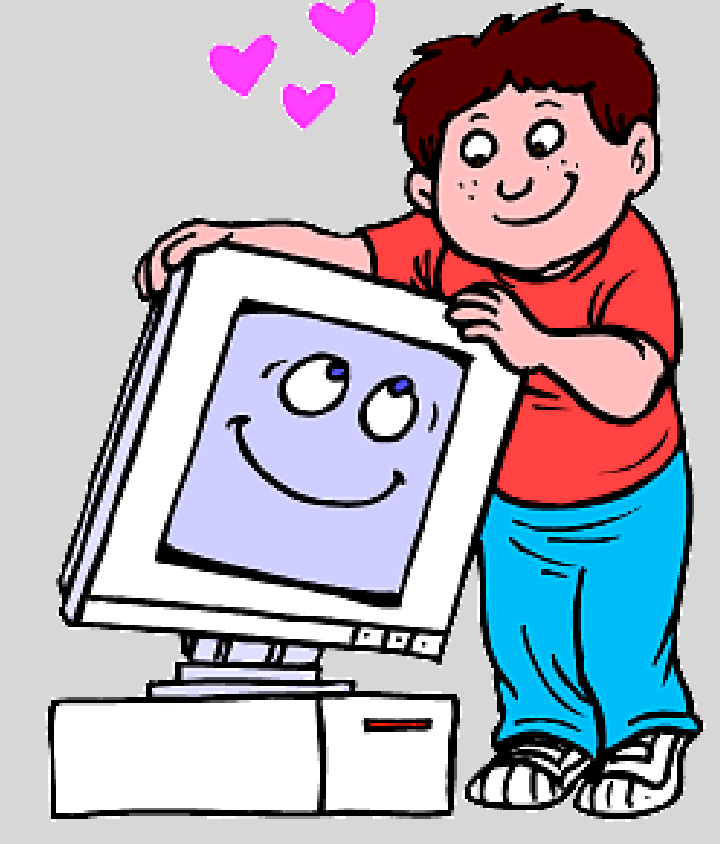# Integrated Technology: Increased Use of Technology as a Tool to Meet Instructional Standards

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School Information

Our Pre-School through 8th grade school has had a long history of successful use of technology. In March of 2010, a technology committee was formed. This committee proposed that the school was beginning to be dated or behind the times in its use of technology and an overhaul was needed. The technology committee worked tirelessly for several months to establish a vision and mission for the school around technology, technology acquisition and its use. The committee made significant gains in terms of purchasing hardware. In the spring of 2010 the "old" computer lab was dismantled and the computer teacher job was discontinued. The job of technology instruction became the responsibility of the classroom teachers. Three carts of computers were purchased to be used in the classrooms at grades 3 to 8. Grades K, 1 and 2 received centers of six wireless computers in each classroom. K and 1 received the old teacher laptops. Also, most classrooms received a projector, smart board, teacher laptop and a document camera. At the same time , many software upgrades were made, new software was purchased, web-based memberships were secured and memberships were made available to teachers to ISTE and United Streaming.

There were many formal trainings provided and there was technical support for beginning use and beyond. However, we have found that very few teachers were using the equipment and knowledge they have to it's fullest potential and some upgrades of hardware still need to be made.

Goal Of School Improvement Plan

Technology is integrated and student centered.
•Technology is used to place students at the center of the learning experience.
•Integrated teaching is used to support each student's need/levels.
•Technology is the key element in innovative project based learning and encourages creative thinking.
•The use of technology is common practice and not seen as an extra within the curriculum.

Options Considered

#1. Re-institute the computer lab and computer teacher.
#2. Not push this on teachers and let it happen naturally. Focusing on teachers who are embracing it.
#3. Develop a specific plan to make technology integration happen.

Our team selected option #3. The team reviewed ISTEs Essential Conditions for Implementing the NETS and found that our school is poised to implement this goal. Of the 10 conditions, our school was solid in 7. We confirmed a need for a shared vision among staff, extended professional development and assessment of technology integration.

Implementation of Student Technology Team

Twelve students will be selected in 2011 from 6th, 7th and 8th grade to participate in the Technology team. This team will be trained in all building hardware and software as well as basic workings of the school network. The primary responsibility of the team will be to assist teachers in learning to use equipment and software as well as help in the instruction of younger students.

Resources (financial impact)

Our school projects what our financial needs will be each year for technology and puts it into the annual budget. The administration is committed to the advancement of technology integration and learning. Funds have been set aside for extensive professional development and the purchase of needed hardware. See priority expenditures below.

1	24 Netbooks w/wireless for grades k-2	$12,000 (IT $ included)
2	One digital camera for each classroom	$2,100
3	Professional Development *Conferences *Off-site visits to other schools one per teacher	ISTE $210-$300 + travel/housing $420 OETC + travel/housing/subs $2,500 Sub costs/day for off site visiting $3,000 for professional development
4	SMART Boards for Pre-s, 6th and 8th	$3,000 for 3 boards $1,000 for one projector $3,000 for installation
5	2-3 summer days for clean-up, organization, updates	$500
6	Firewall update	$3,000
7	Library computer upgrade	$2,000
8	4 wireless modems	$200
		Total $34,280

Current Hardware, Software and Training Resources

Hardware:
Projectors-25
Document Cameras-16
Ipods-30
Personal Response Systems-12 class sets
SMART Boards-16
Webcams-5
External microphones-10
Digital cameras-4
Software:
Accelerated reader, Accelerated math, Online grade book,
Online textbooks for many subjects beginning in 5th grade,
United Streaming membership, Inspiration, Kidspiration, Typing Pal,
student blogs, iEARN membership, TakingItGlobal membership,
Training:
Half time instructional coach
ISTE Professional development membership, books and support
Company representative trainings
Technology/integration in-services

Parent Resources

Online grade book, teacher websites, online textbooks, email newsletters, and teacher blogs.

Timeline for 2011

February:
•Technology team meets multiple times to review old technology plan and to revise the document to meet the current needs of the school
• Vice principal sits on the Archdiocese team to develop curriculum for technology
•Teachers meet to create whole staff buy in to the vision that was established in 2010
•Teachers meet to establish a curriculum map of software minimally covered at each grade
•Teachers meet to review ISTE NETS (adopted curriculum)
•Teachers begin adding technology to other subject curriculum maps (integration)
March:
•Purchase of 24 net-book computers to create centers in Kindergarten and first grade classrooms
•Install wireless in 4 classrooms
•Purchase digital cameras and memory cards for every teacher
• Obtain a quote for a firewall and filter update
•Staff meet as a team with the instructional coach for one full day of planning
•Teacher experts begin presenting at staff meetings
•Institute collaboration time (2 times a month for 2 hours)
April:
•Continued curriculum mapping
•Digital camera training
•Order firewall and filter update
•Follow up meetings with instructional coach
•Offer off site days to observe experts in the field
•Teacher experts present at staff meetings
May:
•Continued curriculum mapping
•Digital camera training
•Implement new firewall and filter
•Follow up meetings with instructional coach
•Teacher experts present at staff meetings
June:
•Continued curriculum mapping
•Teachers meet to review ISTE NETS and review current needs
August:
•Wireless access building wide to be installed
•Website and blog training for all interested teachers
•Install Smart boards in 3 classrooms
September:
•Parent training on use of building digital resource
•Follow up meetings with instructional coach
•Teacher experts present at staff meetings
•Announce Global projects as a theme for the year
•Teachers meet to review software and instructional agreements
•Smart training for new users and beginners
October:
•Survey of teacher needs and thoughts
•Follow up meetings with instructional coach re: Global projects
•Teacher experts begin presenting at staff meetings
November:
•Follow up meetings with instructional coach Re: Global Projects
•Teacher experts present at staff meetings
•Follow up Smart training

Progress Indicators

The team that put together this plan was looking for indicators of success. Below are some of the indicators they will be looking for.

•ISTE standards are incorporated into daily lessons in multiple subjects.
•Students are using technology on a daily basis as a tool to meet instructional standards.
•Technology integration does not interrupt the flow of instruction it enhances it.
•Collaboration is taking place on a regular basis.
•Parents are accessing online resources.
•Teachers are active members of professional technology education organizations.
•Professional development has happened.
•ISTEs 10 Essential Conditions for implementing the NETS are all in place.
•Teachers and students are connecting with others in our nation and globally.
•Teacher surveys indicate that they are getting what they need for professional development and they have the tools they need to teach with.
•Parent surveys indicate they are happy with the level of instruction their students are receiving in all areas and technology is integrated into all subjects.

Changes In Student Computer Access Since Initial Implementation in 2010
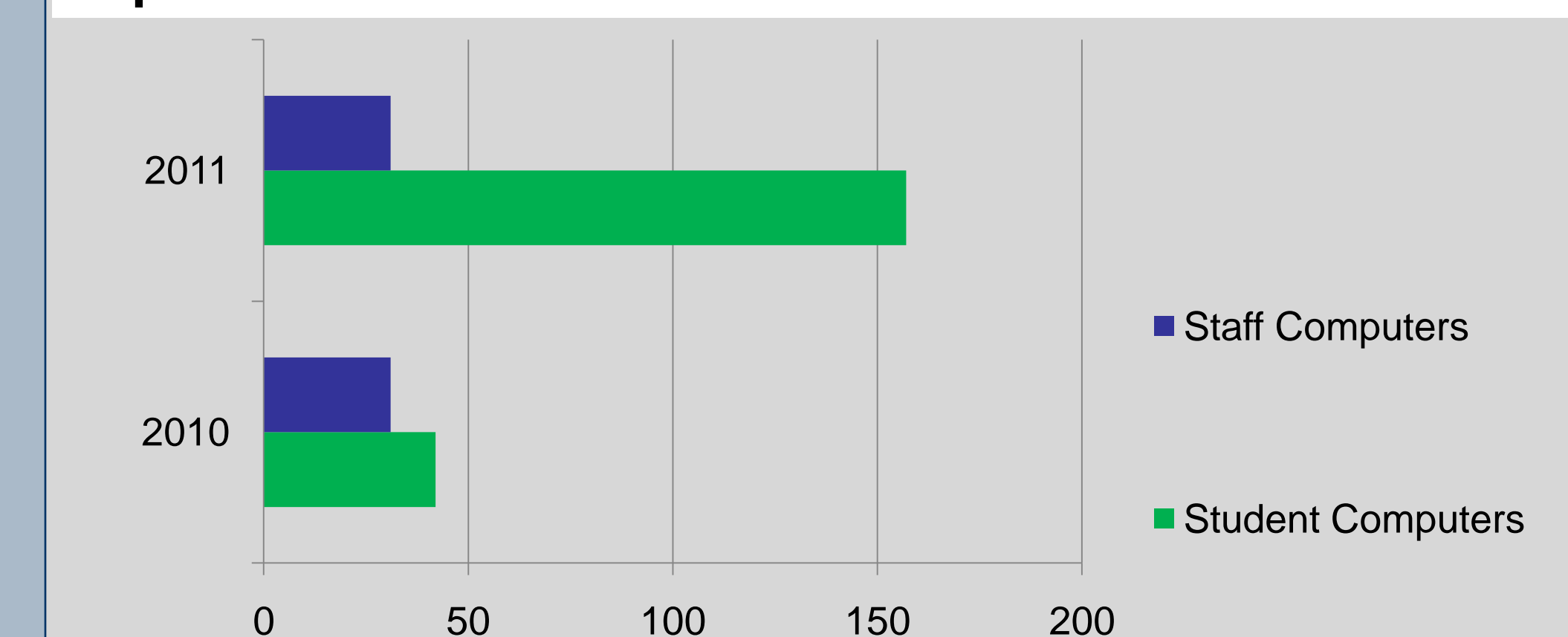
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