Department Report: Information Technology

Objective: Report the state of technology systems functionality and on strategic key measurements of student and staff technology experience.

Data: Data on percentage of staff and students reporting adequate access to technology is provided through the 2024-25 staff and student surveys. Additional data sources for this report include the help desk system, asset management system, server and networking systems log files.

Staff and student reporting access to technology

Measurement	2022-23	2023-24	2024-25
% teachers reporting adequate access to technology to support their work	84.1%	85.5%	87.1%
% secondary students reporting their learning experience is supported by digital tools the school offers	90.3%	90.8%	93.1%
% students reporting their school teaches them to be a good digital citizen	85.1%	85.9%	87.2%

2025 BSD Student Survey – Technology Support for Student Learning

Elementary Students

In the 2025 elementary student survey, students in grades 4 and 5 were asked how they access the internet outside of school. Students were able to select more than one response. Compared to 2024 elementary student survey results, the number of students reporting ability to access internet at home, through a hot spot, and at the library remained constant. Elementary

How do you get online outside of school?
(More than one answer may be selected.)

- Internet connection at home — 80.4%
- Cell phone — 36.9%
- Hot spot — 12.9%
- Public library — 5.6%
- Coffee shop/restaurants — 5.4%
- Friend's house — 20.4%
- I am not able to access the internet outside of school. — 5.1%
- Other — 19.8%

students reporting internet access through cell phone and at a friend's house increased by over 100 students in each category. Elementary students reporting that they are not able to access the internet outside of school rose by 72 students. At the elementary level, most students do not take devices home and there is no expectation that elementary students use devices outside of the school day.
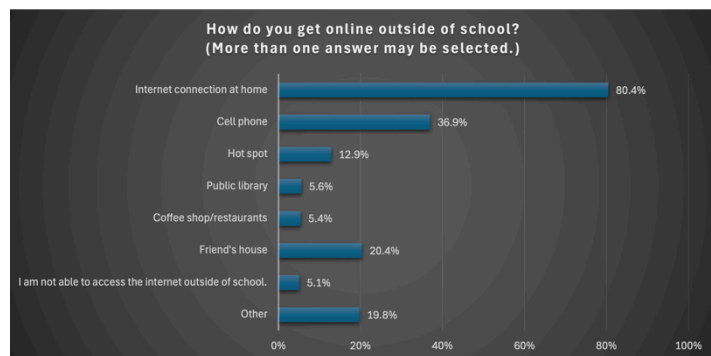
Middle School Students

Students in middle school were asked if digital tools supported their learning, whether their student device was their main device used for completing schoolwork, and if the student had adequate internet connectivity. Compared with 2024 student survey responses, students reported an increase in agreement in all three questions. For the third year in a row, students reporting the Chromebook is their main device to complete school work increased. New to the 2025 survey was a question about use of the district learning management system, Canvas. Among middle school students, 97% reported their teachers regularly use the Canvas learning management system.
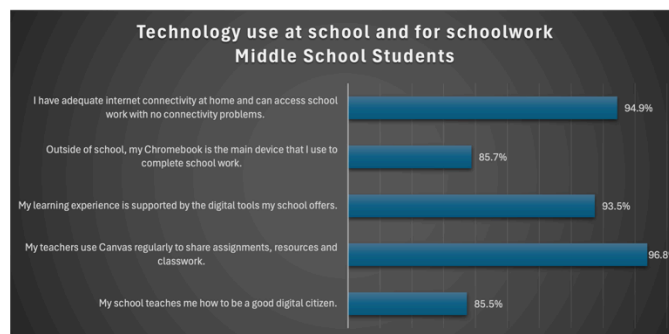
High School Students

High school students were asked the same questions as middle school students regarding internet access, learning experience supported by digital tools, and the Chromebook used as the main device used to complete school work. Students responding in agreement with these questions rose in all categories from the 2024 student survey. High school students reporting having adequate internet connectivity to access schoolwork at home was 95.9%, rising by 2 percent over last year. Although slightly lower than the 85.7% of students at the middle school level, over 3 out of 4 high school students reported their district issued Chromebook is the primary device used to complete schoolwork outside of school. Chromebooks used by students are funded through the 2022 bond. High levels of student use illustrate the need for devices so students can continue their learning outside of the school day.
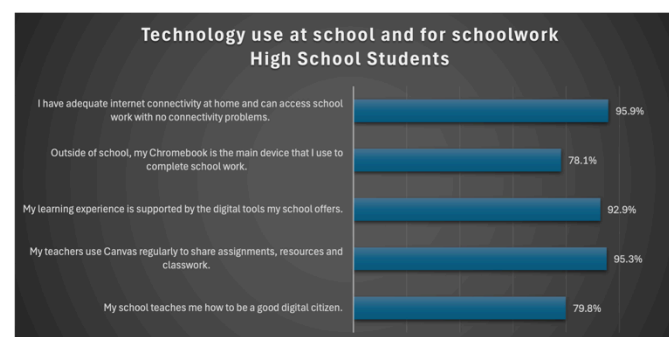
Successes:
- Student and staff survey responses indicate continued high satisfaction for technologies supporting student learning and staff work.
- Teacher devices replaced at start of 2025-26 school year were received well.
- IT projects funded through the 2022 bond remain delivered on time and on budget.

Issues:
- Beaverton School District continues to experience an increase in the number of cyber security attacks. With the advent of generative AI tools, the attacks are much more sophisticated and targeted than in previous years.
- The Enterprise Resource Planning project is creating challenges for IT staff to make progress on other projects and support of current systems.

Action Plan:

- Work to increase technology supports 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 demonstrate work aligned to increasing staff and student satisfaction of how technology supports their learning and work.

Technology Systems

Our Strategic Plan, teaching and learning mission, and our business functions demand robust and reliable technology systems and support structures. Access to network resources and the internet are critical to our learning mission and business operations. Applications for student learning and business functions are used both inside and outside of school or work hours and must be accessible from any location. The mission of the Information Technology department is to create and sustain an environment that is always available, highly secure, and continuously improving to meet the needs of students, staff, and our community.

Infrastructure Improvements

Cyber Security

Securing Beaverton School District networks, systems, and data is a primary and critical focus area for the IT department. Due to extensive amounts of personal and financial data maintained by school systems, and coupled with resource challenges, school systems across the nation are a frequent target for ransomware and other cyber-attacks.

According to a recent report from the Center for Internet Security (CIS) and the Multi-State Information Sharing and Analysis Center (MS-ISAC), there continues to be significant increase in sophistication and frequency of cyber-attacks against K-12 school systems. The report revealed 82% of school systems experienced a cyber threat impact with 9,300 confirmed incidents in a 17-month period.[1] Attacks include ransomware, account compromise, malware, unauthorized access, and data breach attempts to download student, staff, and organizational data. In addition to protecting data stored in our district data centers, the IT department must work with vendors to secure and protect data stored in cloud systems.

To assess the effectiveness of our IT cyber security processes and systems, a third-party security assessment is conducted every other year. The assessment is aligned to standards defined by the National Institute of Standards and Technology (NIST) and assesses multiple facets of the district's cybersecurity preparedness.

IT department staff are currently working with a vendor on a third-party assessment and once complete, the results will inform planning to improve our cyber security defenses.

A key defense in our cybersecurity portfolio is addressing user education and training. Staff regularly receive phishing simulations from our security awareness platform along with micro training sessions both when a phishing email is reported and when a staff

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[1] Center for Internet Security & Multi-State Information Sharing and Analysis Center. (2025). *K-12 state of cybersecurity report: Where education meets community resilience*. Center for Internet Security. https://learn.cisecurity.org/2025-k12-cybersecurity-report

member clicks a phishing email from the platform. IT tracks engagement with the platform, staff skill level at identifying phishing emails, and speed of staff reporting.

Data Center
The Beaverton School District has redundancy at the data center level, with two locations serving district network, telecommunications, and system access needs. The data centers have the ability of either location to assume full IT control of the district and continue operations in the event of an outage.

The Beaverton School District operates in a hybrid cloud environment. This means some applications are utilized directly from the internet and others are housed in our district data centers. Applications for learning and business functions are used around the clock and must always be available.

One critical data center component is our virtual infrastructure. Instead of many servers providing access to district applications, a virtual infrastructure environment uses fewer and more powerful physical servers, allowing IT staff to manage many virtual servers existing on the virtual infrastructure hardware. Due to licensing changes from our previous vendor, IT staff transitioned to a new virtual server management application and server backup environment. In addition to ensuring the new management application would work in our environment, IT staff had to test, schedule and transition hundreds of virtual servers. This work was done collaboratively with departments that relied upon their applications and was successfully completed in the summer of 2025.

Network Switch Replacement
There are over 1,000 network switches in use at all school and district ancillary sites. These switches provide network and internet access for all district devices. The oldest switches were approaching 18 years in use and in addition to capacity constraints, the switches did not contain new security enhancements. IT staff recently completed a three-year project to replace all district network switches. The new equipment has significantly reduced network downtime and technical support incidents that previously disrupted instruction or staff work time. The new switches provide faster data transfer and include enhanced security features.

Enterprise Applications

Enterprise Resource Planning (ERP)
For the past 28 years, the district has used the PowerSchool BusinessPlus HR/Finance application for business processes including human resource management, payroll, accounting, and purchasing. The existing application has been substantially customized to district processes, creating delays in updating and patching the system due to the amount of time needed for staff testing of upgrades.

The request for proposal (RFP) to replace our ERP was successfully completed in June 2024 with BusinessPlus from PowerSchool selected. Contract negotiations completed in September 2024 and the project kickoff was held in November 2024. Throughout the past year, the team from Business Office, HR, and IT have been working on the design, configuration, and implementation of the new ERP.

PowerSchool is an ERP solely designed for K-12 school districts and demonstrated the closest alignment to standard school district business practices and needs. While PowerSchool is our current vendor, this is a completely new implementation of the ERP. Business Office, HR and IT staff examined current business practices and have built the new system to align with standard business processes. The new design reduces custom development, creates efficiencies for department staff, and when implemented, will provide improved customer service for users of the system. This implementation will transition from an application hosted in district data centers to a vendor hosted solution, streamlining upgrades and security patching.

The implementation of a new ERP system is complex. In addition to running the business operations, all employees use the system to access employee financial and a variety of other information. The team is currently completing User Acceptance Testing (UAT) and is designing staff training which will begin in December. We have built a phased approach, with the business functions going live in January 2026 and the human resources functions transitioning in June 2026.

Transition to Synergy Special Education (SE)
IT department staff work closely with Teaching and Learning colleagues to ensure the Synergy student information system continues to meet needs of teachers and support the teaching and learning mission of the Beaverton School District.

For many years, Beaverton School District staff used the ORSPED application developed and maintained by the Northwest Regional ESD (NWRESD). The ORSPED application provided documentation and support to students receiving special education services. In summer of 2024, NWRESD announced the discontinuation of ORSPED. Staff from the Special Education and IT departments began working on the transition to Synergy SE. Synergy SE is a part of the core Synergy platform so there are no additional licensing costs in making the transition.

The transition to Synergy SE went live at the start of the 2025-26 school year. Staff from the special education department and IT worked to address technical issues and staff training and are continuing to support the transition to Synergy SE.

Student Data Privacy
The Beaverton School District, like all school systems across the country, holds a vast amount of student, staff and family data. This data is necessary for instruction, administration of the district, and state and federal reporting requirements. With the addition of digital instructional resources, student data might also be held by third party applications and vendors. The increased use of digital resources can make it more difficult for parents to know what information on their student is held by the district and if additional personally identifiable information is also contained in third party vendor systems.

Since 2018, the Beaverton School District has been a member of the national **Student Data Privacy Consortium** (SDPC). The SDPC is a national consortium of school districts that share information and best practices for providing parents with student data privacy information. The consortium allows districts to work together with vendors through a national student data privacy agreement to ensure vendors are adhering to best practices for safeguarding student data.

The IT department maintains a **public web portal** on our district website listing Beaverton School District digital applications and the data fields they create

Logo ↑↓	Software Name ↑↓	Agreement Status ↑↓	Agreement Type ↑↓	Agreement Dates ↑↓	Grade Level ↑↓	Content Area ↑↓	Data ↑↓
Renaissance	EduClimber	Active	Vendor Specific (OR-NDPA-V1) with Exhibit Exhibit E	Approved: 03/12/2024 Expires: 03/12/2027	K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	English Language Arts, Math	

and store. Staff, students, parents and community members can access the portal to view applications used in the district, vendor information and the data collected and stored by vendors. The page contains this information for 989 applications used by students and staff in the district and as additional applications are identified, they are added to the web portal. In the past year, 178 new student data privacy agreements have been signed by vendors to protect data on Beaverton School District students.

To strengthen data privacy practices in Oregon, Beaverton School District IT staff launched a workgroup open to all school districts in the state. This community meets virtually every month to share information and collectively align our efforts to improve practices in Oregon school districts and our work with vendors.

2022 Bond Projects

In May of 2022, Beaverton voters approved the 2022 bond. The 2022 bond contains $44M of investments for student devices, networking upgrades and infrastructure support. Information Technology staff are working on the following projects as part of the fourth-year implementation of the 2022 bond.

Dark Fiber Improvements
Dark fiber is a strategy of leasing fiber optic network cables and maintaining the electronics on the points where those network connections enter buildings to connect school and ancillary sites. The advantage of a dark fiber network is that monthly connection costs remain constant during the long-term lease agreement and the district can scale up network speeds by upgrading the electronics on the connections without incurring additional monthly costs from the provider.

In 2017 as part of the 2014 bond, high school and option school sites were connected to the district via dark fiber connections. In 2022, construction began on phase 2 of our dark fiber project with the project adding all elementary and middle schools in the northern half of the district. Phase 2 completed in October 2024. The third and final phase of the project began in 2023. This phase added elementary and middle schools in the southern half of the district and was completed in June 2025.

With the completion of phase 3, all district sites are now on a long-term, leased fiber optic network which is a lower cost solution for district connectivity over the next 10 years. In addition to the ability to scale to meet future network needs, ownership of the network allows IT staff to best secure and optimize the network. This dramatic increase in network capacity eliminates bandwidth bottlenecks that previously caused delays

when students accessed online learning platforms, streamed educational videos, or took digital assessments simultaneously. Our dark fiber network design is also highly resilient, with multiple network routes available to maintain school connectivity in the case of a fiber cut in our network.

Wireless Access Infrastructure Replacement
Daily, around 40,000 devices connect to our district wireless network. In all schools and district sites, over 3,000 access points provide the connection between devices and the district network. Wireless controllers in the district data centers manage the access points and balance network traffic to provide a robust wireless experience for students and staff.

Our current wireless infrastructure was installed in 2015 and it has reached end-of-life. IT staff are beginning the process to replace the entire wireless infrastructure using the latest WiFI 7 standard. In addition to increased network capacity and speed, the new wireless infrastructure will offer increased authentication and security protections. The wireless controllers will transition from district data centers to the cloud. This project will complete in the 2026-27 school year.

User Services and Support

Much of the work done in IT is work not immediately visible to our students, staff and community. When done well, efficiencies and time saved for staff can seem almost invisible to users. The impacts most visible to students, staff and our community are those that involve direct service and user support.

Teacher Laptop Replacement
Beginning in 2012, a computer replacement program was launched for certified staff members. Every four years, certified staff receive a new laptop as their primary computing device.

At the start of the 2025 school year, all certified staff received a new laptop to replace laptops purchased in 2021. IT staff designed a process to minimize the time needed for staff to transition between their old and new device. The existing teacher laptop devices will be repurposed for less demanding use in schools.

Technology Inventory Audit
The transition to a new and unified staff help desk application was completed in March 2025. Incident IQ is the new help desk application and includes an asset tracking module. With over 55,000 devices in use across the district and all classrooms now containing standardized technology equipment, it is important to accurately track devices assigned to students, staff and schools. This fall, IT staff launched a project to audit all devices and classroom technology. IT staff are visually confirming all devices assigned to staff, students and in use in classrooms to ensure asset information is accurate in Incident IQ. The project is expected to be complete by spring 2026 and will ensure all district devices are assigned to the appropriate user and connected into our district infrastructure for security and updating purposes.

Generative Artificial Intelligence (AI)

Since the launch of ChatGPT in November 2022, school systems across the United States have been exploring the impacts of generative artificial intelligence (AI) on student learning and business operations.

The use of AI applications in the Beaverton School District has the potential to support student learning. AI tools, like other resources on the internet, offer students the opportunity to seek help in their learning, brainstorm ideas for demonstrating their understanding, and provide ways for students to stay engaged in their learning.

As AI tools become more integrated into applications used by students and staff, it's important to understand the limitations of these tools. While AI tools are growing in sophistication, the information that they provide isn't always accurate, requiring students and staff to exercise critical thinking skills to evaluate work produced by AI. In addition to accuracy, concerns over data privacy, copyright, and bias must be addressed.

In collaboration with Teaching and Learning, IT led a process to develop a systemwide approach to the use of generative AI applications. The process began with a Generative AI Advisory Committee comprised of students, teachers, parents, administrators, classified staff, and members of the business community. The goal of the Generative AI Advisory Committee was to create responsible use guidelines for Generative AI applications. The Generative AI Responsible Use Guidelines document is posted on our district website. The Responsible Use Guidelines create a common understanding of how students and staff can use Generative AI applications in their learning and work, using approved applications vetted for student data privacy and security. Ongoing professional development is provided in collaboration with the Department of Teaching and Learning and building level Generative AI lead teams composed of teachers, library and technology teachers (LITTs), and building administrators. The Generative AI Responsible Use Guidelines also includes a chatbot to assist teachers with possible generative AI types-of-use scenarios for specific lessons, assignments, tasks and projects. Teachers can use the chatbot to brainstorm strategies for responsible AI use aligned to the Types of Student Generative AI Use section in the guidelines. The chatbot is in the Types of Student Use Scenarios section of the responsible use guidelines.
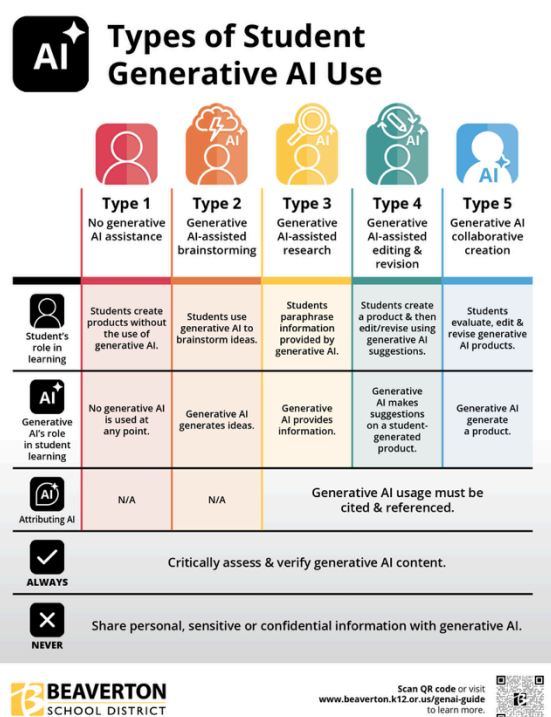
Customer Service

A strength of the IT department is that in addition to high levels of technology skills and knowledge, IT department staff understand and embrace the importance of their work supporting the teaching and learning of our students. As a result, the IT department staff continues to maintain excellent levels of service aligned to the IT Department Customer Service Standard.

At the end of every IT help desk ticket submitted, there is a chance for staff to provide feedback on how quickly IT resolved issues, the level of approachability and professionalism displayed, and our communication throughout troubleshooting the issue. Survey results on each question through November 1, 2025 rank IT staff 4.9 out of 5 stars in each area with over 1,100 surveys completed within the past year.