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Board Report - Technology
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Looking Back

Wireless Network

I have been working with HP certified wireless contractors to stabilize our wireless network and have seen quite a bit of improvement in that area. It is not yet where it needs to be, but we do have a plan to provide better and faster access to our network. We currently plan to offer "public" and "corporate" networks which will be configured quite differently. With the SBAC testing (see below) coming up next year, it is vital that we are able to provide dependable and consistent access to areas where this testing may occur.

In conjunction with the Teaching and Learning department as well as the superintendent, the contractors and I have developed a strategy that gives priority to the instructional use of our wireless network. After allocating the resources necessary for a robust and reliable corporate network, we will offer access to personal devices so that they can be used here at school. To be clear, it is NOT our priority to provide a great public access experience. The priority is provide solid, reliable, and secure connections to the wireless devices we use as part of daily instruction. Though I wish it were as simple as setting up a home network, it is an entirely different beast when you have a system this expansive.

All in all, it is going very well. I wish sometimes we could power through this process a little faster, but the work done so far has paid off and many more improvements are yet to come.

What's Current

Internet Connection

Our Internet connection has been upgraded from 18 Mb/s to 24.5 Mb/s with the addition of four additional T-1 circuits which were installed by TDS and paid for by the K20 network. The K20 is responsible for providing every district an Internet connection which is sufficient to meet their needs. We pay for the data that goes across that connection but the installation and maintenance of that connection is something provided by the state.

There has also been the installation of an even better connection, but it is not yet functional. TDS has installed a DS3 circuit which, when made active, will replace our current 20 T-1 circuits. When this comes online (expected to be live in another month or so), our bandwidth capacity will be 45 Mb/s. I think that moving from an 18Mb/s to a 45 Mb/s connection within a couple of months will be quite an improvement. What we can't lose sight of is the cost for the data we ultimately use. In general, districts across the state are almost doubling their consumption of data each year. With our limiting factor removed, I would be quite surprised if we didn't see a significant increase in our district costs associated with Internet access. While it is still a bargain, it is never any fun to have higher bills to pay.

Looking Forward

Smarter Balanced Assessment Consortium (SBAC)

Next year, we will be required to use the SBAC online test for state testing. The consortium describes itself this way:

> Smarter Balanced is a state-led consortium developing assessments aligned to the Common Core State Standards in English language arts/literacy and mathematics that are designed to help prepare all students to graduate high school college- and career-ready.

This testing (which will probably use both iPads and Chromebooks) will place huge demands on our network and specifically on our wireless connections. This is one of the design considerations that Dave Holmes and I have been working on as we develop our wireless solution with the help of our contractors. I have confidence that they will be able to get us where we need to be for this testing. The critical piece is to be able to provide a large number of wireless connections at a single location. We will be ready.