



Informational Memo - Summer Technology Updates

TO: School Board
Superintendent, Trisha Kocanda

FROM: Maureen Chertow Miller, Director of Technology

August 16, 2016

Background

The Winnetka Public Schools technology team strives to maintain and update existing infrastructure to ensure the best service and security for our staff and students. From 2011-2014, new servers and switches were installed in the Data Center and wireless access points were installed in all five schools. Since then, we have increased our iPad fleet by over 1200, added Chromebooks to each school, and increased our internet bandwidth to 600 mbps. Over the summer of 2016, there were updates to the wired and wireless infrastructure, network security, virtualization, and iPad deployment.

Updates

Network infrastructure was once again upgraded allowing for better overall signal coverage, download speeds, monitoring and management. 160 cloud-managed wireless access points were installed across the District replacing our five-year-old access points. Seven new switches were deployed to replace those that failed over the past year.

Another update for the summer came from Apple. They released a new system titled *Apple School Manager*, and the tech team has been busy transitioning all student iPads to the new system. *Apple School Manager* eliminates the need for parents to create an Apple ID for their student, allows technology staff to reset passwords remotely, and quickly deploys apps to iPads based on their serial numbers rather than Apple IDs. Apple School Manager allows for more responsive app management and eliminates the need for access to the app store for students.

Security for our network users is always a priority; therefore, several new security measures have been introduced. A new authentication server based on Active Directory

has been rolled out. This will allow multiple systems to be linked to one login to support the end user. A new password aging scheme for user accounts has been introduced and we are retiring our older wireless configurations and moving to new wireless network names and passwords, this will keep usernames and passwords in line with industry security standards. Changes have also been made to the web filtering system which will allow for more efficient tracking of student behavior on the web.

Several aging Windows infrastructure servers have successfully been migrated to a new virtual machine environment, dramatically improving performance and reliability of DNS, DHCP, the door controls and other key systems. Virtual machines reduce the need for additional hardware, provide scalability, backup with fast recovery, and easy cloning.

The camera system has been overhauled and a new camera management software has been introduced. This makes it possible for administrators at the District and building levels to review and preserve footage from our video recorders when needed. Administrators are also able to view camera footage via a web interface anytime, anywhere.

The technology team is continually looking to improve the end user experience across the District while maintaining a high level of security. The team is looking forward to the return of students and staff for the 2016-2017 school year. The summer has been busy, but the team likes when our schools are full of the creative noise generated by our students and staff.