

## Technology Report

The school network plays a very important part in the schools operation. The schools network and servers are responsible for delivering data and controlling many functions in our school's operation such as, wireless access, computer access to files, phones, cameras, email, access to the internet, Skyward, and Haiku just to mention a few.

Over the last few years we have invested a considerable amount of money into our network and servers, but this is an ongoing process. All network equipment needs to be refreshed on a regular basis anywhere between 3 to 5 years typically, and in some cases between 8 or 10 years. This cycle is usually determined by a few things, the end of life support for the device (if you wish to have an immediate replacement available), and end of life for software support for the device. We have positioned ourselves so that we have no large purchases that will need to be made in the 14-15 school year that will not fit into the technology budget for the 14-15 school year. We have also made purchases over the last few years so that we can extend the life of some of our equipment. We can do this by making larger purchases at any given time such as purchasing two identical virtual servers; we do this so that if one fails the other one will run all of our servers additionally, by doing this we can extend the life of a server by keeping it to the very end or past the warranty period because if one fails the other one can run all of our virtual servers.

There has been talk of some schools going to a 1Gbps ITP connection. We currently have a 100Mbps ITP connection and utilize approximately 70Mbps maximum on a daily basis. I do anticipate an increase in our use next year with the addition of chromebooks but we have to start the process in the fall in order to get the increase of our ITP funded under the E-Rate program. Our plan is to go to a 200Mbps ITP connection starting with the 15-16 school year. This connection cost was recently quoted at \$750 a month from Charter before E-Rate. To increase from 100Mbps to 200Mbps with our current provider will cost \$855 a

month extra before E-Rate. We currently spend \$7,600/year for ITP with Badgernet and Wiscnet combined.

It is very hard to plan more than two years out because technology changes so quickly. I can already see one possible change that is becoming available in that you can run the windows operating system on a chromebook virtually; this does require a very fast SAN and server system but it would allow you to remove computer labs. It is very important to keep up on all aspects of our network and the updating of our network infrastructure. We will have unscheduled downtimes with the failure of devices understanding that we cannot afford to have a backup sitting on the shelf if the primary device fails. Because of this it is important to keep up on replacement and replacement warranties so that we can limit downtime since we rely so heavily on the schools network for educating our students on a daily basis.