that could support the K-12 Technology Standards as their rationale. In the spring of 2004, the School Board approved the purchase of additional Windows computers for the middle school, high school, and elementary buildings to continue the focus of the K-12 Standards. While this has not replaced all of the old computers, it is a step in that direction.

Scope and Summary

The 1998 revision of the technology plan reflected the progress that had taken place in the district in the area of technology. The 1993 enhancement millage, the funds from the 1994 bond issue, Durant Bond proceeds, and the TTI Program enabled the purchase of infrastructure, computers, and other media and technologies. The 1998 plan focused on teaching and learning with technology, infusing media and technology into all aspects of the curriculum, and professional development (Status Reports follow).

One of the outcomes of the 2002 Technology Plan was the development of a comprehensive technology curriculum that aligned with current state and national standards. Another goal for full implementation of the revised Technology Plan was to ask the voters for a technology bond. In 2003, a bond was put before the voters that included a new 6th grade building and renovations to various other buildings and grounds. Part of the total package included technology enhancements and replacements. The community voted down the proposal and the Technology Committee went back to the drawing board. After revising the bond package, conducting numerous community studies and town meetings, and evaluating education efforts, a second bond was offered to voters in June 2004. Technology was put on the ballot as a separate voting item, and it was narrowly defeated by less than 50 votes.

At this point, our district has refocused to deal with facilities and technology issues within current funded budgets. We have put into place a plan that calls for slow, but steady improvements to the technology while still operating within our budgets. We have identified what the *21st Century Classroom* should look like.

Since the defeat of both bond proposals, the Grandville Board of Education voted on a three-year plan to replace 90% of the then current workstations and printers. The last year of the plan also called for the replacement of the network backbone – upgrading it to 1 GB and 100 mb to the desktop.

Overall, the Board voted to spend over \$700,000 during the three (3) years. We completed the last of the three (3) years in 2005.

Vision

The Grandville Public School District believes that there is a dual need for schools to use technology education.

First, in order for students to become effective citizens in an information/communication society, schools must teach about the role of technology that is prevalent in schools, homes, and the workplace. Students must acquire basic knowledge concerning technology, its appropriate applications, its ethical use, and its impact upon society.

Second, schools are responsible for providing effective and efficient means to facilitate learning, and preparing students for the world of work. By integrating technology into curriculum and instruction, teachers are able to facilitate technology as a device to enhance the teaching and learning process for every student in every classroom. Technical support and training must be provided to insure the effective use of technology in the instructional process, and for all staff to employ technology for management, instruction, and productivity.

The Grandville Public School District strives to provide appropriate support and experiences for all students and staff in the development of technology skills. Technology is an essential component in life-long learning.

Goals

Curriculum

1. Our Belief: We believe that instructional technology must be integrated into the instructional process.
 1.1. Goal: To continually identify and correlate to the district K-12 Technology Standards the media, telecommunications, and resources to improve teaching and learning. ([Curriculum Integration](#))
 1.1.1. Objective: To support the K-12 Curriculum through the K-12 Technology Standards.

Step #	Action Step:	Notes:
1	Annually give teachers a copy of the Technology Standards they are responsible for teaching	See Appendix A for K-12 Technology Standards
2	Continually monitor and modify our current K-12 Technology Standards based on changes to the state or national standards document	Grandville's K-12 Technology Standards document was approved by the Board in December 2003 and is continually reviewed to be aligned with the State standards.
3	Review grade level standards and course descriptions to ensure the identified technology skills are taught	
4	Identify and purchase standardized media and resources to attain curricular objectives	

- 1.1.2. Objective: To identify interdisciplinary applications of media and technology within the structure of the K-12 curriculum committees.

Step #	Action Step:	Notes:
1	Choose standardized instructional practices in all grades K-6 that support the Technology Standards	
2	Choose standardized instructional practices by department in grades 7-12 that support the Technology Standards	
3	Develop lesson plans and activities which meet the standards of overlapping curricular areas	
4	Develop and administer 8 th technology exam testing computer fluency of all 8 th grade students by the end of 8 th grade as indicated by the State Technology Literacy Test	

1.2. Goal: To integrate technology into the curriculum and instruction for the purpose of improving student academic achievement. (Student Achievement)

1.2.1. Objective: To identify tools that effectively assesses student academic achievement.

Step #	Action Step:	Notes:
1	Choose standardized assessments in all grades K-6 that support the Technology Standards	
2	Choose standardized assessments by department in grades 7-12 that support the Technology Standards	
3	Assess the integration of instructional technology throughout the curriculum	
4	Utilize results of Measure of Academic Progress (MAP) test that are used to make instructional decisions	Tests taken via computers and disseminated to teachers within 24 hours in electronic form.

1.2.2. Objective: To encourage curriculum updates to include quality technology resources.

Step #	Action Step:	Notes:
1	Have subject area committees assess the technology available when evaluating new resource purchases from publishers	

1.3. Goal: To deliver specialized or rigorous courses and curriculum through the use of technology. (Technology Delivery)

1.3.1. Objective: To deliver specialized or rigorous courses and curriculum through the use of technology where needed.

Step #	Action Step:	Notes:
1	Provide distance learning/virtual field trips at the elementary level	
2	Provide access to on-line courses at Michigan Virtual High School and Brigham Young University or other on-line courses as needed for students	
3	Continue to encourage the use of PDAs for textbook and software applications. For example, Ipaq at the Middle School, Enchanted Learning site, Career Cruising for School-to-Career software, Discourse Software, etc.	

1.4. Goal: To promote parental involvement and to increase communication with parents and community.(Parental Communications and Community Relations)

1.4.1. Objective: To increase parental awareness of student progress and participation through electronic communication.

Step #	Action Step:	Notes:
1	Promote links to staff/department blogs through new campus Edublog site (http://gpsblogs.org)	
2	Continue communicating grades, student accounting, etc. via email, the internet, Infinite Campus portal and food service software	

1.4.2. Objective: To improve the district WWW site, voice mail, and email to provide the community with information concerning school programs, activities and resources.

Step #	Action Step:	Notes:
1	Continue maintaining and assessing for improvement the district website	
2	Post a link to the district technology plan on the web page	
3	Continue communication through the use of Blog pages by staff members	
4	Publish an annual article in the Communicator and in building newsletters regarding information available on the District Website	

1.4.3. Objective: To improve communication between the Technology Department, building administrators, media specialists, teachers, and program directors.

Step #	Action Step:	Notes:
1	Notify staff of technology problems via email or voice mail	
2	Establish regular work/business sessions for the Technology Advisory Group to facilitate communication and resolve issues	

1.4.4. Objective: To provide extended learning opportunities for the community.

Step #	Action Step:	Notes:
1	Continue to offer senior citizen technology classes through Community Education and TRI-ACE	

1.4.5. Objective: To maintain and increase collaboration with area businesses to enhance technology experiences for students and staff.

Step #	Action Step:	Notes:
1	Maintain Robotics Team sponsorship	
2	Maintain Lego League sponsorship	
3	Seek additional collaboration opportunities	

1.5. Goal: Collaborated with KISD on financial software, Data Warehouse, and joint purchasing of hardware/software, etc.(Collaboration)

Step #	Action Step:	Notes:
1	Collaboration services for Adult Education are referred to Jenison Public Schools per the TriACE program which offers these services	

Professional Development

2. Our Belief: We believe that training in the use of media and technology must be an ongoing process for all staff.

2.1. Goal: To provide all staff with continuous opportunities for training in the use of media and technology.(Professional Development)

2.1.1. Objective: To provide mandatory training, during the school year, for all media and technologies that are required by the curriculum or management needs.

Step #	Action Step:	Notes:
1	Provide trainer(s)	
2	Provide means to budget for substitutes	
3	Dedicate in-service days for technology	
4	Establish grade level/subject area specific training	
5	Establish district-wide Professional Development time	
6	Develop a comprehensive budget to implement training needs for Professional Development	

2.1.2. Objective: To provide media and technology training for all staff.

Step #	Action Step:	Notes:
1	Identify, adopt, basic skills required per National Education Technology Standards (NETS) for teachers and administrators	
2	Require mandatory training for all new staff in the use of standardized tools	
3	Require technology related goals in non-tenured teacher Individual Development Plans (IDP)	
4	Offer technology related training within the Professional Development program during fall, spring, and summer of every year utilizing ISD resources	
5	Provide opportunities for training of Technology Department staff to ensure quality service	

2.1.3. Objective: To provide staff development in the integration of media and technology into the curriculum.

Step #	Action Step:	Notes:
1	Provide trainer(s)	
2	Develop lesson plans for grade level/subject area integration	
3	Provide team teaching opportunities	
4	Provide after school and summer training	

2.2. Goal: Provide a variety of resources that support the varying needs of Professional Development in technology.

(Supporting Resources)

2.2.1. Objective: To provide supporting resources that will be available to ensure successful and effective uses of technology for all staff.

Step #	Action Step:	Notes:
1	Promote technology classes provided by KISD	
2	Encourage use of the video lending library at REMC-8 and video clips from UnitedStreaming.com	
3	Continue to post updated district technology policies on the web	
4	Update and maintain listings on a webpage where to find technology manuals	

Infrastructure, Hardware, Technical Support and Software

3. Our Belief: We believe that each student and staff member must have access to technology and technology support that is current with curriculum, irrespective of assigned duties, grade level, content area, teaching style, learning style, or capability.

3.1. Goal: To provide, maintain and upgrade equipment needed to integrate media and technology into the curriculum.(Infrastructure Needs/Technical Specification, and Design)

3.1.1. Objective: To maintain a process for the evaluation, selection, approval and implementation of new media and technology into the curriculum.

Step #	Action Step:	Notes:
1	Identify the characteristics of quality media, software, and resources and develop a format for their evaluation	
2	Develop a process for the purchase of standardized media, software and resources	
3	Apply the criteria and selection process to the purchase of building and district level media, software and resources	

3.1.2. Objective: To maintain and upgrade existing basic equipment.

Step #	Action Step:	Notes:
1	Recommend to the Board a procedure of replacing and updating technology	
2	Maintain an inventory of existing equipment and supporting resources	
3	Establish a process for replacing and updating equipment	
4	Maintain technical support services through technology <i>Help Desk</i> /technician dispatch procedures	

3.1.3. Objective: To monitor network bandwidth utilization/optimization.

Step #	Action Step:	Notes:
1	Continue to monitor network for changes in utilization/optimization	

3.1.4. Objective: To continue the ongoing purchase of basic equipment.

Step #	Action Step:	Notes:
1	Replace overhead projectors as needed	
2	Continue to provide data projectors	
3	Provide student access to adequate copiers in the Library Media Centers to support the curriculum	
4	Provide additional technologies as required by the curriculum (i.e., calculators, digital cameras, networked color laser printers)	
5	Develop a process for the purchasing of technology hardware	

3.1.5. Objective: To maintain telephone access (cellular where applicable) and voice mail in every classroom and office, including the services necessary to activate these capabilities.

Step #	Action Step:	Notes:
1	Provide staff development for Voice Mail	
2	Integrate phone/PA system	
3	Investigate new telecommunication tools that are available	

3.2. Goal: To increase access to technology for all students and all teachers. (Increase Access)

3.2.1. Objective: To upgrade and maintain the capabilities of the district-wide network.

Step #	Action Step:	Notes:
1	Upgrade to a 1 GB backbone and 100 mb to the desktop	
2	Establish a plan for ongoing maintenance and upgrade	
3	Expand wireless connectivity to include all rooms in all buildings	

3.2.2. Objective: To establish a distance learning connection to all buildings.

Step #	Action Step:	Notes:
1	Support and enhance curriculum through distance learning opportunities	
2	Support and enhance district professional development through distance learning and online opportunities	
3	Develop an implementation plan	
4	Explore district CATV connection for district-wide broadcast	

3.2.3. Objective: To sustain supplemental equipment that has proven to enhance the curriculum.

Step #	Action Step:	Notes:
1	Develop a policy for the continued use of equipment after it no longer works in the original manner (laptop batteries, cameras, peripherals, handhelds, etc.)	
2	Maintain subscriptions to on-line services that are effectively utilized by teachers and Media Specialists	

3.2.4. Objective: To provide a sufficient number of networked stations for instructional use to accommodate a ratio of one per 4.5 students designating one (1) computer as a dedicated teacher work station (allowing for a minimum of one (1) lab per building).

Step #	Action Step:	Notes:
1	Review Best Practices Standards for effective computer ratios	
2	Maintain an inventory of existing computers	
3	Develop a plan to budget, purchase, distribute and maintain computers	
4	Identify and purchase new technologies as they become available	

3.2.5. Objective: To encourage the use of Assistive Technology throughout the district.

Step #	Action Step:	Notes:
1	Review textbook series currently used in the curriculum for technology related products	
2	Develop a plan to budget, purchase, distribute, and maintain assistive technologies	
3	Identify and purchase new assistive technologies as they become available	

Funding and Budget

4. Our Belief: We believe that funding for instructional technology must be an integral part of the annual school district budget.

4.1. Goal: To provide appropriate funding to support the goals and objectives of the Technology Plan. (Budgeting and Timetable)

4.1.1. Objective: To allocate funding for the implementation of this Technology Plan.

Step #	Action Step:	Notes:
1	Review budgetary line items that deal with media and technology in the existing budgets throughout the district	
2	Allocate funds for technology staffing as recommended	
3	Allocate funds for maintenance, upgrades and replacement of technology	
4	Continue appropriate funding for library media center technology and equipment	
5	Provide appropriate continued funding for staff development in technology	

4.1.2. Objective: To develop a time line for the goals and objectives of this Technology Plan.

Category:	Description:	Notes:
Curriculum: Student Achievement	Review and update drafts of assessments	
Curriculum: Student Achievement	Work toward full implementation of assessments	
Professional Development: Professional Development	Continued offerings of various professional development offerings	
Infrastructure, Hardware, Technical Support and Software: Infrastructure Needs/Technical Specifications, and Design	Plan for continuous upgrading of the interoperability of equipment	

4.2. Goal: Coordinate state and local resources to implement activities and acquisitions prescribed in the Technology Plan. (Coordination of Resources)

4.2.1. Objective: To apply for appropriate grants and other technology funding sources.

Step #	Action Step:	Notes:
1	Apply annually for Universal Service Fund	
2	Apply for appropriate grants to obtain additional funds <ul style="list-style-type: none"> • MACUL Grants • Grandville Education Foundation • Binda Foundation • Best Buy 	
3	Utilize professional grant writer through KISD to assist with writing grants	

Curriculum

Curriculum Integration and Accessibility

To continually identify and correlate to the district K-12 Technology Standards the media, telecommunications, and resources to improve teaching and learning.

GPS K-12 Technology curriculum correlates to the Michigan Educational Technology Standards (METS) and ISTE NETS and is utilized by staff to integrate technology into curriculum.

The District Technology Advisory Group periodically meets to review and update technology standards to address the needs of our students based on best practices in curriculum integration.

Student Achievement

To integrate technology into the curriculum and instruction for the purpose of improving student academic achievement.

Technology Delivery

To deliver specialized or rigorous courses and curriculum through the use of technology.

Grandville Public Schools provides students and staff access to the following technology:

Internet access to all classrooms and buildings.

Wireless access including building wireless labs.

Interactive video via United Streaming.

Use of MOODLE provides teachers and students a blended learning experience.

Blogging allows teachers and groups to individualize and present updated data to students, parents, and community.

Online professional development resource "Atomic Learning"

Online courses including Michigan LearnPort, "Atomic Learning", and intermediate school district for staff online class opportunities.

Distance learning resources are utilized by teachers and students to enhance instruction with online activities, email, learning management systems, online textbooks, and MEAP review.

Infinite Campus, student management software, utilized by teachers to update student assignments,

homework, grades, and classroom information available for accessibility by students and parents.

Online courses including Michigan Virtual High School, Brigham Young University, Kent Intermediate School District, and NovaNet.

Research and Information Fluency – Students apply digital tools to gather, evaluate, and use information. Students: a. plan strategies to guide inquiry; b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media; c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks; d. process data and report results.

Online access to our textbooks.

Data warehouse – Kent Intermediate School District.

District Share Drive – facilitates communication and sharing of materials among grade levels and buildings (collaboration).

MUNIS

A new financial and personnel (including payroll) management application, Munis, was installed district-wide the summer of 2007, with full implementation beginning the fall of 2007. This new software program allows for easier accessibility, creation/approval of district business procedures, and the potential availability of online forms. The conversion has been a cooperative effort, with both the Kent Intermediate School District and Comstock Park Public Schools involved. With the possibility of more local and intermediate school districts joining, this project has the ability to be an efficient collaboration. We believe this is an excellent example of aligning with the State of Michigan directives on cooperation, and will improve reporting and service capabilities in the future.

Infinite Campus

The fall of 2006, a new student management system, Infinite Campus, was implemented district-wide. Extensive staff training was provided over the summer months prior to implementation. As a 100% web-based application, execution eliminates the need for additional software installations on workstations.

Infinite Campus, Campus Portal, is an additional web-based parent tool (Parent Portal) giving parents the capability to view their student's school information (schedule, assignments, grades, attendance, etc.) via the web for all of the district buildings. E-mail hyperlinks facilitate communication with classroom teachers.

Parental Communications and Community Relations

Grandville Public Schools use a variety of media to communicate with our parents and community promoting parental involvement, as well as providing increased communication with parents and community.

District website continually provides current and pertinent information. Each building and/or department has a facilitator to update and monitor information posted. Buildings and departments inform the community to access this resource through building publications and regular meetings.

The Communicator, a district publication, is published and distributed to all homes and businesses in Grandville School District.

District and building reports/publications are posted on our district website including Annual Reports, Strategic Goals, Technology Plan, building newsletters, calendars, performances, etc. For those not having access to the Internet, printed copies of such material is available upon request.

School buildings disseminate and post monthly and/or bi-monthly building newsletters, including current and upcoming building and district-wide activities/events.

Infinite Campus, student management software, is utilized by teachers to update student assignments, homework, grades and classroom information available for accessibility by students and parents.

Blogging allows teachers and district groups/committees to individualize and present updated data to students, parents, and community.

Superintendent has several advisory groups he meets with on a regular basis including Employee Leadership Team (ELT) comprised of employees representing all district employment groups, Parent Advisory Group, comprised of officers representing building's PTC groups, Chamber of Commerce, and Rotary. Additional committees frequented are Long-term Facilities, K-12 Curriculum Council, as well as various information, and curriculum-based meetings.

Collaboration

Grandville Public Schools collaborates with Hudsonville and Jenison Public Schools through TRI-ACE to provide additional technology class instruction. TRI-ACE provides adult evening classes for community members scheduled at facilities in all three school districts.

In conjunction with Kent Intermediate School District and Comstock Park Public Schools, we have implemented MUNIS, a new financial and human resources software application, working with KISD on wide-area WAN, ISP (Internet Service Provider), Data Warehouse, and the possibility of standardizing on a single (SMS) Student Management System for the county.

Professional Development



Grandville Public Schools

ELEMENTARY PROFESSIONAL DEVELOPMENT SCHEDULE AUGUST 2007

	Tuesday, August 28	Wednesday, August 29	Thursday, August 30 District PD Day			
Grade Level	Y5/K - 6	Y5/K - 6	Y5/K - 1	Grades 2 and 3	Grade 4	Grades 5 and 6
Location	High School and Buildings	Buildings	High School Project Room 280	Century Park	Century Park	8:30 am Public Library 10:15 am Century Park
A.M. Session 8:30-11:30 am	District Kick-off High School 8:30-11:30 am	Building Initiative Day and Building Staff Meetings	8:30-11:30 am Early Intervention with OAISD personnel	8:30-10:25 am Writing Instruction w/Deb Smith Room 135/136	8:30-10:25 am Using MEAP and MAP Data w/KISD staff Media Center	8:30-9:55 am Public Library Resources session
				10:35-11:30 am Using MEAP and MAP Data w/KISD staff Media Center	10:35-11:30 am Writing Instruction w/Deb Smith Room 135/136	Century Park 10:15-11:30 am Infinite Campus Gradebook; Lesson Planner Intermediate Computer Lab
P.M. Session 12:30-3:30 pm	Work in classrooms		12:30-1:55 pm DIBELS	12:30-1:25 pm Using MEAP and MAP Data w/KISD staff Media Center	12:30-1:25 pm Writing Instruction w/Deb Smith Room 135/136	12:30-1:25 pm Grade Level Meeting 5 th Grade - Room 230 6 th Grade - Room 225
			2:05-3:30 pm Grade Level Meeting	1:35-2:30 pm Technology Intermediate Computer Lab 2:30-3:30 pm Grade Level Meeting 2 nd Grade - Room 141 3 rd Grade - Room 131	1:35-2:30 pm Grade Level Meeting Room 236 2:30-3:30 pm Technology Intermediate Computer Lab	1:35-3:30 pm Writing Instruction w/Deb Smith Room 135/136

Grandville Public Schools is dedicated to providing the highest quality technology resources available. We have taken a big step in integrating technology into our classrooms by subscribing to Atomic Learning, an online resource for software training. The following flyer contains the user ID and password that staff will need to access this online tutorial resource.

Atomic Learning recently correlated our full tutorial library, Lesson Accelerators and other resources to the ISTE NETS-S framework to assist educators in fulfilling tough state assessment standards.

The National Educational Technology Standards (NETS) were developed by the International Society for Technology in Education (ISTE) as national standards for technology education. The standards are the most recognized set of technology standards in use by teachers and educational leaders around the world today.

Got a technology question?

Just ask AL!



AL stands for Atomic Learning, our online resource for software training.

Our school district has taken a big step forward in incorporating technology into our classrooms. We are dedicated to providing the highest quality technology resources available. That is why we are making Atomic Learning available to staff. It's convenient, affordable and available 24 hours a day, 7 days a week, all year long.

Atomic Learning provides a large, online library of short, easy-to-understand tutorials. AL's innovative approach to software training focuses on answering the common questions encountered when learning and using software. How do you cut and paste in Word? How do you crop photos using Photoshop Elements? Just ask AL.

1. Go to www.atomiclearning.com
2. Enter the following user name and password:
User Name: xxxxxxxx
Password: xxxxxxxx
3. Type your question in the search box and click on **Go!**
4. An answer will be provided in the form of a one to three-minute tutorial movie. The movie will walk you through all the steps needed to complete the task

Our subscription to Atomic Learning also includes closed-captioning on many tutorials, Spanish language tutorials, Teacher2Teacher curriculum materials, and online workshops on mail merge, newsletter design, charting, and more.

Have a question about technology?
Just ask AL.



Infrastructure, Hardware, Technical Support and Software

Help Desk/Technology Dispatch Procedure

Technology Department Remote Access Procedure

Technicians do not gain remote access to a workstation without a request for support. Prior to using remote access to assist with technical support, the technician is conversing or has communicated with staff requesting assistance as they initiate control of the workstation. If the request is submitted through email, the technician will only start remote access after confirming with the end user that they will be doing so.

After 4:00 p.m. and on non-school days, technicians may need to use remote access to complete service requests, install software, and perform updates; this could be done without prior confirmation. If someone is actively using such workstation, technology dispatch will exit promptly.

District Website Update

Grandville Public Schools launched its new Web site, utilizing the same URL address as the former site, in October of 2007. The project incorporated a new content management system as well as a total redesign of the style sheets throughout the site.

The content management system was customized to allow web editors in each building and major departments to revise the content pieces on specific pages. Uniformity of the site is possible even with several web editors through the use of consistent fonts, colors, and style sheets. The site's design emphasizes student and building photos paired with brief news stories. Detailed PDF files are available for the user to download. Information, an interactive map, and navigation tools on the site were designed for parents, students, and members of the community. Staff forms and resources have been relocated to a shared drive on the network.

Staff training for Web site editors was delivered individually and in small groups.

Current District Technology Status

District Technology Status

	Total	Equipment Age		Notes
	Current	1-3 Years	4+ years old	
Computers				
Windows OS	1499	734	765	Does not include all TTI
File Servers	30	30	0	
Audio-Visual Equipment				
TV	415	15	400	
Cameras	0	0	0	
Video	16	6	10	Does not include all TTI
Digital-Still	20+			Does not include all TTI
DVD/VCR	330	10	320	
Sub-channel video broadcast cart	12	0	12	Allows live or taped broadcast within building from any building location
Laser Disc Player	10	0	10	
Peripherals				
Scanners	36+	0	36+	Does not include all TTI
Projectors				
Overhead	360	8	352	
Video/Data	50	50	0	Does not include all TTI
Printers				
Laser	140	90	50	Does not include all TTI
Multi-Function (copier/printer/fax/scanner)				
	Current Status			Software Age
Software				
Elementary	Many titles are used for math, science, presentations, remedial work, reading, language arts, productivity, etc.			Less than one year
Secondary	Titles cover core curriculum areas as well as CAD, AV production, art, productivity software, business technology			Software age varies from title to title. Some buildings have kept up with current versions
District / Administration	Library automation software, food service, transportation, district financials, student accounting, technology <i>Help Desk</i> software, on-line research software (all buildings)			
	Current Status			Notes
Telecommunications				
Local/Long Distance	3 PRI, 28 POTS lines for 911 and elevators			
Cellular				
Internet Access	9 MB fiber connection to ISP			
	Current Totals			Notes
	Total	Breakdown		
Staffing				
Staff Total	728			
Instructional		571		
Media Specialist		3		2 secondary, 1 elementary
Library Media Supervisors (Para-pro)		11		
Technological Support	4			
Supervisor of Technology		.5		
Technicians		1.5		1 high school and elementary, 1 middle school and elementary - Average 1:800 computer ratio
Network Administrator		.5		
Phone/Hardware Technician		.5		Avaya Definity and Intuity Audix
Infinite Campus Software Support		1		

District Filtering Efforts

Grandville's Filtering Solution and Grandville's Virus Blocking

To clear any confusion on what is filtered in the district and what is considered filtered for viruses, there are two aspects to be considered:

Content Filtering of Web Activity and Computer Use

In compliance with the Children's Internet Protection Act, (CIPA), Grandville is required to provide: Technology Protection Measure

Technology Protection Measure is a specific technology that blocks or filters Internet access. It must protect against access by adults and minors to visual depictions that are obscene, child pornography, or - with respect to use of computers with Internet access by minors - harmful to minors. It may be disabled for adults engaged in bona fide research or other lawful purposes. For schools, the policy must also include monitoring the online activities of minors.

Internet Safety Policy

The Internet Safety Policy must address the following issues: access by minors to inappropriate matter on the Internet and World Wide Web; the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; unauthorized access, including so-called "hacking," and other unlawful activities by minors online; unauthorized disclosure, use, and dissemination of personal information regarding minors; and measures designed to restrict minors' access to materials harmful to minors.

Virus Filtering in Email and on Computers

GWAVA (GroupWise Anti-Virus Agent) and Sophos are two software programs that scan GroupWise email for viruses and inappropriate words. The word list can be edited to include or exclude words, if needed.

In most cases, the sender and the recipient will receive an email informing them that an email has been blocked. This is not every case and is dependent on the reason for blocking. Emails with Word, Excel, Acrobat Reader (.pdf) attachments are allowed because they can be scanned for viruses. Since viruses are now found in music, chatting, pictures, programs, and many other formats, most of these are blocked to protect our network.

As a reminder to staff, they are asked not to open any suspicious email, from someone they do not know or if it includes attachments they were not expecting. This would include any email from Microsoft claiming to be an update. Microsoft does not deliver updates through email. If they are not sure, staff is instructed to call the technology *help desk* at xxxx, and not to forward the message to anyone.

Sophos Anti-virus checks all files as they are accessed on servers and Windows workstations. At times when there is a new virus alert, the level of scanning will be increased to check files that have not been accessed recently. When this level of security is increased, the network will respond slower. When the threat has lessened, we can return to scanning files only as they are accessed.

Grandville Public Schools adheres to monitoring and taking steps to continually provide technology protection for all Internet-enabled computers whether used by minors/students or adults/staff on a networked basis. Currently we use 8e6 XSTOP R3000IR for Internet filtering which gives us the capability to filter by username. Filtering rules for teachers are geared to be more flexible than the standards established for students.

We use Barracuda Networks Spam Firewall for email filtering of staff email. Students receive a Gaggle.net email account at the request of a teacher, which is an offsite email system with content filtering.

Both of these filtering appliances are used to enforce CIPA compliance and with the above-mentioned policies, Grandville Public Schools meets the guidelines per the verbiage established within the CIPA Compliance Checklist.

Essential Conditions

necessary conditions to effectively leverage technology for learning

Shared Vision

proactive leadership in developing a shared vision for educational technology among school personnel, parents, students, and the community.

Implementation Planning

a systemic plan aligned with a shared vision for school effectiveness and student learning through the infusion of technology and digital learning resources.

Consistent and Adequate Funding

on-going funding to support technology infrastructure, personnel, digital resources, and staff development.

Skilled Personnel

educators and support staff skilled in the use of technology appropriate for their job responsibilities.

Curriculum Framework

content standards and related digital curriculum resources.

Assessment and Evaluation

continuous assessment, both of learning and for learning, and evaluation of the use of technology and digital resources.

Technical Support

consistent and reliable assistance for maintaining, renewing, and using technology.

Ongoing Professional Learning

technology-related professional learning plans and opportunities with dedicated time to practice and share ideas.

Support Policies

policies, financial plans, accountability measures, and incentive structures to support the use of technology in learning and in district and school operations.

Engaged Communities

partnerships and collaboration within the community to support and fund the use of technology and digital resources.

Supportive External Context

policies and initiatives at the national, regional, and local levels to support schools in the effective implementation of technology for achieving curriculum and technology standards.

Student-Centered Learning

use of technology to facilitate engaging approaches to learning.

Equitable Access

robust and reliable access to current and emerging technologies, digital resources, and connectivity for all students, teachers, staff, and school leaders.

District Assistive Technology – Increased Access Initiatives

Where We Are/Where We Should Be...

What We Are Currently Using:

An email survey was sent out to district special education staff asking what assistive technology devices they currently use in their programs, and what they would like to see Grandville move toward in the future. The following is a summary of the results:

Ancillary Staff (Speech Pathologists and Occupational Therapists):

1. Low Tech is the primary focus
 - a. 3 x 5 cards for articulation therapy, letter/sounds, sequencing
 - b. Sticky notes for segmenting sounds in words
2. Mid Tech
 - a. Boardmaker software for communication boards, schedules, calendars, etc.
3. High Tech
 - a. Dynavox - speaking communication device
 - b. Palmtop - speaking communication device
 - c. Mind Reading software
 - d. Journey to the Wild Divine software (fluency work)
4. Comments: The entire department uses this technology with such regularity that we do not consider it as assistive tech.

Elementary Level (Resource and Self-Contained Rooms):

1. Low Tech - the majority of Assistive Tech is here...
 - a. **Visual Aides** - highlighters, highlighter tape, EZC readers, enlarged text, note cards w/steps, graphic organizers, fact charts, mask overlays, color-coding material, Wiki Stiks
 - b. **Organizational/Attention** - Timers, Move'N Sit cushions, portable study carols, sound-reducing headphones, tabs for easy access to text components, paper clips for page fluffing
 - c. **Writing Aides** - adapted pencils, pencil grips, slant boards, little white boards, hand weight gloves, pencil weights,
 - d. **Reading/Curricular Aides** - EZC readers, sticky notes, Touch Point strips, Touch Point money
2. Mid Tech
 - a. **Writing Aides** - Tape recorders for kids w/ poor fine motor on extended responses, Large key calculators, Alphasmart, Franklin Spellers
 - b. **Adaptive equipment for kids with physical disabilities**
 - c. **Language/Curricular Aides** - Boardmaker software, moveable clocks (math), PowerPoint for instruction and review (i.e. Jeopardy Game)
3. High Tech
 - a. eText (on CD, MP3, social studies/science/math online), scanned in text (social studies, science)
 - b. Premier software
 - c. Braille-writer notes

Middle School:

1. Low Tech
 - a. EZC readers, highlighting tape, 3 x 5 cards, cue cards, colored transparencies, sticky notes, note cards, little white boards
2. Mid Tech
 - a. Alpha Smarts, audio books, online texts, Premier software

Where the ISD would like us to go...

Countywide trends:

1. Accessible text - with current legislation, publishers are required to provide alternate forms of text for accessibility reasons.
 - a. In our district, the Curriculum Department has recently purchased Prentice Hall Social Studies series (6th grade) with student online CD packs, which provides accessibility not only at school, but also with an online password for home access.
 - b. Our science curriculum with Prentice Hall also offers this same online access.
 - c. eText access through Premier software, Kent District Library, or other sources.
building library collections of audio books

Grandville staff suggestions:

1. Maybe once a year professional development refresher (possibly during opening PD days in August) on what we have available and examples of how and when to use Assistive Technology. Sometimes we just forget what we have and simple ways to use different items.
have held AT "Playgrounds" in the past with good turnout
2. Staff would be interested in the following AT for classroom use:
 - easy to use software for classroom computers that support curriculum
 - touch screens
 - easy to use computer mouse
 - Big Macs - communication devices
 - anything else that might be out there for the little ones

Universal Design for Learning (UDL) is an educational approach to teaching, learning, and assessment, in which flexible strategies and tools are embedded into the curriculum during the planning process. Learning environments in which students can have access to a variety of learning solutions provide instant, seamless access and support across the curriculum for all students. Features essential to UDL are flexible methods of presenting the general education curriculum to meet the needs of diverse learners, and built in tools that promote equal access to learning to increase self-sufficiency, not just equal access to information.

In a time of greater student diversity, increased emphasis on standards and accountability challenges teachers to help all students achieve. New insights into the learning brain shed light on learner differences and effective uses of technology. UDL seizes the opportunity brought by rapidly evolving communication technologies to create flexible methods and materials that can reach diverse learners. Instilling flexibility into methods and materials maximizes learning opportunities not only for students with identified disabilities, but also for all students.

UDL is not "just one more thing;" it is an integral component of improving student learning, compatible with other approaches to education reform.

The major components necessary to implement UDL at the local level within a district are technology infrastructure, administrative support, teacher training and support, redefined roles for special and regular education teachers, a new curriculum planning model, parent and community involvement, and creative funding. To be practical on a larger scale, UDL requires systemic changes in the following key arenas: policy, curriculum design, teacher training and preparation, consensus building, and parent involvement. Grandville Public Schools is committed to teaching every student in the digital age incorporating UDL principles.

Funding and Budget

Annual Technology Budgets for 2007-2012

GRANDVILLE PUBLIC SCHOOLS TECHNOLOGY BUDGET OPERATING AND CAPITAL					
Operating Budget	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Employee Costs					
Technical Staff	205,029	210,154	215,408	220,793	226,313
Instructional Support Staff	553,758	567,602	581,792	596,337	611,246
Telecommunications	68,898	70,621	72,386	74,196	76,051
Training	38,815	39,785	40,780	41,799	42,844
Maintenance/Contracted Services	114,234	117,090	120,017	123,018	126,093
License/Agreements, Software	145,166	148,795	152,515	156,328	160,236
Total Operating Budget	1,125,900	1,154,047	1,182,898	1,212,471	1,242,783
Capital Budget					
Designated for Technology	335,338	343,721	352,314	361,122	370,150
Total Capital Budget	335,338	343,721	352,314	361,122	370,150
Total Operating and Capital Budget	1,461,238	1,497,768	1,535,212	1,573,593	1,612,933

Coordination of Resources

Coordinate state and local resources to implement activities and acquisitions prescribed in the Technology Plan.

Status Report of Previous Technology Plans

The following indicates objectives and accomplished goals that were met in the 1994, 1996, 1998, 2002, and 2005 Technology Plans. Included are additional technology accomplishments that were made through either the millage, general fund, or other resources.

1994 Technology Plan	
<ul style="list-style-type: none"> Hiring of District Technology Coordinator Allocations of additional resources for building level technical support Buildings wired for voice, video and data Cable TV access in every classroom Electrical service upgraded where necessary District site licenses for productivity packages Computer labs installed in every building 	<ul style="list-style-type: none"> Computer and printer in approximately 75% of classrooms Computer purchase plan for district employees Scheduling and implementation of numerous training opportunities for staff Grandville Educational Credits (GEC) established for completion of training sessions Automation of several of the media centers
1996 Technology Plan	
<ul style="list-style-type: none"> TV, VCR, multi-media workstation, and printer in each classroom Secondary multi-media work stations Technology access for special and traveling teachers TV monitors for video distribution systems Hubs for computer networks Secondary Novell and ICLAS network upgraded Digital scanner and digital camera in every building Three middle school labs: Drop-in, Computer Applications, Media Center Video/data projection units for each building Zip drives in each building for data management 	<ul style="list-style-type: none"> Eleven high school computer labs that include: Drop-in, Drafting/Algebra, Business Education, Multi-media, Technology Education, Journalism, Art, Media Center and Energy Lab Phones in all high school classrooms with access to voicemail Laser disc players in all buildings Wide Area Network (WAN) for email, Internet and data communications Video, voice, data infrastructure for new high school Video/data projection units (3) to be shared by buildings
1998 Technology Plan	
<ul style="list-style-type: none"> Upgraded Wide Area Network to fiber between buildings Computer virus protection software for all buildings Multi-media, productivity, and subject specific software across grade levels Grading software for grades 4-12 Remote email access for traveling staff Large capacity phone switch to support district phone needs Phones in all classrooms Improved district-wide internet connectivity Internet security hardware and software World Wide Web Site Technology Department restructured Staff development programs Access to district email from home for staff 1998 global email access to staff 	<ul style="list-style-type: none"> Hardware network upgrade WinSchool adoption and implementing K-12 lesson plans integrating technology available on website Wireless laptops at Century Park Learning Center Hand-held Wireless Program at Middle School Anti-Virus update Governor's Teacher Technology Initiative (TTI) Program Athletic Technology Additions (swimming and track) Robotics Club Electrathon Racing Club Lego League Club Lunchroom accounting software Transportation Department software Audiovisual product at high school and middle school CBL equipment in the high school science rooms Computerized lighting at the auditorium

2002 Technology Plan

K-12 District Standards adopted
 Assistive Technologies Committee established
 Continued Professional Development classes in the area of Technology Integration
 Established a large resource library for staff Professional Development, such as website training materials, policies, etc.
 Decreased computer down time with Remote Control Access for technical support
 Implemented Help Desk software for technology support
 Textbook adoption requires supplemental technology resources
 Implemented Measures of Academic Progress assessments for all students 2nd - 10th grade
 Established two wireless labs for high school At-Risk students
 Implemented Leap Track for 2nd - 4th grade students at Century Park Learning Center
 School Finance software adopted for Business Services
 Technology Department restructured

PrinciPalm software pilot at high school
 Upgraded Auto Desk software
 Established Video Production Site in all buildings
 Implemented School Finance for Human Resources
 Installed Vision software for high school computer lab monitoring
 Started Moodle Pilot in fall of 2004
 Wireless laptops purchased for Orion Alternative Middle/High School
 Migrated all elementary media centers from Mac to Windows platform
 Replaced hubs with switches in all buildings
 Expanded HVAC remote monitoring network system to additional buildings
 Expanded imaging solution to include curriculum
 Upgraded elementary software to current Windows version
 Upgraded Making the Grade to current Windows version
 Held after school training on new Windows workstations installed in each building for Productivity software
 Established a procedure for purchasing technology items to promote standardization and track inventory

2005 Technology Plan

wireless access points at the high school
 laptops (mini-labs) at the high school
 upgrade CAD lab
 data projectors
 addition of hardware on our CISCO backbone to manage wireless access points district-wide
 Uninterrupted Power Supply (UPS) on EPN's (phones)
 implementation of Infinite Campus for the Student Database System, including parent and student portal access
 wireless access points at the middle school
 laptops at the middle school
 HiShare solution district-wide
 instructional peripherals (calculators, SmartBoards, data projectors, etc.)
 upgrade/replace video monitors district-wide
 network upgrade; backbone and software to audit and monitor
 purchased and installed a backup generator at the Administration Building that will run the entire MDF room in the event of a power outage or natural disaster
 Board Room renovation
 implementation of MUNIS for district financial and human resources application
 wireless access points at Cummings Elementary and West Elementary
 laptops (mini labs) at Cummings Elementary and West Elementary
 begin replacement schedule of tethered labs
 consideration of replacement/conversion to HDTV
 purchased license for access to Atomic Learning, *"Just ask AL!"* for staff technology software development
 productivity software - Microsoft Office

Orion Alternative High School, Administration Building were connected to the wireless network
 implemented wireless laptop carts at all buildings connected to the wireless network
 replaced Macintosh labs with Windows workstations
 network upgrade - addition of switches to support labs
 printers - every building has one color printer and at least two laser black and white printers
 upgraded labs at the high school and middle school with new workstations
 replaced classroom computers with new Windows workstations
 continued to upgrade the network by adding switches to the middle school in anticipation of the backbone upgrade
 purchased Microsoft Office licenses with new workstations
 replaced remaining Macintosh and old PC workstations
 network upgrade - gigabit connection to all buildings and most distribution closets; 100mb to most desktops
 software - old workstations upgraded to Windows XP and added Office XP - all our workstations are at the same point/version
 adding additional access points at the high school in blind/dark spots
 upgrading and attaching the wireless access points to the controller at Century Park Learning Center
 upgrading and attaching the wireless access points to the controller at Grand View Elementary
 attaching East Elementary wireless access points to the wireless controller
 adding distance learning capability and hardware at South Elementary
 replacing older teacher PC's with new machines - throughout the district

Into the Future. . .

2008 Technology Plan	
Server replacement/consolidation - create a SAN/NAS solution for centralized storage housed at Administration Building in MDF room.	Consolidate our server down to 10 to 15 servers using the SAN/NAS solution in conjunction with the virtual technologies available.
Replacement of Traditional Server Storage with Storage Area Networks/Network Attached Storage	
<p>Currently data is stored on individual servers that support various software applications and are dispersed across the District. Each campus (13) is provided with a Novell Netware file server to support network operations and individual home directories for document and data storage. Additionally, there are nine (9) Microsoft servers running individual applications for the District, including Renaissance Place, VersaTrans, and Infinite Campus. In total, 32 servers district-wide support the application systems and data needs of Grandville Public Schools.</p> <p>Implementation of a Storage Area Network (SAN) with Network Attached Storage (NAS) will create a shared data environment that will consolidate our server farmer from 32 servers down to ten (10) servers.</p>	
What do we want to do next?	
What the 21st Century Classroom at Grandville Public Schools Should Look Like. . .	
setup remaining elementary buildings with wireless completion of wireless access at the high school and middle school use some of the newer technology, like PSPs, in the classroom setting	create smart classrooms across the District – audio, video, projection increase the number of mobile carts in each of the buildings offer classes on blogging, podcasting for teachers to start using for high school online requirements
Ceiling Mounted Projectors	
<p>Everyone can see! It changes teaching and learning in our classrooms. The ceiling mounted projector serves as the central conduit through which instructional content flows. It allows content to be shared with all students in a large format, easily viewed by all students in the room. Many of the other technologies are displayed through the projector.</p>	
Contributions to the classroom: display of PowerPoint presentations display of student work eLearning courseware video from DVD/VCR/cable channels	streaming video from computers images from document camera live and virtual experiments digital photos images to interactive whiteboard (SmartBoard)
Equal Educational Opportunity!	
<p>Sound field classroom amplification is an important piece of the 21st Century classroom. Most instruction is still delivered visually and/or audibly. Those students who sit in the back of the room, or have hearing loss at any level, do not have the same educational advantage as those students who can hear clearly.</p>	
Contributions to the classroom: all students hear equally support for hearing impaired students increased phonic development for beginning readers less voice strain for teachers	increased language development for English Language Learners whole class distribution of video sound at lower volumes
Immediate Interactive Response!	
<p>Classroom response systems promote whole class participation. The system allows teachers and students to get instant feedback via their remote control device. Students are shown a question and they respond on their hand-held “clicker”. The responses are tallied by a computer and projected instantly.</p>	

<p>Contributions to the classroom: engages students in active participation immediate responses from every student students who normally remain silent can now answer every question</p>	<p>teachers can reinforce frequently missed skills stimulates classroom discussions tracks performance ongoing and immediate assessment</p>
<p>Give Eyes to Your Projector!</p>	
<p>Overhead projector to digital microscope. From pictures in a book, to a live animal, the document projector allows images to be magnified on the digital white board, and teachers and students to interact with those images.</p>	
<p>Contributions to the classroom: replaces overhead projector streaming video from computers images from document cameras display text images, magazine articles, newspapers instantly, on-the-fly</p>	<p>magnifies images and objects; from grasshoppers to flowers, from art work to student work capture and save the images including labels, annotations, and highlights from Tablet PC or interactive white board</p>
<p>Education on Demand!</p>	
<p>Video access through ceiling mounted projector. By adding a DVD/VCR to each classroom, educational video and district approved cable TV content can be viewed in large format so that all students can see and hear clearly.</p>	
<p>Contributions to the classroom: textbook supplemental materials on DVD sound for video classroom amplification</p>	<p>VCR portion controls cable TV channels allows DVD/VCR movies to show on classroom projector</p>
<p>Student Centered!</p>	
<p>Elementary and specialized programs would benefit from interactive white boards. Middle school and high school will have wireless slates that communicate with the projector and present collaborative information to the entire classroom.</p>	
<p>Contributions to the classroom: interactive with the teacher computer control of computer by touching white board draw, highlight, and circle text at the board</p>	<p>all images saved for absent students create interactive student games students can control PowerPoint and web pages for classroom presentations</p>
<p>Tool for Teaching Professionals</p>	
<p>We believe that the Tablet PC has many applications in the classroom, for both teachers and students. While we have some ideas as to how they can be used, our ideas are only the beginning of the creative uses that will follow once we put these in the hands of the creative teachers.</p>	
<p>Contributions to the classroom: classroom mobility use of hand-written text hand-written equations</p>	<p>mobile interaction with white board mobile control of PowerPoint - annotate text, laptop program, and work sample problems pass around for student demo work</p>
<p>Increased Flexibility and Access!</p>	
<p>Student access to computers can be increased by bringing the computers into the classroom, rather than marching the students down to a computer lab. Wireless laptops allow them to be used in a variety of ways, rather than just in straight rows, everyone facing the front. 24/7 accessibility. Get to home directories from outside the district.</p>	
<p>Contributions to the classroom increased student computer access less loss of instructional time students can work in collaborative groups</p>	<p>frees up computer lab space for classrooms introduces and trains students on laptops for eventual one-to-one laptop program</p>

Monitoring and Evaluation

Grandville Public Schools will conduct an annual review and update of the District Technology and Learning Implementation Plan.

The formal review process will occur yearly and will include:

- reading current research about the impact of technology on student learning;
- reviewing state and federal technology plans, goals and initiatives;
- analyzing district assessment data;
- discussing how learning has improved as a result of effectively integrating technology into the curriculum;
- reviewing professional development evaluation results;

- discussing hardware and software inventories and recommendations for purchase;
- and analyzing budget trends based on annual technology-related expenditures.

We will attempt to answer three basic questions:

- Is the technology being used effectively?
- What elements are missing?
- What needs to be added?

Though we must keep our focus on how well we have done in terms of the implementation, we cannot forget to keep our eye on tomorrow by allowing for new and promising practices and technologies. What we learn from our evaluation will be shared with all stakeholders by a variety of means. The following details the process for this.

DISTRICT-LEVEL TECHNOLOGY AND LEARNING IMPLEMENTATION PLAN REVIEW PROCESS		
Plan Review and Update Activities/Objectives	Person/Team Responsible	Purchases/Budget/Potential Funding Source (s)
Review the technology plan; identify progress and evaluate changes needed; contract with Plante Moran to analyze and improve effective use of technology by teachers, students, and staff; assess integration of technology within the curriculum using surveys and assessment tools designed within the curriculum development process; determine needs for in-servicing teachers in technology areas and develop appropriate content; utilize Atomic Learning for individual training on software applications; use of assessment tools (self-evaluation, performance assessments, project rubrics) to gather data on student use of technology.	Technology Advisory Group, building-level administrators for on-site survey and evaluations	\$4,000 - Title II, Part A, Title II, Part D, and General Fund Professional Development
	March 2008 - District-wide Technology audit was administered and completed via Plante Moran and Kent Intermediate School District (KISD) - <i>Report to be posted on district website</i>	Funding source of audit through Kent Intermediate School District (KISD)
Provide leadership for professional development; manage technology grants and budgets to reflect the needs of the students and staff K-12; current with developments and innovations in the field; maintain current inventories and adjust as plan outlines; provide service and repair to maintain equipment and networks; and compile data for state and local reports.	Curriculum Department, Administrative Team, and Technology Advisory Group	
Provide leadership, support, and alignment for technology integration, curriculum development, and assessment.	Board of Education, Superintendent and Administrative Team	None
How will implementing this review process help reach building and/or district goals?	Success is determined by: successful implementation of technology standards in K-12 curricula improvement of student scores on Technology Literacy Assessment given in the 8 th grade and district assessments meeting and completing the benchmarks as outlined meeting training goals, and positive evaluations of training from participants	

Technology Supervisor and Assistant Superintendents, with the assistance of the Technology Advisory Group, will oversee the implementation of the technology initiatives and action steps. The review, revision, adjustment, and evaluation of the initiatives and action steps must be a perpetual process. Periodic updates and revisions will be brought to the district Board of Education and will also be published on the district's web site. All components of the plan will be evaluated.



Acceptable Use Policy for Information Resources, Services and Network
Preschool - Grade 12

Student Name _____
Last First Middle

Building (current) _____ Grade (current) _____

Access to Grandville Public Schools' electronic information resources, services and network is given as a privilege to users who agree to act in a lawful and responsible manner. By signing below, you are agreeing to follow the rules of the Grandville Public Schools' Student Handbook and the conditions as indicated in this Acceptable Use Policy, while using the information resources, services and network of the district. The purpose of the guidelines stated in this document is to make you aware of the responsibilities that you are about to undertake. If you violate any of these provisions, your access will be terminated and further disciplinary action may be taken following the guidelines found in the student handbook.

As a **Preschool - 3rd Grade** student, I agree:

- I will use all hardware and software with care and respect.
- I will follow the directions of the adult in charge.
- I will only use software approved by a teacher.
- I will not give out my name, address, or any other personal information over the Internet.
- I will only go to places on the Internet that are approved by a teacher or the adult in charge.
- I will tell a teacher or adult immediately if I come across something that is wrong.
- I agree to help others follow these rules.
- In the event I do not follow these rules, I will lose the privilege of using the technology for amounts of time determined by the teacher.

As a **4th - 12th Grade** student, I also agree:

- To use the information resources, services and network for educational purposes.
- To follow accepted rules of behavior as listed in the student handbook.
- To protect the privacy of my username and password from others.
- To not make copies of, or modify files, data or passwords belonging to other users, or to use their name and password.
- Not to reveal personal information, such as name, address and telephone number, without written permission from my parent or guardian.
- To follow the rules of copyright laws.
- To not use the information resources, services and network of the district for political lobbying, product advertising, personal profit or extensive private business.
- Not to harm or destroy any hardware, software or data.
- Not to participate in any actions, which may be considered inappropriate or dangerous to the integrity of the information resources, services and network of the district.
- Not to change any computer settings without permission from my teacher.
- To immediately notify my teacher should I access something questionable.

I have read the guidelines for acceptable use, understand and agree to follow them. Should I violate the rules, I understand that I would lose the privilege of using the services of the district and further disciplinary action may be taken following guidelines found in the student handbook.

Student Signature _____ Date _____

As the parent or legal guardian of the student signing above:

- I have read and discussed the guidelines with my student.
- I grant permission for my student to use the information resources, services and network of Grandville Public Schools.
- I agree to release Grandville Public Schools and staff from any liability or damages that may result from the actions of my student.
- I agree to accept all financial and legal liabilities, which may result from the actions of my student in regards to the use of the information resources, services and network of Grandville Public Schools.
- I understand that my child's violation of these guidelines will result in the loss of the privilege of using the information resources, services and network of Grandville Public Schools.

The District makes no warranties of any kind; either expressed or implied that the functions or the services by or through the District information resources, services and network will be error free or without defect. The District will not be responsible for any damages users may suffer, including but not limited to, loss of data or interruptions of service. The District is not responsible for the accuracy or quality of the information obtained through or stored on the system or systems. The District is not responsible for financial obligations arising through the unauthorized use of services.

Parent or Guardian Signature _____ Date _____

New AUP Forms are required when students enter the middle school and high school.



Acceptable Use for Information Resources, Services and Network

NAME: _____

STAFF ACCESS TO NETWORKED INFORMATION RESOURCES

Grandville Public Schools provides computers and other technologies for students and staff for the benefit of all learners. Our goal is to promote educational excellence by facilitating resource sharing, innovation, and communication.

The staff who use computers and other technology provided by Grandville Public Schools agree to adhere to this Acceptable Use Policy, which applies to the school's local area network, Internet, e-mail, and other online access in addition to traditional computer resources. Staff should understand there is no implied privacy when using district technology. Staff will have access to some confidential information about students, and those staff members agree to keep that information confidential, and only use it for the better of the student within the privacy laws. Staff is responsible for professional behavior on school computer networks just as they are in a classroom or a school hallway. The network is provided for staff and students to conduct research and to communicate with others. Communications on the network are often public in nature, therefore general school rules and standards for professional behavior and communications apply.

Acceptable Uses

- Staff is responsible for properly using and caring for the hardware and software. Users are to seek assistance from their immediate supervisor and/or technology department if necessary.
- Staff is responsible for using technology primarily for educational purposes.
- Staff is responsible for all material sent and received under their user account.
- Staff must demonstrate good faith efforts to supervise students' use of the technology under their charge.
- Staff will have access to district-provided Internet primarily for educational purposes. Personal Internet and email use shall be limited to non-instructional or non-working times.
- Staff is responsible for recognizing and honoring the intellectual and creative work of others. Copyright laws must be observed; all sources should be cited accurately.

Unacceptable Uses

- The sharing of files or information of students and coworkers with unauthorized individuals, which are in violation of FERPA (Federal Educational Right to Privacy Act), CIPA (Children's Internet Protection Act) or HIPA (Health information Privacy Act.)
- Using an ID other than your own or attempting to gain access to unauthorized files.
- Installing or downloading files (software/music) onto school technology or sharing your files (i.e., music).
- Tampering with software, files, or hardware. This includes changing passwords, settings, or the work of others, Installing, copying, or infecting a computer or the network with a virus.
- Searching for or distributing inappropriate material. This includes material that is pornographic, contains profanity, or promotes violence, discrimination, harassment, or illegal behavior.
- Risking personal/student safety by posting personal contact information about others.
- Wasting district resources with excessive or non-school related use.
- Employing the network for commercial purposes where the staff member is using the district's Internet connection to make a profit.

Consequences

Reports of inappropriate behavior, violations, or complaints will be directed to the employee's supervisor for appropriate action. Violations will be reviewed and may result in the loss of access and/or disciplinary action up to and including dismissal. When applicable, law enforcement agencies may be involved.

Grandville Public Schools Acceptable Use Policy Confirmation

I have read and understand the Acceptable Use Policy of Grandville Public Schools. I agree to adhere to its guidelines

Employee Signature _____

Date _____

Revised 08/2006

Appendix A: K-12 Technology Standards



Grandville Public Schools

K-12 TECHNOLOGY STANDARDS

**Initial Board Adoption
December 2003**

Grandville Public Schools consistently review and revise the Technology benchmarks based on State and National standards.

Examples of Technology Lesson Plans



Grandville Public Schools Technology Lesson

Grade: 2

Subject: Science

Topic: Earth, Sun, Moon

Technology Standard: 1, 2, 3

Strand: Computer Systems and Networks, Multi-Media, Word Processing, Internet

Content Expectation:

Students will save and name files.

Students will access files from the server.

Students will insert a graphic into a document.

Students will create a slide for a class presentation using technology.

Students will format text style (i.e. bold, italics).

Students will use a web browser for basic navigation.

Overview: Students will use Power Point to make a slide show about the earth, sun and moon. Slides will include both text and pictures.

Materials/Resources/Location: computers with Power Point

Time: multiple sessions (four-six 30-45 minute sessions)

Directions:

1. Double-click the Power Point icon on the desktop.
2. Students will create a slideshow of 4 slides (title slide, earth slide, sun slide, moon slide).
3. Each slide should have at least one sentence and a picture.
4. After students type their information, they should highlight the text and change the formatting. They can change the style to bold, underlined or italics; and they can change the font choice (i.e. Times New Roman) and size.
5. Students can find a picture to copy online at the StarChild web site. (This site is linked from the 2nd Grade Student Resources section of the GPS web site.)
6. Students can add background colors or designs from the Format Menu.
7. Advanced: Students can add animation to their slideshow.
8. Each student can present their slideshow to the class or a small group when finished.

Teaching Tips:

Assessment: Completed slideshows



Grandville Public Schools Technology Lesson

Grade: 6

Subject: All

Topic: Creating Hotlists

Technology Standards: 3, 5

Strand: Internet

Content Expectation:

Students will search the Internet for appropriate web sites on various subjects and create a list of the addresses as hotlists.

Overview: Teachers never have enough time to find Web resources for topics they teach. Students can help by doing the searching and creating hotlists.

Materials/Resources/Location:

Computer Lab/Internet Explorer/Microsoft Word, GroupWise (set up with student accounts)

Time: one short session to email staff and then 120 minutes to research and create hotlist

Directions:

1. Assign students a staff member to e-mail, requesting topics they would like a hotlist for.
2. Help student select a topic from the compiled list.
3. Demonstrate how to search the Internet.
4. Demonstrate how to copy/paste a web address into Microsoft Word and how to hyperlink it.
5. Discuss elements of a good web site.
 - a. Easy to navigate
 - b. Quick to load
 - c. Appropriate for grade level
 - d. Attractive

Student Directions:

1. Open a word document and add a title at the top of the page.
2. Browse or search the Internet to find topic-related web sites that will be helpful to teachers and students.
3. Highlight the web address.
4. Go to Edit-copy.
5. Return to your Word document.
6. Type in the title of the website you have found, and then press enter.
7. Go to Edit-paste. Word will automatically hyperlink pasted addresses.
8. Repeat steps 1-5 until you have added at least 5 addresses to your document.
9. SAVE!
10. E-mail your results to the teacher.

Teaching Tips: This activity would be most helpful if done at the beginning of the school year. This could also be done in groups. Students could add clip art to their lists. Students could include a brief description of the web site's contents.

Assessment: Completed Hotlist



Grandville Public Schools Technology Lesson

Grade: 2

Subject: Social Studies

Topic: Bodies of Water

Technology Standard: 2

Strand: Multi-Media

Content Expectation: Students will insert a graphic into a document.

Overview: Students will use Kid Pix to illustrate 5 different bodies of water.

Materials/Resources/Location: computers with Kid Pix

Time: one session (45 minutes)

Directions:

1. Double-click the Kid Pix icon on the desktop.
2. Use the line tool to divide the screen into 6 equal boxes.
3. Students will type their names in the first box.
4. In each of the other boxes they will draw and label a body of water, including gulf, lake, ocean, river and stream.
5. They should add color to their pictures to clarify which space is water and which is land.
6. Students can print their pictures when finished.

Teaching Tips:

This lesson needs to be done after students have been introduced to the different bodies of water. You may want to have them draw it out on paper in the classroom before coming to the lab so they know what they're doing when they get to the computers.

Assessment: Completed pictures



Grandville Public Schools Technology Lesson

Grade: 6

Subject: Math/Language Arts

Topic: Financing your Dream Car

Technology Standard (s): 2, 3

Strand: Spreadsheets, Word Processing, Internet

Content Expectation: Students will copy/paste a graphic from the Internet. Students will research using the Internet. Students will create a spreadsheet and apply formulas. Students will create a chart.

Overview: Students will search the Internet to locate a photo of and information on their “dream car”. Students will use loan rate information gotten from the Internet. Students will create a spreadsheet using formulas to calculate monthly payments and total cost of loans. Students will create a chart to visually compare loans. Students will create a written summary of their findings.

Materials/Resources/Location: Computer Lab/Internet Explorer/Microsoft Word, Microsoft Excel/Handouts

Time: Four (4) - 40 minute sessions

Directions: Buying and Financing the Car of Your Dreams

Description:

In this lesson you will use the Internet to locate a car that you would like to buy if you were old enough. You will also locate two different Internet sites that provide you with interest rates for car loans. Using Microsoft Excel, you will learn how to create a spreadsheet and enter formulas that will calculate monthly payments, sales tax, total interest paid, and the total cost of purchasing a financed automobile. You will also produce a report using Microsoft Word with your results and include a picture of your car (“harvested” from a website). You will also create a bar graph comparing the two different car loan rates.

Teaching Tips:

This activity can be modified to fit your needs. You might compare a four-year loan with a five-year loan, etc. This activity is a great way to talk about debt and credit card versus cash purchasing.



Student Activities/Procedures:

Session 1:

1. Log onto the Fileserver
2. Log onto the Internet
3. Enter the following URL: <http://www.carpoint.com>
4. Choose to search for a new car or new truck
5. Click through the choices to find the make and model of a car or truck that you would like to buy
6. Save the graphic that shows your car or truck by copy/paste into a Microsoft Word document to your student folder on the fileserver
7. Copy down the cost of the vehicle on the sheet provided
8. Enter the following URL: http://www._____, go to loan rates, record the interest rate for a five-year car loan on the sheet provided
9. Enter the following URL: http://www._____, go to loan services, click on car loan graphic, record the interest rate for a five-year car loan on the sheet provided

Session 2:

1. Log onto the Fileserver
2. Open up Claris Works, select Spreadsheet
3. Type the following data in Column A: *You will need to resize the columns so the data will fit. Go to Format - Column width type in 150
4. Save document to your student folder, name it *Dream Car Spreadsheet*
5. Type the following data in Column B:
 - Cell B1: The full MSRP price of the vehicle you chose
 - Cell B2: =B1*.06
 - Cell B3: =B1+B2
 - Cell B4: =B1*.1
 - Cell B5: =B3-B4
 - Cell B6: The interest rate on new car loans from Bank A
 - Cell B7: 5
 - Cell B8: 12
 - Cell B9: Go to Edit - Paste Function - scroll down, select PMT (rate, Nper, Pv, fv, type)
 - a. delete the word rate and type B6/B8
 - b. delete the word Nper, and type B7*B8
 - c. delete the word Pv, and type -B5
 - d. delete fv and type
 - Cell B10: =B9*(B7*B8)
 - Cell B11: =B10-B5
 - Cell B12: =B3+B11
6. You will need to change the cells formats by double clicking in the cell, then choose currency for the cells that display dollar amounts. For Cell B6 select percent. For Cells B7 and B8 select general
7. Repeat the above for Column C, in cell C6 type the interest rate from Bank B. Type the rest of the C cells exactly the same as you did in Column B
8. Remember to change cell formats in column C exactly as you did in B

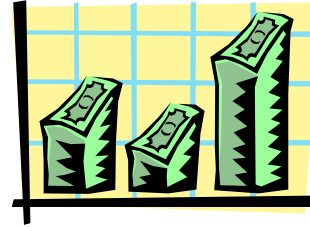
Sessions 3 and 4:

1. Log onto the fileserver
2. Open your spreadsheet document titled, *Dream Car*
3. Select the following cells for your chart - hold down the shift key as you click on:
A10, A11, A12
B10, B11, B12
C10, C11, C12
4. Go to Options - Make Chart
5. Click on the bar icon in the gallery section
6. Click the check boxes to set the options you want
7. Click OK
8. The chart will appear on the screen on top of the spreadsheet data
9. Go to Edit - Copy
10. Go to File - New - word processing
11. Click on the icon to display the tools, click on the pointer tool
12. Go to Edit - Paste
13. Save the document to your student folder, title it *Bar Graph*

Your Report:

1. Open up a Microsoft Word document
2. Type your name, enter, teacher's name and press return 3 times
3. Type and center *My Dream Car*
4. Type and center the year, make and model of your chosen car
5. Insert the picture of your car that you saved in your student folder
6. Insert a page break, type a paragraph summarizing the information you found on the Internet about your car - (What is good, bad, features, etc.)
7. Double space the paragraph you typed
8. Copy and paste your spreadsheet you created below the paragraph
9. Copy and paste the bar graph you created below the spreadsheet
10. Type a paragraph about what you have learned in doing this project
11. Save as *My Dream Car* to your folder on the fileserver
12. Print one copy and hand it in

**FINANCING THE CAR OF YOUR DREAMS
EVALUATION**



Name _____

Teacher _____

	Points Possible	Your Score
Retrieving information from the Internet	5	_____
Harvesting/saving a graphic	5	_____
Excel Spreadsheet	10	_____
Bar graph	10	_____
Word Processing Report	<u>20</u>	_____
	50	_____

