

Title: Technology Report

Objective: The objective of this document is to report the state of technology systems functionality and on strategic key measurements of student and staff technology access.

Data: Data on percentage of staff and students reporting adequate access to technology is provided through the 2016-17 staff and student surveys. Additional data sources for this report include the Help Desk System, Asset Management System, server and networking systems log files.

Measurements 1 and 2: Staff and student reporting access to technology

Measurement	2013/14	2014/15	2015/16	2016/17
% teachers reporting adequate access to technology to support their instruction	46.5%	49.5%	66.6%	83.5%
% students reporting adequate access to technology to support their learning	83.7%	85.4%	91.1%	92.8%

Successes:

- Student satisfaction levels continue to remain high.
- Staff reporting access to technology to support instruction grew by 17% over prior year for the second straight year.
- Over 80% of parents and guardians participated in the Online Enrollment and Enrollment Verification process.

Issues:

- Cybersecurity threats are increasing in frequency and sophistication. A combination of systems improvements, procedural changes, and staff training will be required to address.

Action Plan:

- Work to increase technology support for students and staff continues through bond and general fund investments and is summarized in this report. While not inclusive of all projects within IT, the projects below represent work aligned to increasing staff and student satisfaction of how technology supports their work.

Technology Systems – 2017/18 School Year

Infrastructure Improvements

Technology plays a vital role in student learning and our support of instruction begins with a solid infrastructure. We are launching our fourth year of system-wide infrastructure improvements supporting student and staff use of technology for learning.

Enterprise Wireless Network Improvements



Wireless access remains the primary method used by students and staff to access District and internet resources. Our wireless network is critical to both the teaching and learning and the business needs of the organization.

Over the summer months, IT staff researched, tested and implemented security improvements to the wireless network in preparation for the 2017-18 school year. Previously, there was a production wireless network for Beaverton School District devices and a guest network for staff, student, and guest use. The most significant security issue with this configuration was the lack of separation of server infrastructure access between the two wireless networks.

IT network engineers created and implemented network improvements to distinguish between student and staff users who should have internal access to resources, and those users who are external to BSD and should only have internet connectivity. In addition to protecting BSD resources, the guest network is also limited in internet bandwidth, prioritizing connectivity for student and staff use.

Enterprise Applications

Online Enrollment and Verification System

New for the 2017-18 school year was the launch of the Online Enrollment and Online Enrollment Verification System. Beaverton School District IT staff led a state workgroup to design a system with our student information system vendor that would meet school district needs not only for Beaverton, but for districts across the state.

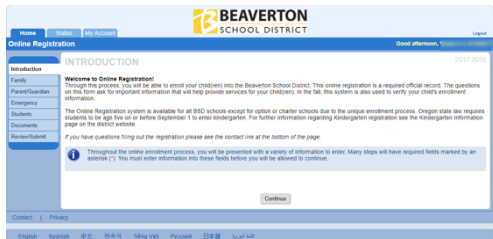


Image 1: Online Enrollment & Verification Screen

Prior to moving the process to an online application, school staff would print a six-page enrollment verification form for each student. Those forms would be distributed, edited and then returned to the school for data entry changes. Due to the time demands at the beginning of each school year, updated student and family data might not get entered into the student information system for many weeks.

The new system allows parents and guardians the ability to update their student’s record via an online application. School staff are able to review and accept the updated record, which records the change in our student information system.

Within the first three weeks of launch, almost 32,000 parents and guardians used the system to either enroll a new student or verify their student’s information. This represents 80% of BSD families using the new system.

As with any large-scale change, there were some questions with the new system. BSD IT and school office staff worked collaboratively to answer parent questions regarding the new system. Debrief meetings will occur in the next month to collect enhancement requests and refine the process for next year.

FutureReady Year 4 Planning

Working in partnership with Teaching and Learning, the IT Department deployed over 26,230 student devices during the 2016-17 school year to support the FutureReady initiative. Our stable wireless and network infrastructure allowed the purchase of devices scheduled for this year to be purchased and deployed this past school year. We are ahead of schedule with device deployments and the devices in the system are holding up well with minimal breakage or loss. As a result, we will use the 2017-18 school year as an evaluation year prior to selecting the replacement of student technology for the remainder of the bond.

Digital Equity

The Beaverton School District was awarded student hotspots as part of the Sprint 1Million Project. Each year, for the next 5 years, the Beaverton School District will receive 400 hotspots with free connectivity for high school students who have limited or no internet access at home. High schools are in the process of distributing hot spots to students.



Image 2: Aloha High Students Receiving Hotspots From the Sprint 1Million Project

CyberSecurity Improvements

An important focus for the 2017-18 school year will be to increase protection of BSD systems to respond to changing cyber security threats. The attacks to BSD systems, student, staff and financial data are increasing both in frequency and sophistication. IT staff continue to implement new systems and procedures to mitigate the effectiveness and protect BSD resources and data. A combination of systems improvements, procedural changes, and staff training will be required to best protect the organization.