





With thanks to the Utah Legislature's commitment to digital teaching and learning, the Utah Education and Telehealth Network (UETN) is proud to present the third iteration of the Utah School Technology Inventory.

With the support of school and district-level technology directors, administrators and statewide leadership, UETN and nonprofit partner Connected Nation have successfully collected over 17,000 new data points across 1,018 public schools. The data, focused on digital teaching and learning resources, inform decision-makers of the current state of instructional technology in the classroom and helps identify future teacher and student needs. Furthermore, this report allows Utah's leaders to track changes in the technologies required for teaching and learning and to proactively recognize trends or outstanding issues that affect teachers and students.

This year's inventory shows that over the past two years, Utah educational institutions have added nearly 200,000 new computing devices for students, showing a particularly significant increase in the use of Google Chromebooks. As a result, the device-per-student ratio in the state increased from 0.84 in 2017 to 1.11 in 2019. In fact, 30 percent of district and charter schools have established some form of a 1:1 mobile device program. In spite of that, only a small percentage of those schools allow those devices to be taken home by students.

This is the first inventory where we have identified whether or not wireless networks in schools were professionally engineered. It was found that 77 percent of schools have professionally designed networks, allowing for better connectivity in classrooms. While that number is promising, we are reminded that over 20 percent do not have professionally engineered networks.

The data also show differences in the age of wireless versus wired hardware. Overall, fewer schools reported wireless gear four years or older. However, the data shows that wired gear is becoming fairly outdated across the state. Forty percent of schools reported wired hardware four years or older with only 5 percent reporting wired hardware one year or newer.

The data from this year's inventory are encouraging. Our commitment to enhance the digital teaching and learning environment for our students remains strong. Continuance of this inventory is of importance as it supports data-driven policy decisions and helps keep Utah at the forefront of the nation in providing quality educational experiences for its students. The data serve as a resource that policymakers can use to target the essential needs of Utah students. UETN will continue to collect, analyze, and report digital teaching and learning data in support of that need.

Sincerely,

Ray Timothy

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CEO/Executive Director

We network for education and healthcare

Contents





01 PROJECT HISTORY AND KEY FINDINGS	3
02 INVENTORY RESULTS	7
A. Computing Devices Available for Students and Educators B. Mobile Device Deployment in Utah Schools C. Technology Support Staffing in Utah Schools D. Wi-Fi Access E. Hardware Age in Utah Schools F. Educational Software Tools Used by Utah Schools G. Licenses Owned for Digital Textbook Content H. Instructional Software Needs I. District-Charter Comparisons	11 12 13 20 22 24 26
03 INVENTORY OVERVIEW AND METHODOLOGY	33
A. Survey Design and Portal Development B. Outreach C. News and Notables October – December	36 37 40
04 CONCLUSION	42
05 APPENDICES	44
Appendix A: House Bill 277 Appendix B: Inventory Questions Appendix C: About Connected Nation Appendix D: Statewide Summary Pages Appendix E: School District Summary Pages Appendix F: Charter School Summary Pages	45 60 72 74 78 120
Appendix G: News and Notables	

Project History and



Project History and Key Findings



I. Project History and Key Findings

Technology has the power to equalize learning opportunities and award the same educational tools and experiences to students from the most rural of schools to the most urban. With a priority on world-class learning through technology, the state of Utah has been a trailblazer, not only through its commitment to connect schools to robust internet access, but also in its commitment to data-driven studies on how schools and districts use the technology available. With this commitment, the Utah Education and Telehealth Network (UETN) embarked on a third iteration of its School Technology Inventory, which comprehensively assesses digital teaching and learning resources available in every classroom throughout the state.

In 2015, the Utah legislature passed Senate Bill 222, which established a digital teaching and learning program that would be informed by a statewide inventory of classroom technology and related resources deployed across Utah's public and charter schools. This legislation catalyzed the first iteration of the School Technology Inventory, which commenced in the fall of 2015 and concluded in January 2016. Nonprofit Connected Nation (CN) was selected by UETN to develop a data collection portal and lead the inventory effort, which was successful in gathering data from 100% of public schools (regular district and charter schools) across the state.

Following this success, the Utah legislature passed a second bill, House Bill 277 (see Appendix A), in 2017 that established the state's Digital Teaching and Learning Grant Program. The program allotted grants to schools and districts seeking to improve student learning outcomes and professional learning opportunities for educators in the area of digital teaching and learning. To understand the investments made as a result of this legislation and, ultimately, the impact made in schools, UETN was charged with implementing a second iteration of the School Technology Inventory in late 2017. UETN continued its partnership with CN, and data was once again gathered and analyzed from 100% of the state's public schools.

At the conclusion of the 2017 inventory, an assessment of lessons learned and opportunities for improvement in the data collection process resulted in UETN's decision to build a new, custom data collection portal from the

ground up that can serve the needs of future inventory iterations. Beginning in mid-2018 with focus groups, surveys and dozens of conversations regarding how schools track and report data internally, the team applied the feedback received and developed a design plan. Then, the team selected a software developer via RFP and worked alongside them to ensure that the new portal would adequately address all identified needs. In October 2019, the new portal was launched and the third iteration of the inventory commenced on schedule.

The following report highlights the many findings of the 2019 inventory and offers a look back at historical data and trends observed dating back to the first iteration of the inventory in 2015.

Key Results and Findings

- Since 2015, Utah Local Educational Agencies (otherwise known as LEAs, which consist of charter schools and public school districts) have significantly increased their investment in Google Chromebooks that are available for student use; Utah schools report having approximately 155,000 more Google Chromebooks available for student use in 2019 than they did in 2017.
- Three out of 10 Utah schools (30%) have established some type of 1:1 mobile device program, up from 19% in 2017 and only 11% in 2015.
- LEAs report spending anywhere from nearly 3,800 hours to as little as
 one hour per week on technical support. Altogether, Utah LEAs own an
 average of 1,212 computing devices for every full-time equivalent (FTE)
 technical support employee, including staff and contractors.
 Meanwhile, schools report an average of 145.3 classroom teachers (fulltime and part-time) per FTE instructional technology support staff.
- Between 2015 and 2019, the number of schools that offer Wi-Fi access via the 802.11ac protocol increased by nearly 60 percentage points, while those that still provide Wi-Fi service using 802.11b or other legacy standards (the slowest of the current Wi-Fi protocols) decreased by approximately 14 percentage points, with no significant changes from 2017.
- The majority of schools (53%) report that their Wi-Fi networks were designed by in-house professionals, while an additional 24% said their network was designed by outside contractors. Statewide, though, more than one in five schools said they had Wi-Fi networks that had not been professionally designed.

- Fifty percent of schools reported having wireless gear that was two years old or newer on average. This number is down slightly from 2017, yet the percent of schools reporting that their wireless gear was four years old or more decreased by eight percentage points since 2017.
- Wired hardware in Utah schools tends to be several years older than wireless gear on average. Two out of five schools report that their wired hardware is more than four years old on average. Meanwhile, only 5% said their wired hardware is newer than one year old on average, which is a decrease by more than half since 2017.
- A significant majority of Utah charter schools and school districts listed Google Apps, Microsoft Office and Adobe Creative Suite among their top educational software tools used in their schools.
- The percentage of LEAs using the Canvas LMS platform jumped substantially between 2017 and 2019 from 28% to 60%.
- All Utah LEAs report that they use some type of Student Information System (SIS) tools to help track attendance, grades and other important statistics, with Aspire being the most commonly used platform.
- Nearly nine out of 10 schools statewide (87%) have obtained at least some digital textbook licenses (or they use licenses acquired by their district).



Inventory Results





II. Inventory Results

The Utah School Technology Inventory included 66 questions posed to charter and district schools on topics ranging from computing devices; internet access; Wi-Fi connectivity; technology support; and both the current and anticipated use of a variety of digital learning tools. The cumulative result of this year's inventory is over 71,000 new points of data on the use of technology across 1,018 K-12 schools, representing 100% of the public school universe in Utah. Upon final review and analysis of the data submitted, Connected Nation found meaningful results based on information submitted in 2019, as well as in the trends observed by comparing 2019 data to those obtained in 2015 and 2017. All data were collected, compiled and validated by Connected Nation.

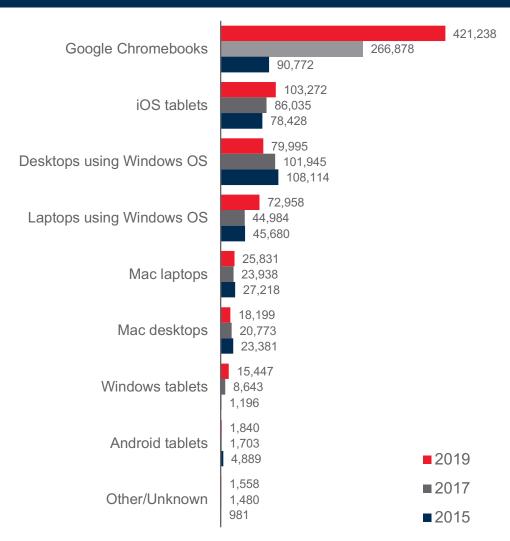
a. Computing Devices Available for Students and Educators

Across the state of Utah, students and educators are making technology access a priority. Districts and charter schools report that more than 740,000 computing devices are available to students in Utah schools, nearly 200,000 more than in 2017. This represents an average of 1.11 computing devices per student in 2019, an increase over the 2017 average of 0.84 devices per student and exceeding an average of one computing device per student in the state.

¹ In this report, the term "charter schools" refers to public schools created by groups of parents, teachers or community leaders within the state of Utah. These charter schools have had their applications approved by the State Charter School Board or the board of a school district. They do not include home schools, private schools, schools where applications may be pending, or schools that are not yet approved.

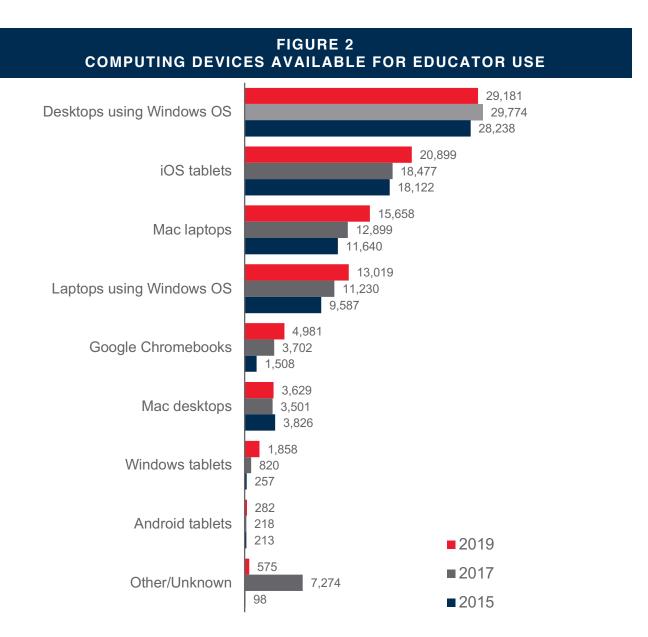
Since 2015, laptop and tablet computers have become more popular, while desktop computers have declined in use. This shift is likely due to the lower cost, growing processing power and portability of these mobile devices. In particular, Google Chromebooks have seen a significant upsurge between 2017 and 2019 (Figure 1).





Since 2015, Utah schools have increased their investment in Google Chromebooks available for student use; Utah schools report having approximately 155,000 more Google Chromebooks available for student use in 2019 than was reported in 2017. Overall, tablets and laptops of every model are gaining ground in Utah schools; since 2017, the number of each type of tablet and laptop device has grown, while the use of desktop computers of every type has decreased.

The number of computing devices for teachers also has increased over the years to approximately 90,000 computers in 2019, compared to just under 88,000 in 2017 and fewer than 74,000 in 2015 (Figure 2).



For educators, desktop computers running Windows operating systems are still the most widely used computing device, a trend that has continued since 2015. Meanwhile, tablets running Apple iOS are the most popular choice among portable computing devices for educators.

Across Utah schools, the number of portable computing devices such as laptops and tablets is growing at a faster rate than the number of desktop computers. Meanwhile, nearly two out of three schools (64%) report that their educators have their own wireless network, separate from the one used by students or (in some cases) the community.

b. Mobile Device Deployment Policies in Utah Schools

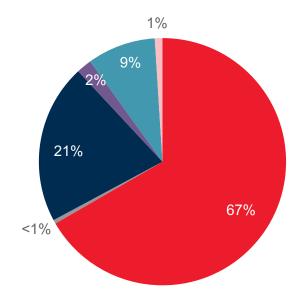
Utah schools have deployed mobile devices for their students in varying ways (Figure 3).

FIGURE 3 MOBILE DEVICE DEPLOYMENT POLICIES IN UTAH SCHOOLS

- On a cart for in-classroom use only
- No school-owned mobile computing devices, but students are allowed to use their own personal mobile devices under a BYOD ("Bring Your Own Device") policy
- On a 1:1 basis (devices cannot be removed from school)
- Available for check-out from library, media center, or computer lab
- On a 1:1 basis
 (students can take the devices home at night)



No mobile devices in school use

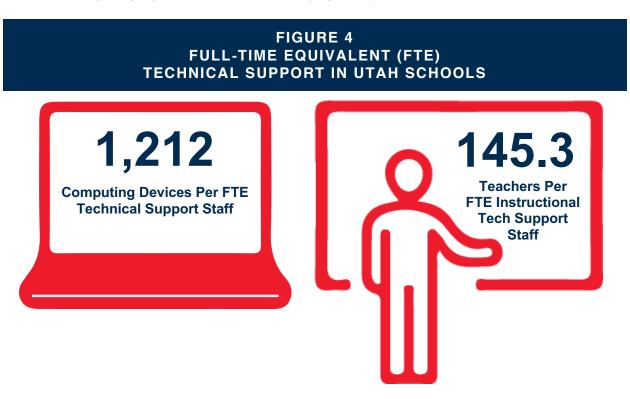


Statewide, two out of three Utah schools offer mobile devices to students via a cart that is used in a classroom or shared by several classes. More than one in five Utah schools (21%) offer their students mobile devices on a 1:1 basis through which the devices remain at the school, while an additional 9% allow their students access to mobile devices on a 1:1 basis under agreements by which students can take their devices home after school hours. Combined, this means that three out of 10 Utah schools (30%) have established some type of 1:1 mobile device program, up from 19% in 2017 and only 11% in 2015.

c. Technology Support Staffing in Utah Schools

To maintain the technology on which Utah students and teachers rely, schools require technical support professionals who are properly trained to diagnose and resolve any issues that may arise, as well as those who can advise administrators on technical improvements that may be needed. Schools also require employees and contractors who are equipped to provide instructional technology support to teachers in the classroom. These individuals handle tasks such as leading professional development training and coaching teachers on how to maximize the capabilities of various software and hardware to have a positive impact on student learning outcomes. For many schools, these tasks would be impossible without the support and assistance of volunteers in the community, whether that includes community members who are experts in the use of a certain type of technology, or teachers and administrators volunteering their time to help their peers understand how to best use technology in their schools.

Statewide, LEAs report that they own a total of more than 830,000 computing devices for teachers and students to use. Meanwhile, the number of hours that LEAs dedicate toward tech support for those computers varies depending on the district size, the number of computers it uses, and a number of other factors; as a result LEAs report spending anywhere from nearly 3,800 hours to as little as one hour per week on technical support. Altogether, Utah LEAs own an average of 1,212 computing devices for every full-time equivalent (FTE) Tech Support Staff, including employees and contractors (Figure 4).



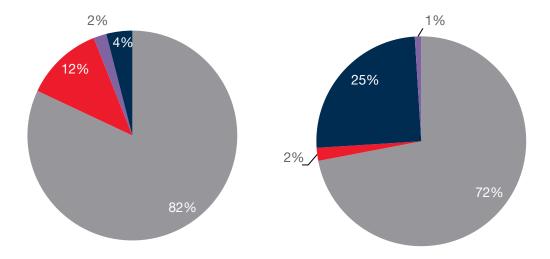
Many LEAs also lean on support from volunteers, either teachers or others in the community who are familiar with computer and software technology. In addition to teaching educators how to use software, these volunteers also provide IT support for hundreds of schools.

Across Utah, 18% of schools benefit from at least some volunteer assistance with technical support, while more than one in four (28%) get volunteer assistance with professional technology development (Figure 5).

FIGURE 5 PERCENT OF UTAH SCHOOLS THAT BENEFIT FROM VOLUNTEER TECHNOLOGY SUPPORT ASSISTANCE

Technology Support

Professional Development



- No volunteer assistance received
- Volunteers provide less than 10% of total technology support services
- Volunteers provide 10% 20% of total technology support services
- Volunteers provide more than 20% of total technology support services

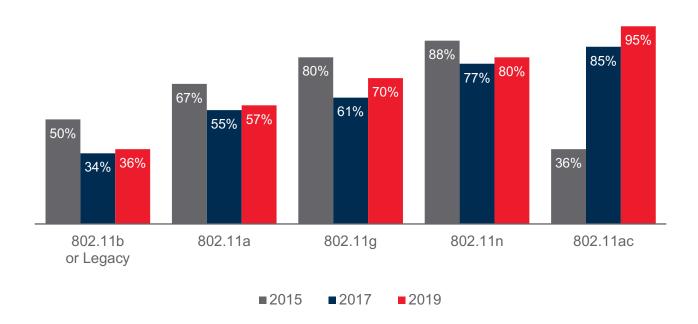
d. Wi-Fi Access

To accommodate this growth in wireless devices, Utah schools are increasing the number of Wi-Fi access points in each classroom and educational space. Because each school faces its own unique challenges, each must follow its own strategy to ensure that wireless access is provided in an efficient manner that will meet the needs of its students, as well as its community. As a result, Wi-Fi access continues to increase — meaning faster and more reliable internet service for a greater number of students.

1. Wi-Fi Protocols Used in Utah Schools

The vast majority of Utah schools offer Wi-Fi via access points that employ the 802.11ac protocol, the fastest currently available, offering hypothetical download speeds of up to 1.73 Gbps from the access point to end-user (Figure 6). On the other hand, slightly more than one-third of schools still rely on Wi-Fi access via older protocols that may offer less than one-tenth of the speeds offered by 802.11ac technology.





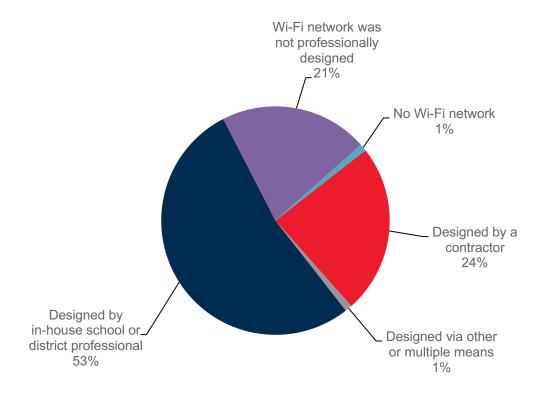
In addition, educators must understand how to best utilize the technology tools they are provided; that job is the duty of the instructional tech support staff. Utah schools report an average of 145.3 classroom teachers (full-time and part-time) per FTE instructional technology support staff.

Between 2015 and 2019, the number of schools that offer Wi-Fi access via the 802.11ac protocol increased by nearly 60 percentage points, while those that still provide Wi-Fi service using 802.11b or legacy standards (the slowest of the current Wi-Fi protocols) decreased by approximately 14 percentage points, with no significant changes from 2017.

2. How School Wi-Fi Networks Were Designed

In addition to the unique needs faced by each Utah school, every school used different methods of designing their Wi-Fi networks. While some hired outside contractors, others relied on in-house experts to design and optimize the networks that provide wireless internet service to their students (Figure 7).

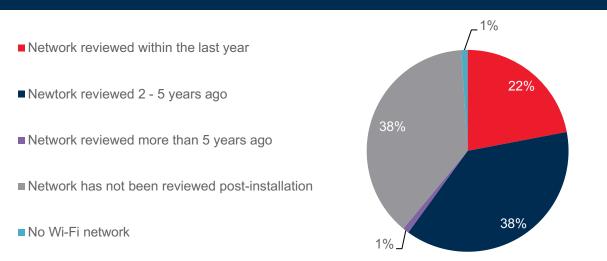
FIGURE 7 HOW SCHOOL WI-FI CONNECTIONS WERE DESIGNED



The majority of schools (53%) report that their Wi-Fi networks were engineered by professionals who work for their LEA, while an additional 24% said their network was designed by outside contractors. Statewide, though, more than one in five schools said they had Wi-Fi networks that had not been professionally engineered.

Schools must not only design and build their Wi-Fi networks, they also must maintain them. To that end, most schools carry out regular maintenance reviews to ensure that the quality of the network is top-notch (Figure 8).

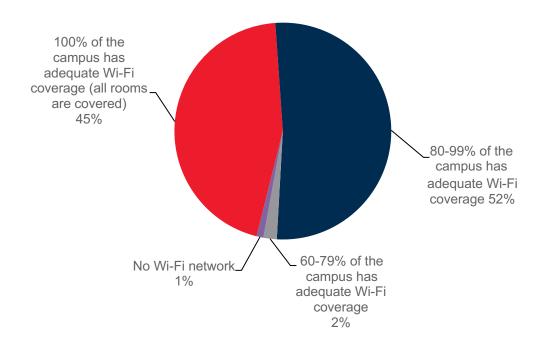
FIGURE 8 WHEN UTAH SCHOOLS HAD THEIR WI-FI NETWORKS REVIEWED



Among the schools that have *not* conducted post-installation validation surveys, one in three (34%) report that their wireless gear is less than two years old on average — indicating that their network may be too new to warrant such a review.

For the majority of schools, this continued assessment and refinement of their Wi-Fi networks has resulted in coverage that reaches across their entire campus (Figure 9). More than nine out of 10 schools report that at least 80% of their buildings are covered by their current Wi-Fi network.

FIGURE 9 PORTIONS OF SCHOOL BUILDINGS COVERED BY ADEQUATE WI-FI



When asked about the reliability of the Wi-Fi connections at each school, the majority said they had no noticeable losses of Wi-Fi connectivity in the last year, and more than one in three said they experienced no significant slowdowns or degradations in the quality of their Wi-Fi connectivity in the last year (Figure 10).

FIGURE 10 PERCENT OF UTAH SCHOOLS REPORTING WI-FI CONNECTIVITY OUTAGES LAST YEAR

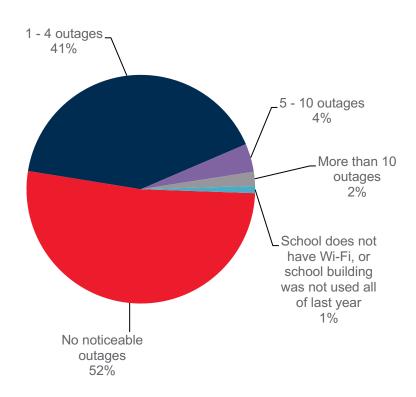
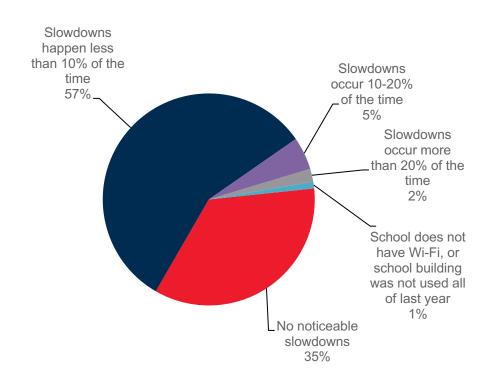


FIGURE 11 PERCENT OF UTAH SCHOOLS REPORTING NOTICEABLE WI-FI SLOWDOWNS LAST YEAR



3. Wi-Fi Access Points

In 2019, Utah schools report having 0.88 wireless access points per classroom or instructional space, continuing the upward trend of network densification from 0.58 access points per classroom in 2015 and 0.82 in 2017 (Figure 12).





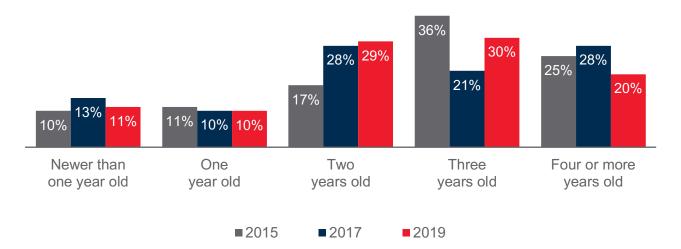
Statewide, just over one-third of Utah schools (36%) report that they have at least one AP per classroom or instructional space, down from 2017 when 46% of schools reported the same.

While the ratio of one AP per classroom provides a simple means of measuring access point density — and to a certain extent, coverage — it is not necessarily an optimal standard or target for any given school. Proper access point distribution is best determined by a qualified engineer's assessment of the school floor plan, its building materials and the capabilities of Wi-Fi equipment in use. Some LEAs have undertaken exhaustive measures to determine the optimal placement of their APs, and for those schools, a network with one AP per classroom may not be optimal, economical or prudent. These factors should be taken into account when assessing the quality of any school's Wi-Fi network.

e. Hardware Age in Utah Schools

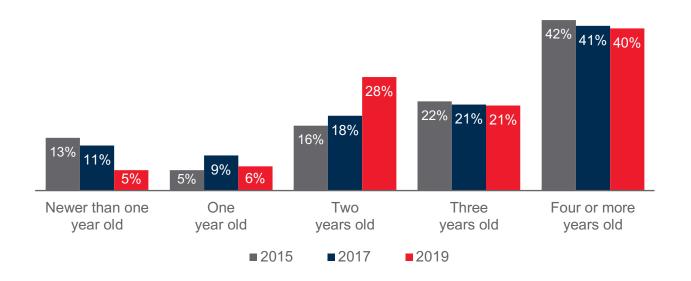
When asked the average age of the wireless hardware in each school, half of all schools (50%) reported having wireless gear that was two years old or newer (Figure 13). This number is down slightly from 2017, yet the percent of schools reporting their wireless gear was in the oldest age bracket also decreased by 8% since 2017.





By comparison, wired networking gear in Utah schools tends to be several year older on average. Two out of five schools report that their wired hardware is more than four years old on average (Figure 14). Meanwhile, only 5% said their wired hardware is newer than one year old on average, which is a decrease by more than half since 2017.

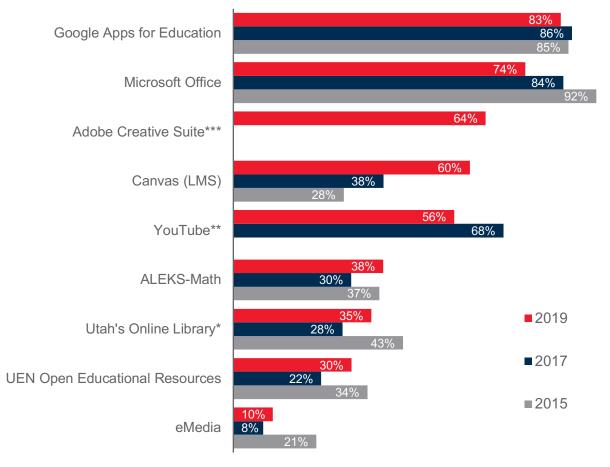
FIGURE 14 AVERAGE AGE OF WIRED HARDWARE IN UTAH SCHOOLS



f. Educational Software Tools Used by Utah Schools

A significant majority of Utah charter schools and school districts listed Google Apps, Microsoft Office and Adobe Creative Suite among their top educational software tools used in their schools (Figure 15).





^{*}Previously "Pioneer Online Library"

The percent of LEAs using Canvas learning management system (LMS) jumped substantially between 2017 and 2019.² While more than half of LEAs still use YouTube for their educational needs, that percentage has decreased since 2017, as has the share of LEAs where Microsoft Office is considered a top educational tool.

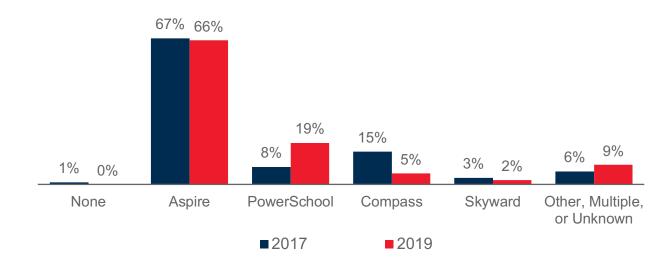
^{**}Option not offered in 2015

^{***}Option not offered in 2015-2017

²Note that LEAs were asked to report on software at the district level. As such, if even one school used a particular software package, the LEA was asked to report that usage at the district level.

Every Utah LEA reports that it uses some type of Student Information System (SIS) tools to help track attendance, grades and other important statistics. Utah's Aspire SIS is the most widely used, followed by a handful of other systems (Figure 16).

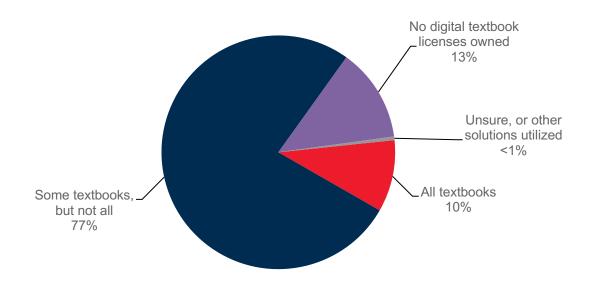




g. Licenses Owned for Digital Textbook Content

As schools incorporate digital technology in their classrooms, one key component to that transition is the acquisition of digital licenses for textbooks and related learning tools. These licenses allow teachers to access textbooks digitally or to supplement lessons from the textbooks with additional examples, as well as augment lesson plans in other ways that can help material come alive for students. For that reason, many schools are turning to online resources to complement or replace physical textbooks, at least in some subject areas (Figure 17).

FIGURE 17 SCHOOLS OWNING* DIGITAL TEXTBOOK LICENSES

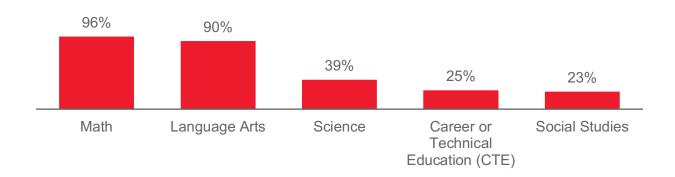


^{*}Includes schools where licenses are owned by the district

Nearly nine out of 10 schools statewide (87%) have acquired at least some digital textbook licenses, or they use licenses owned by their school district. Some schools employ other solutions, such as seeking out digital lesson tools that are available for free or in the public domain. Slightly more than one in eight schools (13%) say they or their districts have not acquired any digital textbook licenses.

Among those schools that own digital licenses for select textbooks, the most popular subjects for digital textbook licenses are math and language arts, followed by science, social studies and career or technical education (Figure 18).

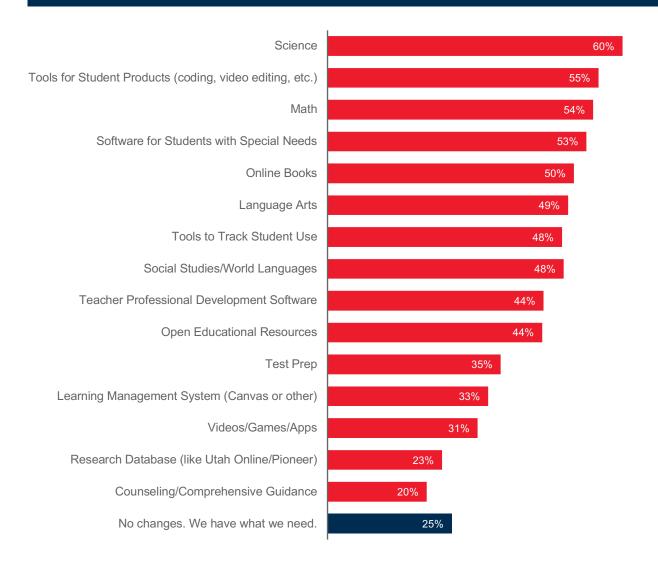
FIGURE 18 DIGITAL TEXTBOOK LICENSES AMONG SCHOOLS THAT DO NOT OWN LICENSES FOR EVERY SUBJECT



h. Instructional Software Needs

Schools also identify a variety of instructional software and tools that would benefit them and their students (Figure 19).

FIGURE 19 SCHOOLS REPORTING A NEED FOR DIGITAL TOOLS AND SOFTWARE



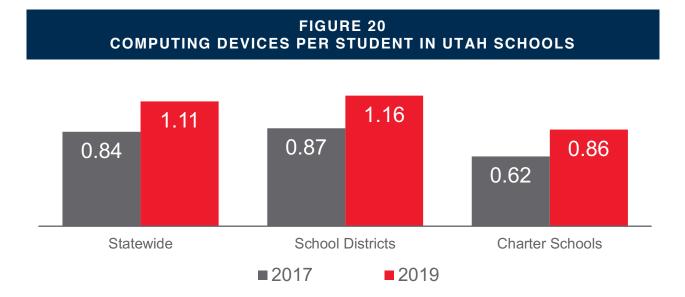
One out of four Utah schools (25%) say they do not see a need for any change and that they have no unmet needs for software or digital tools. Among those that did report educational software needs, the greatest demand was for science-related resources, tools to support student productions and online tools to assist in the development of math skills. Software to help students with special needs and online books also were noted by at least half of Utah schools.

Utah schools are split on whether adequate professional development and training resources are available in their respective budgets to assist teachers in effectively integrating mobile devices into their instructional practices. Just over half (51%) of schools say that they do believe that adequate resources are provided, while nearly as many (49%) feel that more can be done to improve these budgets.

i. District-Charter Comparisons

Because funding, administrative practices and student populations differ between charter schools and school districts, there are several differences between the two groups in terms of technology as well.

One such difference is in the number of computing devices available per student. Statewide, Utah schools average 1.11 computing devices per student, up from 0.84 in 2017; charter schools report a significantly lower ratio than district schools (Figure 20).

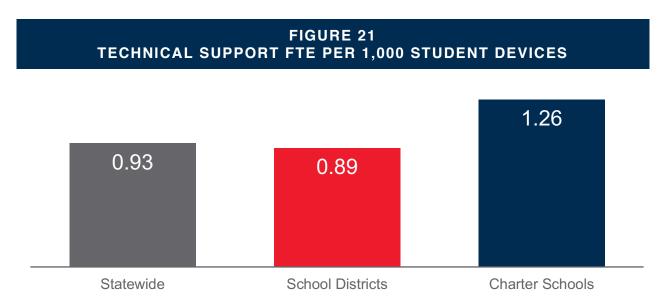


School districts and charter schools have both increased their computer-to-student ratio since 2017. Two years ago, school districts reported having 0.87 computing devices per student, and charter schools reported having only 0.62 computers per student, continuing an upward trend from 2015.

Charter and district schools alike provide their students with Google Chromebooks most often. The second most popular computing device in district schools is an Apple tablet running the iOS operating system, while among charter schools, Windows laptops rank second to Chromebooks.

To ensure these computing devices function at their optimal capacity, districts and charter schools both rely on an army of technical support staff, as well as instructional support staff who help make sure that educators know how to best utilize the software and hardware tools they have.

Across Utah, schools dedicate 0.93 Full-Time Equivalent (FTE) staff per 1,000 student computing devices each week (Figure 21). This includes those who are employed at individual schools, those who maintain computing systems district-wide, and contractor hours dedicated to providing technical support.

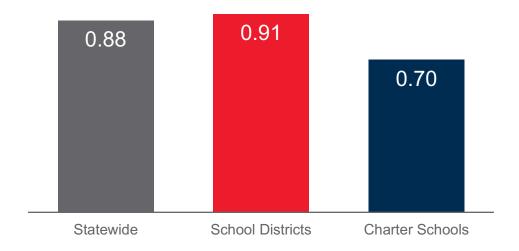


Charter schools dedicate 1.26 FTE per student computing devices per week, compared to 0.89 among district schools.

Both charter and district schools are equally likely to receive volunteer assistance for their technical support needs; 18% of district schools say they rely on volunteers for some of their technical support needs, compared to 17% of charter schools.

Both charter schools and public schools have made wireless internet available in their classrooms (Figure 22).





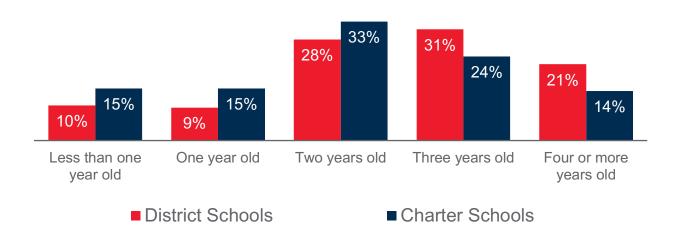
Utah district schools report having an average of 0.91 Wi-Fi access points per classroom or educational space, compared to 0.70 among charter schools.

These ratios have all increased since 2017, and it should be noted that a ratio of one AP per classroom isn't necessarily the optimal target for AP distribution, which is best determined through a proper engineering analysis that takes into account such factors as building construction, equipment capabilities and band/channel management. For example, 72% of charter schools say that all of their classrooms are covered by adequate Wi-Fi service, compared to only 42% of district schools who report the same.

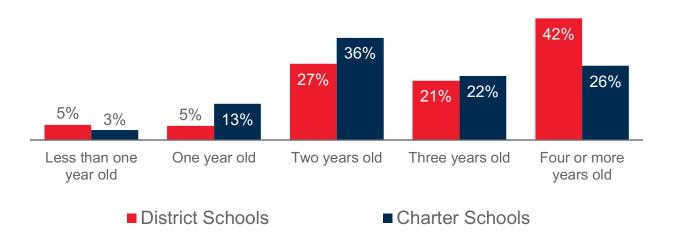
District schools in Utah are also relying on older wired and wireless equipment, in general (Figure 23).

FIGURE 23 AVERAGE AGE OF WIRELESS AND WIRED GEAR IN SCHOOLS

Average Age of Wireless Gear



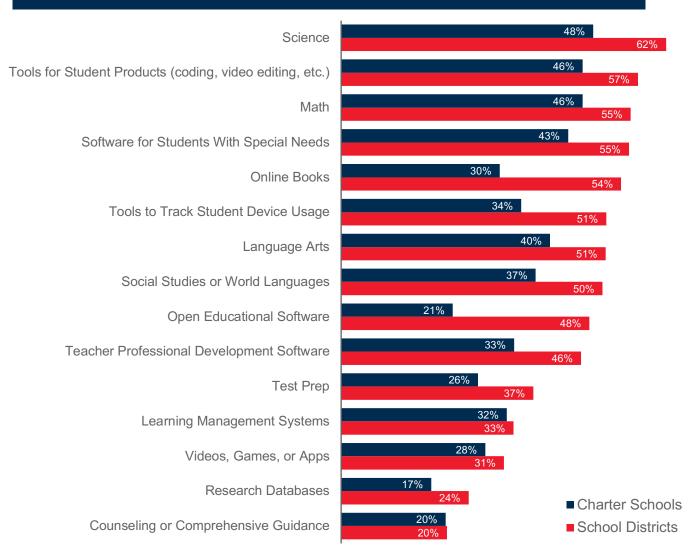
Average Age of Wired Gear



A larger share of Utah district schools report having both wireless and wired gear that is four years or older on average.

Utah school districts are also more likely to identify additional instructional software needs (Figure 24).

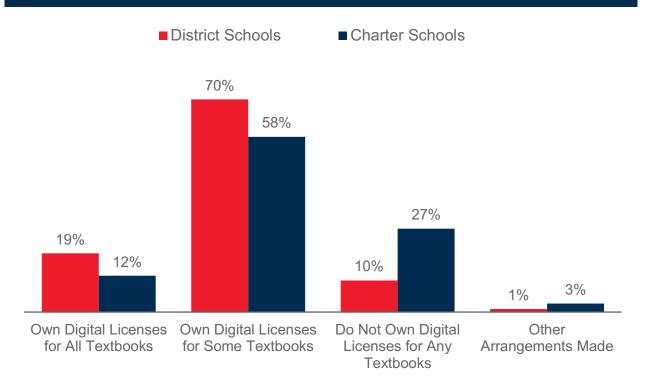
FIGURE 24 TOOLS AND SOFTWARE NEEDED BY SCHOOL DISTRICTS AND CHARTER SCHOOLS



A larger share of district schools in Utah report needing software tools of every stripe. The demand for these tools has increased among both charter and district schools since 2017.

Despite this gap, Utah district schools are more likely to have digital textbook licenses (or use digital textbooks under licenses owned by their districts). Nearly one in five Utah district schools (19%) have digital licenses for all of their textbooks, compared to only 12% of charter schools (Figure 25).





By comparison, more than one-quarter of Utah charter schools do not have any digital textbook licenses, compared to only 10% of district schools in the same situation.



Inventory Overview And Methodology



III. Inventory Overview and Methodology

Since 2015, Connected Nation and UETN have partnered to complete three successful iterations of the Utah School Technology Inventory (in 2015, 2017 and 2019), capturing robust data from every public school in Utah. Unique to the 2019 inventory was the development of a new data collection portal that included months of research and development complete with focus groups and surveys on ideal functions.

In both the portal development and data gathering portions of the Utah School Technology Inventory, Connected Nation continued to focus efforts on several key priorities that proved essential to project success.

Relationship Management	Identifying key points of contact and building relationships that result in effective and timely participation.
Project Management	Competently managing processes, reports, and deliverables throughout the duration of the project, especially given the short timeline.
Portal Development	Designing an online data gathering interface that was simple for schools to use and project personnel to administer.
Data Collection Design	Leveraging Connected Nation's previous school technology survey and data collection experience to develop a data collection process that was efficient and effective.
Communications	Developing an effective internal and external communications plan that efficiently garnered school participation.
Sustainability Planning	Ensuring that sustainable tools and processes were developed that will support future data collection cycles by UETN.

With these priorities in mind, the project plan was designed to include a number of distinct phases from building the portal from the ground up, to identifying initial points of contact, compiling results from 1,108 schools serving nearly 668,000 students.

UTAH 2018-2020

PHASE I MAY 15, 2018 – AUG 30, 2018	 Review of School Technology Inventory Process and Portal Redesign Meetings with School District/Charter Advisory Group Review of Options for Data Collection Tool
PHASE II SEP 26, 2018 – DEC 16, 2019	Release of Request for Quote and Vendor Selection Development of Custom UETN School Technology Inventory Portal
PHASE III JUN 6, 2019 – OCT 4, 2019	 Inventory Launch Planning and Update Communication Strategy Update Local Point of Contact Identification
PHASE IV OCT 7, 2019 – DEC 17, 2019	 Portal Launch Initial Data Collection Preliminary Report Development and Presentation
OCT 7, 2019 –	• Initial Data Collection

Culminating with the delivery of this final report and complete dataset, Connected Nation delivered a new, streamlined and fully functional collection portal, an updated survey design, an effective communications and outreach strategy (which garnered participation from every public school in the state), and a preliminary report of findings. Each of these elements contributed to a successful 2019 inventory project overall and are described in greater detail below.

a. Survey Design and Portal Development

In the 2015 and 2017 inventory iterations, Connected Nation and UETN used a customized off-the-shelf data collection portal that, while effective, had many limitations, particularly as it related to the process flow for how school and district users could input the requested information. As a result, in 2018, UETN engaged with Connected Nation to plan for and build a new data collection portal from the ground up.

At the onset of that exercise, UETN and CN brought together a focus group composed of stakeholders that participated in previous inventories. Via live discussion and the completion of an online survey, these stakeholders provided extremely valuable input that influenced the design and process flow that would be incorporated into the new platform. Additionally, Connected Nation and UETN reviewed numerous other off-the-shelf inventory tools in the marketplace and concluded that all available school inventory management systems did not properly align with the specific needs of this state-level project. The team concluded that the best path forward would be to build a new custom portal that would address the needs of all stakeholders and support the execution of future inventories for many years to come.

Consistent with the original portal, the new system provides user-friendly functions such as a "save-and-return-later" functionality, as well as pre-populated data. Districts and charter schools were asked to fill out a profile for district-wide (or equivalent LEA authority) information, including contact information, number of schools administered by the entity, aggregate enrollment and staff data, and applications and assessment solutions that are in use across all schools in their respective jurisdictions. For tracking purposes, each LEA supplied its unique identification number that is assigned by the U.S. Department of Education's National Center for Education Statistics (NCES).

The district or charter entity also was asked to create school-level profiles for each school that it administers. School profiles consisted of identifying information, a series of questions on wireless and hardware assets, perceived software and support needs and more — as detailed in the report's findings above.

Unique to the redesigned portal is, among other things, the ability for district-level users to assign multiple user log-ins under the same master account — allowing for the delegation of data-gathering to school-specific points of contact. Additionally, the new portal allows a district to move freely among schools and edit responses at-will, rather than having to sequentially complete a school profile fully before being permitted to move on to the another school.

Overall, the new portal functioned as intended, with 100% of district and charter LEAs electing to use the portal itself for data entry rather than the optional pre-formatted Excel spreadsheet that had been used by larger districts in previous iterations of the inventory. Overall, users reported great satisfaction with the new design and its ease of use.³

b. Outreach

The continued success of the Inventory can largely be attributed to supportive school and district points-of-contact. Schools were asked to submit data during the end-of-semester testing period and pre-holiday/winter break season — all of which presented numerous competing priorities for local technology staff. To assist and offer support to schools and districts, UETN and Connected Nation engaged in a number of outreach activities, including on-site visits, personal emails and calls, and social media outreach to facilitate timely participation.

i. Regional Data Collection Managers

In December, Connected Nation deployed two data collection managers on the ground in Utah, assigned to specific designated regions, to facilitate local outreach. The data collection managers assisted smaller charter schools, many of which had very limited resources available to dedicate to the inventory. They also assessed much larger districts that faced the daunting task of amassing large amount of data to submit. By providing a one-on-one support system for points of contact, all remaining data were collected for a comprehensive and all-inclusive statewide analysis of school technology.

ii. Communications Efforts

In addition to word-of-mouth communications and on-site visits, UETN partnered with Connected Nation to develop a communications plan that would further supplement the ongoing data collection efforts. Through effective outreach strategies to build

³ In 2015 and 2017, several districts opted to submit data via a pre-formatted Excel spreadsheet rather than using the available portal.

awareness and increased participation, communications efforts aided the project in accomplishing its goal of 100% participation and understanding of why the inventory is important for Utah's schools. Strategies employed included:

Conference Calls and Webinars

Through frequent internal touch points between Connected Nation and UETN, from the project's earliest stages until its conclusion, clear and consistent internal communication remained a priority and necessity. Connected Nation and UETN also hosted two demonstration webinars regarding the new data collection portal, which allowed school and district points of contact the opportunity to learn how to use the application and ask questions regarding the information being collected.

External Communications

In order to increase visibility of the project, Connected Nation and UETN promoted the Utah School Technology Inventory across multiple media communications platforms including: UETN's "News and Notables" page through www.uen.org, Facebook, Twitter and other communications channels.

Additionally, Connected Nation collaborated with UETN to launch a

series of articles on why technology matters in the classroom. The series entitled "The Changing Classroom in Utah" highlighted how the use of technology in Utah classrooms has changed the way teachers teach and how students learn. The series also served as a reminder of why it was important for districts and charters to



Juab School District

participate in the school technology inventory. Connected

Nation interviewed various stakeholders including district technology leadership, teachers and students to get their insights in Beaver, Weber, Alpine and Juab School Districts.

Connected Nation and UETN highlighted the series via their respective websites and social media. Below is a screenshot of the series page at https://www.uen.org/schooltech/

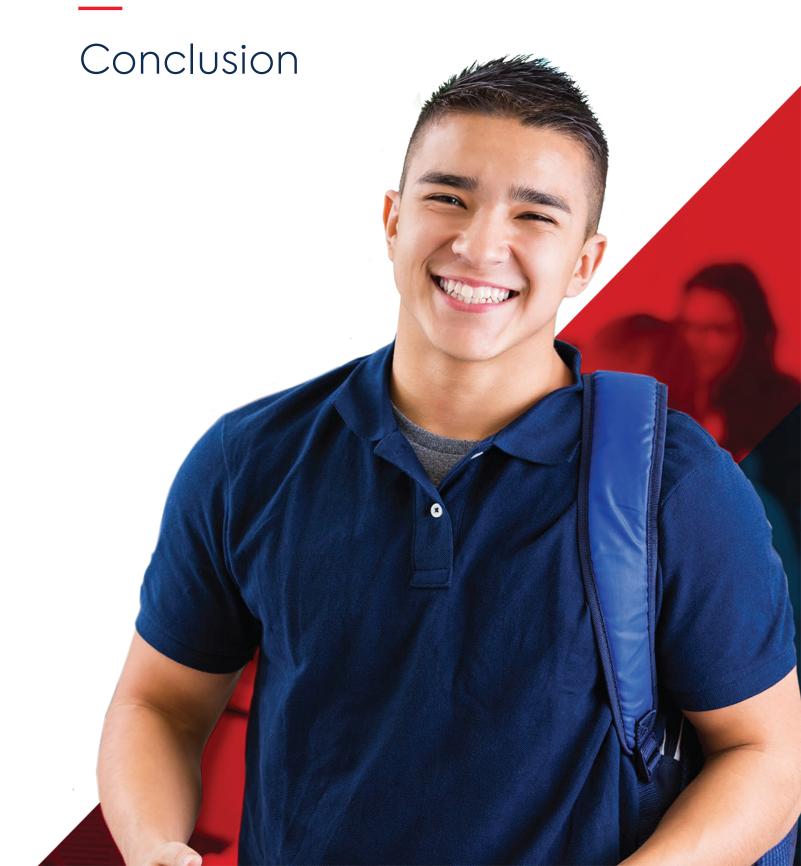


c. News and Notables on the Utah School Inventory October – December 2019

Date	School District	Title	Publication or Organization	Link to Story
10/3/19	N/A	Utah Education Network Asks School Districts to Track Technology in Classrooms	Utah Education Network	https://connectednation.org/blog/ 2019/10/03/taking-inventory- utah-education-network-asks- school-districts-to-track- technology-in-classrooms/
11/5/19	Beaver Co.	The Changing Classroom in Utah: Why Digital Teaching Matters	Utah Education Network	https://www.uen.org/news/article.php?id=934
11/5/19	Beaver Co.	Same	Connected Nation blog	https://connectednation.org/blog/ 2019/11/04/the-changing- classroom-in-utah-why-digital- teaching-matters/
11/06/19	Beaver Co.	Same	Broadbandmatter s.com	https://broadbandmatters.com/ne ws/changing-classroom-utah- why-digital-teaching-matters
11/06/19	Beaver Co.	Same	Beaver County Journal	The newspaper provided pdf's of the story – page 1 and page 2
11/12/19	Beaver Co.	Same	San Juan Record	http://www.sjrnews.com/view/full_story/27679021/article-The-changing-classroom-in-UtahWhy-digital-teaching-matters-to-students
11/12/19	Weber Co.	Technology in Weber School District – From Chalkboards to Chromebooks	Utah Education Network	https://www.uen.org/news/article.php?id=938
11/12/19	Weber Co.	Same	Connected Nation blog	https://connectednation.org/blog/ 2019/11/12/8709/
11/19/19	Alpine	The Changing Classroom in Utah: Technologies Role in Alpine School District	Utah Education Network	https://www.uen.org/news/article.php?id=939

Date	School District	Title	Publication or Organization	Link to Story
11/19/19	Alpine	Same	Connected Nation blog	https://connectednation.org/blog/ 2019/11/19/the-changing- classroom-in-utah-technologys- role-in-alpine-school-district/
11/26/19	Juab	Innovating Technology in Juab School District	Utah Education Network	https://www.uen.org/news/article.php?id=942
11/26/19	Juab	Same	Connected Nation Blog	https://connectednation.org/blog/ 2019/11/26/the-changing- classroom-in-utah-innovating- technology-in-juab-school- district/
12/03/19	Wrap Up of Series	Why Digital Teaching Matters	Utah Education Network	https://www.uen.org/news/article.php?id=934
12/03/19	Wrap Up of Series	The Importance of Tracking Technology in Our Schools	Connected Nation blog	https://connectednation.org/blog/ 2019/12/03/the-importance-of- tracking-technology-in-our- schools/
12/29/19	Paradigm High School	How a Utah School is Bridging the Digital Divide with New Technology for Students	Connected Nation blog	https://connectednation.org/blog/ 2019/12/30/how-a-utah-school- is-bridging-the-digital-divide- with-new-technology-for- students/

To read the full stories from the series see Appendix G.



Conclusion



IV. Conclusion

With this third iteration of the Utah School Technology Inventory now complete, state and local leaders once again have a clear and timely picture of the state of digital teaching and learning assets and needs — unlike any other state in the country. The investment in data collection and analyses has resulted in informed action being taken by the Utah legislature to improve resources available to schools and districts, which is allowing Utah to remain a leader in both connectivity and digital teaching and learning resources.

With 100% of public schools in Utah once again participating in the Inventory, Utah's leaders can ensure that all students have the opportunity for world-class learning opportunities enabled by technology and effective teaching practices. While this year's inventory indicates across-the-board improvements, it also highlights opportunities for targeted future investment where needs remain.

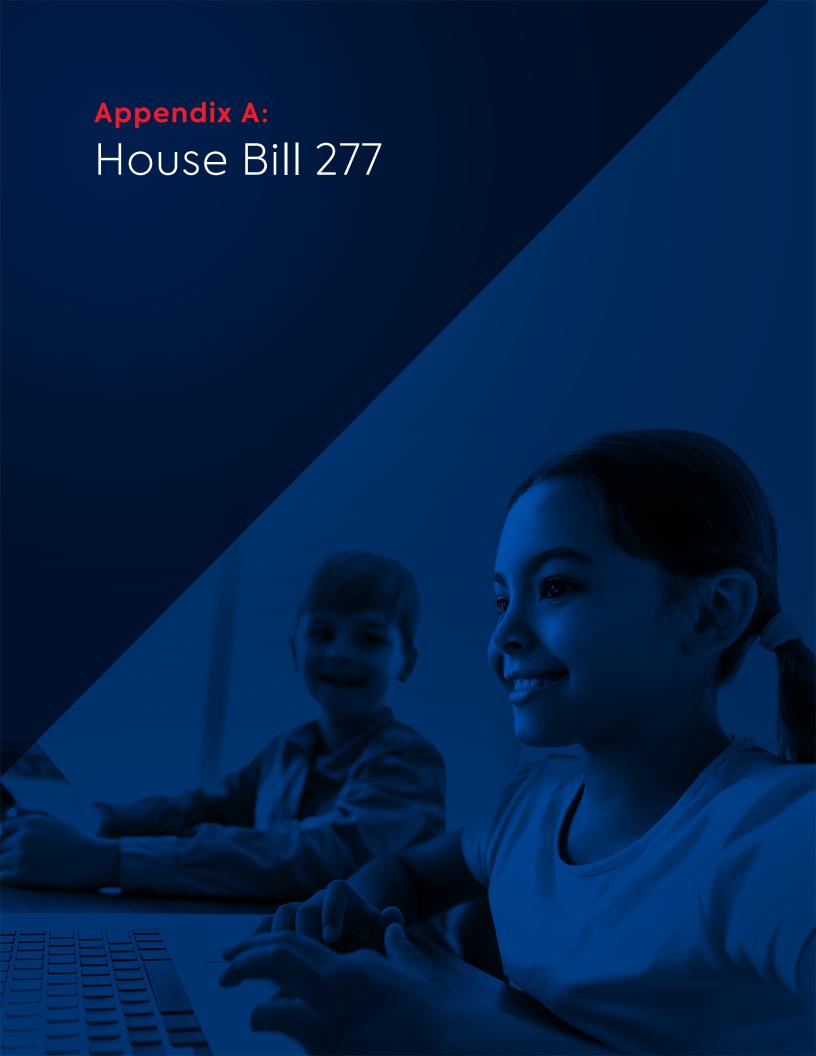
In 2017, 19% of Utah educational institutions had deployed 1:1 mobile device initiatives, but only 6% allowed students to take their mobile devices home outside of school hours. In 2019, the number of 1:1 deployments has jumped to 30%, yet still only 9% of schools allow devices to go home with students. The age of hardware in schools is also worth noting, with 20% of LEAs reporting that the average age of their wireless hardware is four years old or older, while 40% of LEAs say their wired hardware is the same age or older. Additionally, 13% of schools have not acquired *any* digital content licenses for textbooks or other online resources.

While these facts are not necessarily a cause for concern, Utah's leaders should be mindful of these statistics as they prioritize future investments. It is the goal of this report and its corresponding dataset to serve as a resource for informed action so that every student in every corner of the state has access to a world-class education — a goal that is only made possible through the prioritization of, and investment in, education technology and the ecosystem that supports its effective use.

05

Appendices





1	PERSONALIZED LEARNING AND TEACHING AMENDMENTS
2	2016 GENERAL SESSION
3	STATE OF UTAH
4	Chief Sponsor: John Knotwell
5	Senate Sponsor: J. Stuart Adams
6 7	LONG TITLE
8	General Description:
9	This bill creates the Digital Teaching and Learning Grant Program.
)	Highlighted Provisions:
l	This bill:
2	• enacts Title 53A, Chapter 1, Part 14, Digital Teaching and Learning Grant Program,
3	including provisions related to the following:
ļ	• definitions;
;	 the digital teaching and learning master plan;
)	 readiness assessments;
,	 State Board of Education duties and LEA plan requirements;
	 implementation assessments and board interventions; and
	procurement;
	sunsets the Smart School Technology Program;
-	 repeals language related to a whole-school one-to-one mobile device technology
2	deployment plan; and
3	makes technical and conforming corrections.
4	Money Appropriated in this Bill:
5	This bill appropriates:
)	► to the State Board of Education Minimum School Program Related to Basic
	School Program Digital Teaching and Learning Program, as a one-time
3	appropriation:
9	• from the Education Fund, \$220,000;

30	► to the State Board of Education Minimum School Program Related to Basic
31	School Program Digital Teaching and Learning Program, as an ongoing
32	appropriation:
33	• from the Education Fund, \$9,840,000;
34	► to the State Board of Education Minimum School Program Related to Basic
35	School Program Digital Teaching and Learning Program, as a one-time
36	appropriation:
37	• from the Education Fund, \$3,780,000;
38	► to the Utah Education and Telehealth Network Digital Teaching and Learning
39	Program, as an ongoing appropriation:
40	• from the Education Fund, \$160,000; and
41	► to the Utah Education and Telehealth Network Digital Teaching and Learning
42	Program, as a one-time appropriation:
43	• from the Education Fund, \$1,000,000.
44	Other Special Clauses:
45	None
46	Utah Code Sections Affected:
47	AMENDS:
48	63I-2-253, as last amended by Laws of Utah 2015, Chapters 258, 418, and 456
49	63I-2-263, as last amended by Laws of Utah 2015, Chapters 182, 258, 283, 292, and
50	297
51	ENACTS:
52	53A-1-1401 , Utah Code Annotated 1953
53	53A-1-1402 , Utah Code Annotated 1953
54	53A-1-1404 , Utah Code Annotated 1953
55	53A-1-1405 , Utah Code Annotated 1953
56	53A-1-1406 , Utah Code Annotated 1953
57	53A-1-1407 , Utah Code Annotated 1953

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58	RENUMBERS AND AMENDS:
59	53A-1-1403, (Renumbered from 53A-1-710, as enacted by Laws of Utah 2015, Chapter
60	446)
61	Utah Code Sections Affected by Coordination Clause:
62	53A-1-1402, Utah Code Annotated 1953
63	53A-1-1403, Utah Code Annotated 1953
64	53A-1-1405 , Utah Code Annotated 1953
6566	Be it enacted by the Legislature of the state of Utah:
67	Section 1. Section 53A-1-1401 is enacted to read:
68	Part 14. Digital Teaching and Learning Grant Program
69	<u>53A-1-1401.</u> Title.
70	This part is known as "Digital Teaching and Learning Grant Program."
71	Section 2. Section 53A-1-1402 is enacted to read:
72	53A-1-1402. Definitions.
73	As used in this part:
74	(1) "Advisory committee" means the committee established by the board under Section
75	<u>53A-1-1406.</u>
76	(2) "Board" means the State Board of Education.
77	(3) "Digital readiness assessment" means an assessment provided by the board that:
78	(a) is completed by an LEA analyzing an LEA's readiness to incorporate
79	comprehensive digital teaching and learning; and
80	(b) informs the preparation of an LEA's plan for incorporating comprehensive digital
81	teaching and learning.
82	(4) "High quality professional learning" means the professional learning standards
83	described in Section 53A-3-701.
84	(5) "Implementation assessment" means an assessment that analyzes an LEA's
85	implementation of an LEA plan, including identifying areas for improvement, obstacles to

86	implementation, progress toward the achievement of stated goals, and recommendations going		
87	<u>forward.</u>		
88	(6) "LEA plan" means an LEA's plan to implement a digital teaching and learning		
89	program that meets the requirements of this section and requirements set forth by the board and		
90	the advisory committee.		
91	(7) "Local education agency" or "LEA" means:		
92	(a) a school district;		
93	(b) a charter school; or		
94	(c) the Utah Schools for the Deaf and the Blind.		
95	(8) "Program" means the Digital Teaching and Learning Grant Program established in		
96	this part and as described in a proposal adopted by the digital teaching and learning task force		
97	in accordance with Section 53A-1-1403.		
98	(9) "Utah Education and Telehealth Network" or "UETN" means the Utah Education		
99	and Telehealth Network created in Section 53B-17-105.		
100	Section 3. Section 53A-1-1403, which is renumbered from Section 53A-1-710 is		
101	renumbered and amended to read:		
102	[53A-1-710]. 53A-1-1403. Digital teaching and learning program task		
103	force Funding proposal for a program Master plan Reporting requirements.		
104	[(1) As used in this section:]		
105	[(a) "Board" means the State Board of Education.]		
106	[(b) "Core subject areas" means the following subject areas:]		
107	[(i) English language arts;]		
108	[(ii) mathematics;]		
109	[(iii) science; and]		
110	[(iv) social studies.]		
111	[(c) "High quality professional learning" means the professional learning standards		
112	described in Section 53A-3-701.]		
113	[(d) "LEA plan" means an LEA's plan to implement a digital teaching and learning		

114	program that meets requirements set by the board.]
115	[(e) "Local education agency" or "LEA" means:]
116	[(i) a school district;]
117	[(ii) a charter school; or]
118	[(iii) the Utah Schools for the Deaf and the Blind.]
119	[(f) "Statewide assessment" means a test of student achievement in English language
120	arts, mathematics, or science, including a test administered in a computer adaptive format,
121	which is administered statewide under Part 6, Achievement Tests.]
122	[(g) "Utah Education and Telehealth Network" or "UETN" means the Utah Education
123	and Telehealth Network created in Section 53B-17-105.
124	[(2)] (1) (a) The board shall establish a digital teaching and learning task force to
125	develop a funding proposal to present to the Legislature for digital teaching and learning in
126	elementary and secondary schools.
127	(b) The digital teaching and learning task force shall include representatives of:
128	(i) the board;
129	(ii) UETN;
130	(iii) LEAs; and
131	(iv) the Governor's Education Excellence Commission.
132	[(3)] (2) (a) The board, in consultation with the digital teaching and learning task force
133	created in Subsection [(2)] (1), shall create a funding proposal for a statewide digital teaching
134	and learning program designed to:
135	(i) improve student outcomes through the use of digital teaching and learning
136	technology; and
137	(ii) provide high quality professional learning for educators to improve student
138	outcomes through the use of digital teaching and learning technology.
139	(b) The board shall:
140	(i) identify outcome based metrics to measure student achievement related to a digital
141	teaching and learning program; and

142	(ii) develop minimum benchmark standards for student achievement and school level
143	outcomes to measure successful implementation of a digital teaching and learning program.
144	[(4)] (3) As funding allows, the board shall develop a master plan for a statewide
145	digital teaching and learning program, including the following:
146	(a) a statement of purpose that describes the objectives or goals the board will
147	accomplish by implementing a digital teaching and learning program;
148	(b) a forecast for fundamental components needed to implement a digital teaching and
149	learning program, including a forecast for:
150	(i) student and teacher devices;
151	(ii) Wi-Fi and wireless compatible technology;
152	(iii) curriculum software;
153	(iv) assessment solutions;
154	(v) technical support;
155	(vi) change management of LEAs;
156	(vii) high quality professional learning;
157	(viii) Internet delivery and capacity; and
158	(ix) security and privacy of users;
159	(c) a determination of the requirements for:
160	(i) statewide technology infrastructure; and
161	(ii) local LEA technology infrastructure;
162	(d) standards for high quality professional learning related to implementing and
163	maintaining a digital teaching and learning program;
164	(e) a statewide technical support plan that will guide the implementation and
165	maintenance of a digital teaching and learning program, including standards and competency
166	requirements for technical support personnel;
167	(f) (i) a grant program for LEAs; or
168	(ii) a distribution formula to fund LEA digital teaching and learning programs;
169	(g) in consultation with UETN, an inventory of the state public education system's

170	current technology resources and other items and a plan to integrate those resources into a
171	digital teaching and learning program;
172	(h) an ongoing evaluation process that is overseen by the board;
173	(i) proposed rules that incorporate the principles of the master plan into the state's
174	public education system as a whole; and
175	(j) a plan to ensure long-term sustainability that:
176	(i) accounts for the financial impacts of a digital teaching and learning program; and
177	(ii) facilitates the redirection of LEA savings that arise from implementing a digital
178	teaching and learning program.
179	[(5)] <u>(4)</u> UETN shall:
180	(a) in consultation with the board, conduct an inventory of the state public education
181	system's current technology resources and other items as determined by UETN, including
182	software;
183	(b) perform an engineering study to determine the technology infrastructure needs of
184	the public education system to implement a digital teaching and learning program, including
185	the infrastructure needed for the board, UETN, and LEAs; and
186	(c) as funding allows, provide infrastructure and technology support for school districts
187	and charter schools.
188	[(6)] (5) On or before December 1, 2015, the board and UETN shall present the
189	funding proposal for a statewide digital teaching and learning program described in Subsection
190	[(3)] (2) to the Education Interim Committee and the Executive Appropriations Committee,
191	including:
192	(a) the board's progress on the development of a master plan described in Subsection
193	[(4)] (3); and
194	(b) the progress of UETN on the inventory and study described in Subsection [(5)] (4) .
195	Section 4. Section 53A-1-1404 is enacted to read:
196	53A-1-1404. Readiness assessments.
197	Beginning July 1, 2016, and ending July 1, 2021, each LEA, including each school

198	within an LEA, shall annually complete a digital readiness assessment.
199	Section 5. Section 53A-1-1405 is enacted to read:
200	53A-1-1405. Digital Teaching and Learning Grant Program Board duties
201	Advisory committee LEA plan requirements.
202	(1) There is created the Digital Teaching and Learning Grant Program to improve
203	educational outcomes in public schools by effectively incorporating comprehensive digital
204	teaching and learning technology.
205	(2) The board shall:
206	(a) in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,
207	adopt rules for the administration of the program, including rules requiring:
208	(i) an LEA plan to include measures to ensure that the LEA monitors and implements
209	technology with best practices, including the recommended use for effectiveness;
210	(ii) an LEA plan to include robust goals for learning outcomes and appropriate
211	measurements of goal achievement;
212	(iii) an LEA to demonstrate that the LEA plan can be fully funded by grant funds or a
213	combination of grant and local funds; and
214	(iv) an LEA to report on funds from expenses previous to the implementation of the
215	LEA plan that the LEA has redirected after implementation;
216	(b) establish an advisory committee to make recommendations on the program and
217	LEA plan requirements and report to the board; and
218	(c) in accordance with this part, approve LEA plans and award grants.
219	(3) (a) The board shall, subject to legislative appropriations, award a grant to an LEA:
220	(i) that submits an LEA plan that meets the requirements described in Subsection (4);
221	<u>and</u>
222	(ii) for which the LEA's leadership and management members have completed a digital
223	teaching and learning leadership and implementation training as provided in Subsection (3)(b).
224	(b) The board or its designee shall provide the training described in Subsection
225	(3)(a)(ii).

226	(4) The board shall establish requirements of an LEA plan that shall include:
227	(a) the results of the LEA's digital readiness assessment and a proposal to remedy an
228	obstacle to implementation or other issues identified in the assessment;
229	(b) a proposal to provide high quality professional learning for educators in the use of
230	digital teaching and learning technology;
231	(c) a proposal for leadership training and management restructuring, if necessary, for
232	successful implementation;
233	(d) clearly identified targets for improved student achievement, student learning, and
234	college readiness through digital teaching and learning; and
235	(e) any other requirement established by the board in rule in accordance with Title
236	63G, Chapter 3, Utah Administrative Rulemaking Act, including an application process and
237	metrics to analyze the quality of a proposed LEA plan.
238	(5) The board or the board's designee shall establish an interactive dashboard available
239	to each LEA that is awarded a grant for the LEA to track and report the LEA's long-term,
240	intermediate, and direct outcomes in realtime and for the LEA to use to create customized
241	reports.
242	(6) (a) There is no federal funding, federal requirement, federal education agreement,
243	or national program included or related to this state adopted program.
244	(b) Any inclusion of federal funding, federal requirement, federal education agreement
245	or national program shall require separate express approval as provided in Title 53A, Chapter
246	1, Part 9, Implementing Federal or National Education Program Act.
247	Section 6. Section 53A-1-1406 is enacted to read:
248	53A-1-1406. Implementation assessment Board intervention.
249	(1) (a) An LEA that receives a grant as provided in Section 53A-1-1405 shall:
250	(i) subject to Subsection (1)(b), complete an implementation assessment for each year
251	that the LEA is expending grant money; and
252	(ii) (A) report the findings of the implementation assessment to the board; and
253	(B) submit to the board a plan to resolve issues raised in the implementation

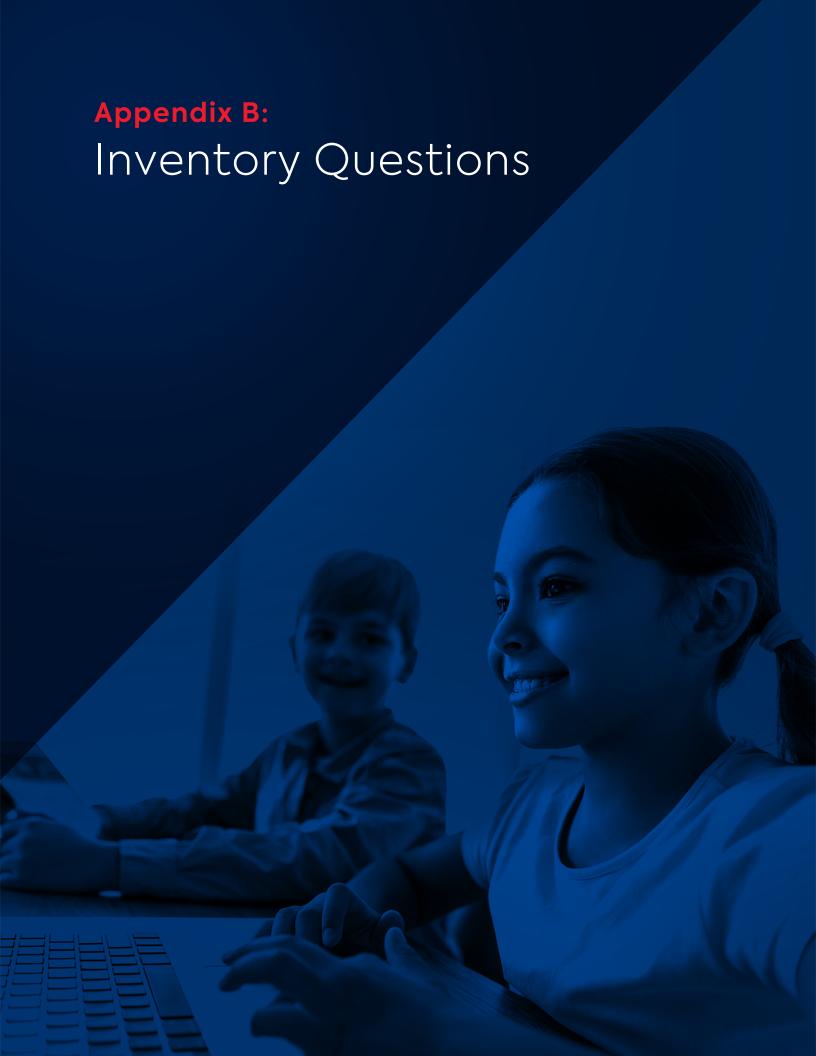
254	assessment.
255	(b) Each school within the LEA shall:
256	(i) complete an implementation assessment; and
257	(ii) submit a compilation report that meets the requirements described in Subsections
258	(1)(a)(ii)(A) and (B).
259	(2) The board or the board's designee shall review an implementation assessment and
260	review each participating LEA's progress from the previous year, as applicable.
261	(3) The board shall establish interventions for an LEA that does not make progress on
262	implementation of the LEA's implementation plan, including:
263	(a) nonrenewal of, or time period extensions for, the LEA's grant;
264	(b) reduction of funds; or
265	(c) other interventions to assist the LEA.
266	Section 7. Section 53A-1-1407 is enacted to read:
267	53A-1-1407. Procurement Independent evaluator.
268	(1) In accordance with Title 63G, Chapter 6a, Utah Procurement Code, the board shall
269	contract with an independent evaluator to:
270	(a) annually evaluate statewide direct and intermediate outcomes beginning the first
271	year that grants are awarded, including baseline data collection for long-term outcomes;
272	(b) in the fourth year after a grant is awarded, and each year thereafter, evaluate
273	statewide long-term outcomes; and
274	(c) report on the information described in Subsections (1)(a) and (b) to the board.
275	(2) (a) To implement an LEA plan, a contract, in accordance with Title 63G, Chapter
276	6a, Utah Procurement Code, or other agreement with one or more providers of technology
277	powered learning solutions and one or more providers of wireless networking solutions may be
278	entered into by:
279	(i) UETN, in cooperation with or on behalf of, as applicable, the board, the board's
280	designee, or an LEA; or
281	(ii) an LEA.

• • •	
282	(b) A contract or agreement entered into under Subsection (2)(a) may be a contract or
283	agreement which:
284	(i) UETN enters into with a provider and payment for services is directly appropriated
285	by the Legislature, as funds are available, to UETN;
286	(ii) UETN enters into with a provider and pays for the provider's services and is
287	reimbursed for payments by an LEA that benefits from the services;
288	(iii) UETN negotiates the terms of on behalf of an LEA that enters into the contract or
289	agreement directly with the provider and the LEA pays directly for the provider's services; or
290	(iv) an LEA enters into directly, pays a provider, and receives preapproved
291	reimbursement from a UETN fund established for this purpose.
292	(c) If an LEA does not reimburse UETN in a reasonable time for services received
293	under a contract or agreement described in Subsection (2)(b), the board shall pay the balance
294	due to UETN from the LEA's funds received under Chapter 17a, Part 1, Minimum School
295	Program.
296	(d) If UETN negotiates or enters into an agreement as described in Subsection (2)(b)(ii)
297	or (2)(b)(iii), and UETN enters into an additional agreement with an LEA that is associated
298	with the agreement described in Subsection (2)(b)(ii) or (2)(b)(iii), the associated agreement
299	may be treated by UETN and the LEA as a cooperative procurement, as that term is defined in
300	Section 63G-6a-103, regardless of whether the associated agreement satisfies the requirements
301	of Section 63G-6a-2105.
302	Section 8. Section 63I-2-253 is amended to read:
303	63I-2-253. Repeal dates Titles 53, 53A, and 53B.
304	(1) Section 53A-1-403.5 is repealed July 1, 2017.
305	(2) Subsection 53A-1-410(5) is repealed July 1, 2015.
306	(3) Section 53A-1-411 is repealed July 1, 2017.
307	(4) Section 53A-1a-513.5 is repealed July 1, 2017.
308	(5) Section <u>53A-1-709</u> is repealed July 1, 2020.
309	[(5)] (6) Title 53A, Chapter 1a, Part 10, UPSTART, is repealed July 1, 2019.

310	[(6)] <u>(7)</u> Title 53A, Chapter 8a, Part 8, Peer Assistance and Review Pilot Program, is
311	repealed July 1, 2017.
312	Section 9. Section 63I-2-263 is amended to read:
313	63I-2-263. Repeal dates, Title 63A to Title 63N.
314	(1) Section 63A-5-104.1 is repealed on January 1, 2016.
315	(2) Section 63C-9-501.1 is repealed on July 1, 2015.
316	(3) Title 63C, Chapter 15, Prison Relocation Commission, is repealed on January 1,
317	2016.
318	(4) Subsection 63N-3-103(1)(d) is repealed on July 1, 2015.
319	(5) Subsection 63N-3-109(2)(f)(i)(B) is repealed July 1, 2020.
320	(6) Section 63N-3-110 is repealed July 1, 2020.
321	[(5)] (7) Subsection 63N-12-208(3) is repealed on January 1, 2016.
322	Section 10. Appropriation.
323	Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for
324	the fiscal year beginning July 1, 2015, and ending June 30, 2016, the following sums of money
325	are appropriated from resources not otherwise appropriated, or reduced from amounts
326	previously appropriated, out of the funds or amounts indicated. These sums of money are in
327	addition to amounts previously appropriated for fiscal year 2016.
328	To State Board of Education Minimum School Program Related to Basic School
329	Program Digital Teaching and Learning Program
330	From Education Fund, One-time \$220,000
331	Schedule of Programs:
332	<u>Digital Teaching and Learning Program</u> <u>\$220,000</u>
333	The Legislature intends that:
334	(1) the State Board of Education use \$220,000 of the appropriation under this section
335	to administer and evaluate the program, provide professional development and other assistance
336	to LEAs, and contract with third party providers to assist with the administration of the
337	program as described in Title 53A, Chapter 1, Part 14, Digital Teaching and Learning Grant

338	Program; and					
339	(2) under Section 63J-1-603, the appropriations described in this section not lapse at					
340	the close of fiscal year 2016.					
341	Section 11. Appropriation.					
342	Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for					
343	the fiscal year beginning July 1, 2016, and ending June 30, 2017, the following sums of money					
344	are appropriated from resources not otherwise appropriated, or reduced from amounts					
345	previously appropriated, out of the funds or amounts indicated. These sums of money are in					
346	addition to amounts previously appropriated for fiscal year 2017.					
347	Item 1 To State Board of Education Minimum School Program Related to Basic					
348	School Program Digital Teaching and Learning Program					
349	From Education Fund \$9,840,000					
350	From Education Fund, One-time \$3,780,000					
351	Schedule of Programs:					
352	<u>Digital Teaching and Learning Program</u> \$13,620,000					
353	Item 2 To Utah Education and Telehealth Network Digital Teaching and Learning					
354	<u>Program</u>					
355	From Education Fund \$160,000					
356	From Education Fund, One-time \$1,000,000					
357	Schedule of Programs:					
358	<u>Digital Teaching and Learning Program</u> \$1,160,000					
359	The Legislature intends that:					
360	(1) except as provided in Subsection (2) or (3), the State Board of Education use the					
361	appropriation to the State Board of Education under this section to distribute money to LEAs as					
362	part of the grant program described in Title 53A, Chapter 1, Part 14, Digital Teaching and					
363	Learning Grant Program;					
364	(2) the State Board of Education may use up to \$187,600 of the ongoing appropriation					
365	to the State Board of Education to administer and evaluate the program, and provide other					

366	assistance to LEAs;
367	(3) the State Board of Education may use up to \$780,000 of the one-time appropriation
368	to the State Board of Education to administer and evaluate the program, provide professional
369	development, and contract with third party providers to assist with the administration of the
370	program as described in Title 53A, Chapter 1, Part 14, Digital Teaching and Learning Grant
371	Program;
372	(4) the Utah Education and Telehealth Network may use up to \$160,000 of the ongoing
373	appropriation to the Utah Education and Telehealth Network to administer the program;
374	(5) the Utah Education and Telehealth Network use the \$1,000,000 one-time
375	appropriation to the Utah Education and Telehealth Network for infrastructure and other
376	technology for LEAs; and
377	(6) under Section 63J-1-603, the appropriations described in this section:
378	(a) not lapse at the close of fiscal year 2017; and
379	(b) may be used in fiscal year 2018, 2019, or 2020.



2019 Utah School Tech Inventory Questions

SCHOOL DISTRICT INFORMATION

- Local Education Agency Type
 - o Charter
 - District
- School District of Local Education Agency (LEA) Name:
- NCES District ID Number:
- Street Address
 - Street Address
 - Suite/Office Number
 - o City
 - o State
 - o ZIP Code
 - o Phone Number

DISTRICT QUESTIONS

1. How many total hours are dedicated to providing technical support per week?

This question is to assess paid-for technical support services. Please include all paid hours (salary, hourly, stipend, prep time, interns, etc.) for those providing this support service for schools and/or the district office.

LEA Employees - number of hours per week on average:	
Non-LEA Contracted Workers - hours per week on average:	

(For example - you have three full time 40 hours a week and one part time 20 hours a week technical professional employed by the LEA, your total hours to report would be 140 hours per week for the LEA Employees. You also have a contract with a local vendor for an additional 10 hours a week for network support, your total hours to report would be 10 hours per week for Non-LEA contracted work.)

2. How many total hours are dedicated to providing instructional technology support (professional development, coaching/mentoring for teachers, etc.) per week? This question is to assess the amount of paid time spent on instructional technology support services. Please include all paid hours (salary, hourly, stipend, prep time, interns, etc.) for those providing this support service for schools and or the district office. This does not include unpaid volunteer or internship hours.

LEA Employees - number of hours per week on aver	rage:
--------------------------------------------------	-------

Non-LEA	Contracted	Work -	hours	per week	on ave	erage:	

(For example: An LEA with three full-time employees (each working 40 hours a week) and one part-time technical professional employed by the LEA (working 20 hours a week on average) would report 140 hours per week for the LEA Employees. An LEA that contracts with a local vendor for an additional 10 hours a week for network support would report 10 hours per week for Non-LEA contracted work.)

3.	What are the top software applications that are being used to support teaching and learning
	in your district?

- Adobe Creative Suite
- ALEKS-Math
- Canvas (LMS)
- eMedia
- Google Apps for Education
- Microsoft Office
- UEN Open Educational Resources
- Utah's Online Library
- YouTube
- (Other) Literacy Software
- (Other) LMS
- (Other) Math Software

4	What are the top	assessment	solutions t	hat are cu	irrently in	use in v	our district?
┱.	vviial are the top	. assessilielii	SOIULIONS I	lial alt ol	41 I GI I U V I I I	use III v	oui district:

- AAPPL
- ACT
- ACT Aspire
- Canvas
- Dibels
- iReady
- KITE
- Mastery Connect
- NWEA
- RISE
- Sage
- SAT
- UTIPS
- Utah Aspire Plus
- Utah Compose
- WIDA
- Other (Please specify):

	Yes - AspireYes - Other
6.	
7.	Does your district or charter school have individual e-mail accounts set up for students? If so, please select the grade level(s) for which accounts have been set up.
	 N/A. We do not have accounts set up for student use. Pre-K Kindergarten 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th
8.	What platform is used for student e-mail accounts? Local or Hosted Microsoft Exchange Server Outlook.com Google Gmail Yahoo! Mail Apple iCloud Mail Other (Please specify):
9.	What type of firewall is employed at this district/school?
10.	. What type of content filter is in place at this district/school?
11.	. Is off-campus connectivity important for your students? How do you anticipate that teaching & learning in your school could benefit from 24/7 access for every student?

5. Does the school have a student information system (SIS) in place? If yes, what platform?

SCHOOL INFORMATION

- School Name
- NCES School ID Number
- Street Address
 - Street Address
 - o Suite/Office Number
 - City
 - o State
 - o ZIP Code
 - o Phone Number

SCHOOL PROFILE QUESTIONS

- 1. School Category
 - Elementary School
 - Middle School
 - High School
 - Combined School (e.g., K-12 or 7-12)
- 2. Grades Served By This School Please check all that apply
 - Pre-K
 - Kindergarten
 - 1st
 - 2nd
 - 3rd
 - 4th
 - 5th
 - 6th
 - 7th
 - 8th
 - 9th
 - 10th
 - 11th
 - 12th
 - 12+ (Programs beyond grade 12)
- 3. Number of Students Enrolled (as of October 1)
- 4. Number of Classroom Teachers, including full-time, part-time, and contractors (as of November 1)

5. How many active instructional spaces (e.g., classrooms, libraries, gymnasiums, cafeterias, labs, and other separate spaces used for instruction) does the school contain in total? (Do NOT count offices, closets, and storage areas)

NETWORK QUESTIONS

- 1. Does this school currently have a Wi-Fi network in place?
 - Yes
 - No
- 2. How many wireless access points (APs) are currently deployed school-wide (including outdoor units)?
- 3. Has the school's Wi-Fi network been professionally designed and the correct AP placement and configuration completed according to that design?
 - Yes, we used a contractor to conduct a professional Wi-Fi design
 - Yes, we performed an in-house professional Wi-Fi design and AP configuration using software (example: AirMagnet, Ekahau, etc.)
 - No, we have not had our Wi-Fi network professionally designed
 - Not applicable, we do not have Wi-Fi
 - Other (Please specify):
- 4. Has there been a professional post-installation validation survey of the school's Wi-Fi network?
 - Yes, it was done within the last year
 - Yes, it was done within the last 2 to 5 years
 - Yes, it was done over 5 years ago
 - No, we have never had a post-installation validation survey of the school's Wi-Fi network
 - Not applicable, we do not have Wi-Fi
- 5. Which statement best describes the Wi-Fi user experience in your school in terms of noticeable Wi-Fi outages ("noticeable" means outages lasting more than a few minutes)?
 - The school does not have noticeable Wi-Fi outages during the school year
 - The school has 1 to 4 noticeable Wi-Fi outages during the school year
 - The school has 5 to 10 noticeable Wi-Fi outages during the school year
 - The school has more than 10 noticeable Wi-Fi outages during the school year
 - Not applicable, we do not have Wi-Fi or this is a new school
- 6. Which statement best describes the Wi-Fi user experience in your school in terms of noticeable Wi-Fi slowdowns ("noticeable" means those lasting more than a few minutes)?
 - Students and teachers do not experience noticeable Wi-Fi slowdowns during school time

- Students and teachers experience noticeable Wi-Fi slowdowns less than 10% of the time during school
- Students and teachers experience noticeable Wi-Fi slowdowns between 10% and 20% of the time during school
- Students and teachers experience noticeable Wi-Fi slowdowns more than 20% of the time during school
- Not applicable, we do not have Wi-Fi or this is a new school
- 7. Which statement best describes the Wi-Fi coverage in your school?
 - 100% of the school building has adequate Wi-Fi coverage (all rooms are covered)
 - 80%-99% of the school building has adequate Wi-Fi coverage
 - 60%-79% of the school building has adequate Wi-Fi coverage
 - Less than 60% of the school building has adequate Wi-Fi coverage
 - Not applicable, we do not have Wi-Fi
- 8. What wireless standard(s) is/are employed by the wireless APs currently serving the school?
 - 802.11a
 - 802.11b
 - 802.11g
 - 802.11n
 - 802.11ac
 - Not applicable, we do not have Wi-Fi
- 9. What is the dominant vendor of your wireless networking gear?
 - Aerohive
 - Aruba
 - Cisco
 - HP
 - Meraki
 - Ruckus
 - Xirrus
 - Fortinet
 - Ubiquiti
 - Not applicable, we do not have Wi-Fi
 - Other (Please specify): ______
- 10. In your school, what is the controller environment for your wireless network?
 - Cloud-Based Controller (Aerohive, Meraki, etc)
 - Wireless Controller Located On-Site at the school
 - Wireless Controller Shared w/ Other Schools
 - Controllerless wireless environment
 - Not applicable, we do not have Wi-Fi

 11. What is the average age of the wireless gear installed in this school? Less than 1 year old 1 year old 2 years old 3 years old 4 years or older Not applicable
 12. Are teachers, staff and administrators connected to a separate network (VLAN, etc.) than the one that students use? Yes No
13. What is the dominant vendor of your wired networking gear? Brocade/Ruckus Cisco Extreme HP Juniper Meraki Fortinet Dell Ubiquiti Other (Please specify):
14. What is the current standard switch vendor for the equipment installed in this school?
15. Indicate the total number of switch ports installed in the school for the following: 100Mbs: 1 Gbs: 10 Gbs: Other (over 10 Gbs):
 16. What is the average age of the wired gear installed in this school? Less than 1 year old 1 year old 2 years old 3 years old 4 years or older Not applicable

- 17. What is the predominant wiring technology in this school?
 Cat 4
 Cat 5
 Cat 5e
 - Cat 6
 - Cat6a
- 18. Is the filtering solution hardware-based (i.e., in the network) or software-based (i.e., installed on the device)?
 - Hardware-Based
 - Software-Based

HARDWARE QUESTIONS

- 1. To what extent have mobile computing devices already been deployed in the school?
 - On a 1:1 basis (students can take the devices home at night)
 - On a 1:1 basis (devices cannot be removed from school)
 - On a cart for in-classroom use only
 - Only available for check-out from the school library, media center, or computer lab
 - No school-owned mobile computing devices, but students are allowed to use their own personal mobile devices in school under BYOD ("Bring Your Own Device") policy
 - None
- 2. How many devices are currently **deployed** and **in active use** in the school? For student use:

Device Type	Number of Devices
Windows Desktop	
Windows Laptop	
Mac Desktop	
Mac Laptop	
Google Chromebook	
Windows Tablet	
Android Tablet	
Apple iOS Tablet (iPad Pro, iPad, or iPad Mini)	

Other		
How many devices are current Teachers/Administrators	rently deployed and in activ	ve use in the school? Used by
Device Type	Number of Devices	
Windows Desktop		
Windows Laptop		
Mac Desktop		
Mac Laptop		
Google Chromebook		
Windows Tablet		
Android Tablet		
Apple iOS Tablet (iPad Pro, iPad, or iPad Mini)		
Other		
school-owned devices? If y • Yes, a single solution	res, please name the solution (Please specify):ons (Please specify and use	commas to separate entries):
Yes, some textbookNone	s (but not all)	
	ain)	
-	content licenses for some tea ady own digital content licen	xtbooks, but not all, in which subject ses?

Math Science

- Social Studies
 CTE
 N/A not applicable
 Other (Please specify):
- 3. What are your needs for instructional software and tools? (check all that apply)
 - No changes. We have what we need.
 - Math
 - Language Arts
 - Videos/Games/Apps
 - Science
 - Social Studies/World Languages
 - Test Prep
 - Teacher Professional Development Software
 - Open Educational Resources
 - Counseling/Comprehensive Guidance
 - Learning Management System (Canvas or other)
 - Tools for Student Products (coding, video editing, etc.)
 - Software for Students with Special Needs
 - Research Database (like Utah Online/Pioneer Library)
 - Tools to Track Student Use
 - Books, Online Books

•	Other (Please specify):
_	Ouiei (r lease specify).

OTHER QUESTIONS

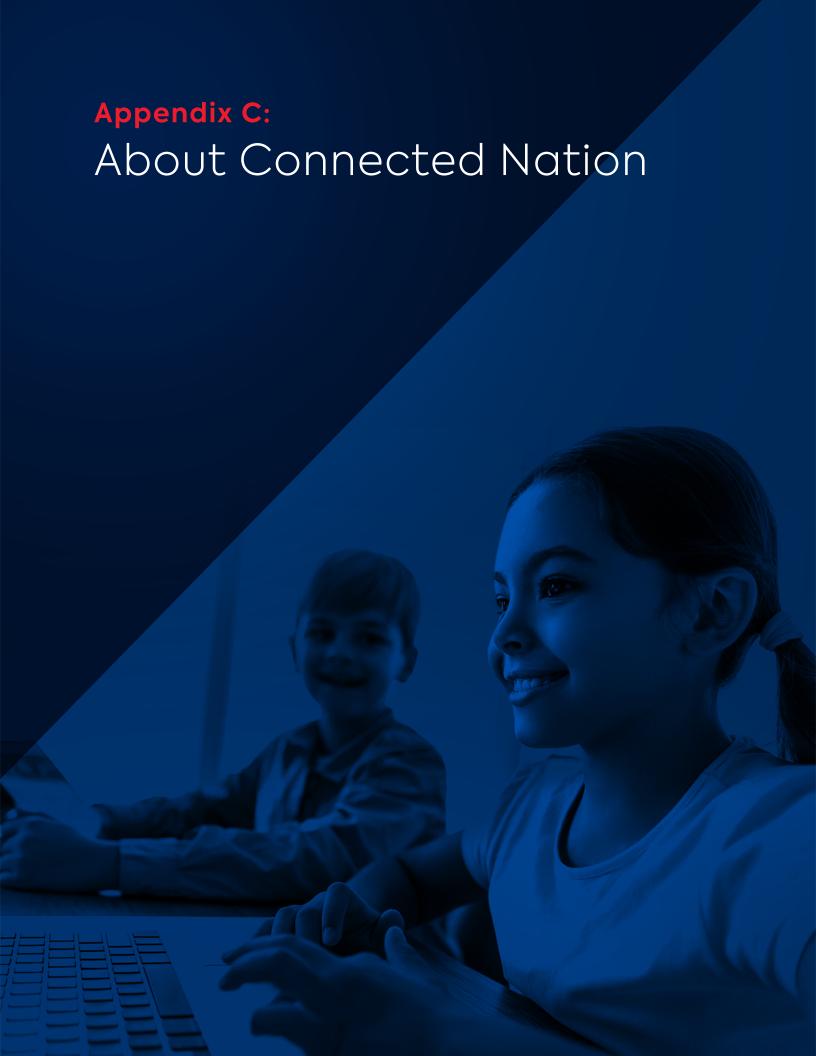
- 1. In your judgment, are adequate professional development and training resources available in your school district's budget to help teachers effectively integrate mobile devices into their teaching practice? If no, how could they be improved?
 - Yes

•	No (Pleas	e Explaır	1)

- 2. Please select the statement that best describes your utilization of volunteers for technology support for the school. This should include non-paid technical support that is provided by students, interns, teachers, vendors, community members, and/or parents.
 - The school does not rely on volunteers for technology support services
 - The school uses volunteers for less than 10% of total technology support services
 - The school uses volunteers for 10% 20% of total technology support services
 - The school uses volunteers for over 20% of total technology support services
- 3. Please select the statement that best describes your utilization of volunteers for technology professional development (professional development, coaching/mentoring for teachers or administrators etc.) for the school. This should include non-paid instructional technology

training that is provided by students, interns, teachers, vendors, community members, and/or parents.

- The school does not rely on volunteers for professional development services
- The school uses volunteers for less than 10% of the total technology professional development services
- The school uses volunteers for 10% 20% of total technology professional development services
- The school uses volunteers for over 20% of total technology professional development services





About Connected Nation

Connected Nation is a leading technology organization committed to bringing affordable high-speed internet and broadband-enabled resources to all Americans. Headquartered in Bowling Green, Kentucky, Connected Nation has operated programs in more than 30 states in collaboration with public and private partners and was the largest single grantee under the United States Department of Commerce's State Broadband Initiative (SBI) grant program—managing more than \$50 million in grant-funded broadband mapping and planning projects in 2009-2015.

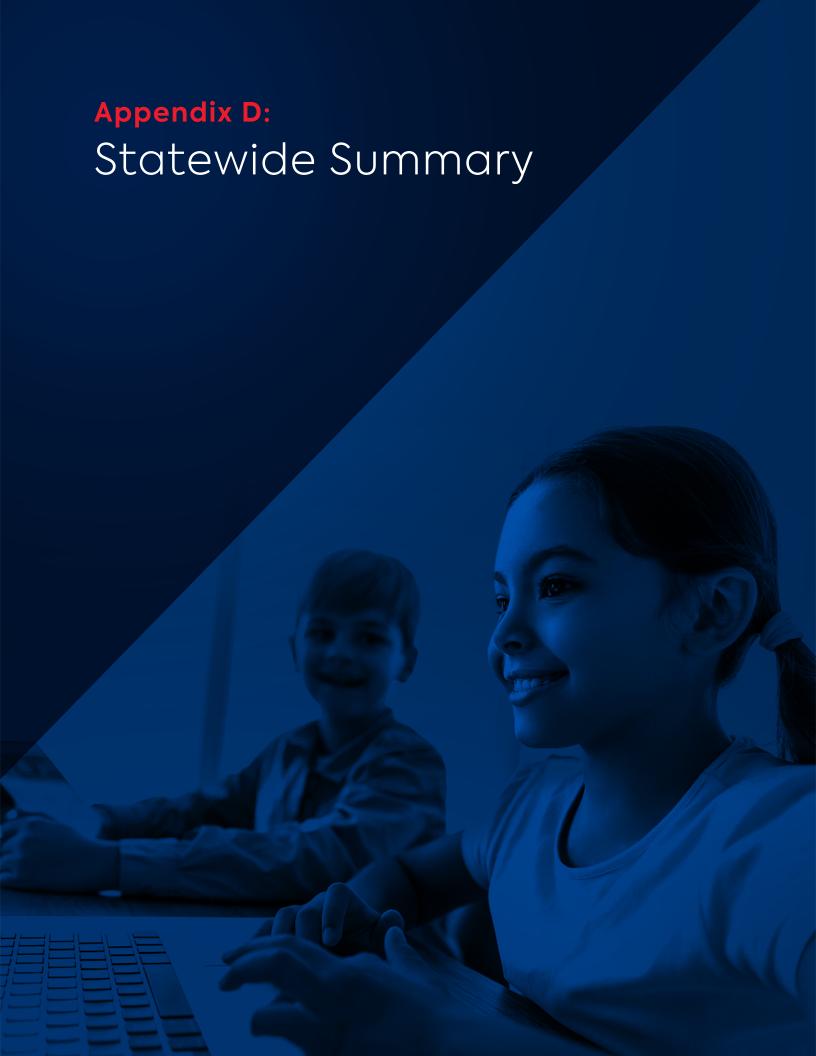
Connected Nation's mission is to improve lives by providing innovative solutions that expand the access, adoption, and use of high-speed internet to all people. Through its projects, Connected Nation effectively raises the awareness of the value of broadband-related technologies by developing coalitions of influencers and enablers for improving technology access, adoption, and use. Connected Nation works with consumers, community leaders, states, technology providers, and foundations to develop and implement technology expansion programs with core competencies centered on a mission to improve digital inclusion for people and places previously underserved and overlooked.

Connected Nation previously served as AT&T's school site selection and implementation partner for the company's "ConnectED" commitment—a commitment to the White House by AT&T of \$100 million in free, off-campus 4G LTE connectivity for students and teachers for three years.

In addition to helping UETN with statewide school technology inventories since 2015 with 100% participation, Connected Nation's Connect Alaska program also undertook the Alaska School Broadband Audit. This comprehensive program involved Connected Nation's thorough examination of school connectivity across all 53 of Alaska's public school districts.

Recently, Connected Nation was selected by EducationSuperHighway to carry forward its mission of ensuring state and school district leaders have the information they need to improve school broadband connectivity. EducationSuperHighway was founded in 2012 with the mission of upgrading the internet access in every public school classroom in America. Having accomplished its mission of connecting 99 percent of schools to internet connections that provide at least 100 Kbps of bandwidth for every student, EducationSuperHighway will sunset in August 2020 and Connected Nation will take over to help launch a new tool for K12 schools named Connect K12. This tool will enable Connected Nation to provide key data and insights that will help state and local leaders take informed action to improve school connectivity in districts across the country.

Everyone belongs in a Connected Nation. For more information on Connected Nation, please visit www.connectednation.org.







Utah District and Charter Schools

STATE FACTS

State Population 3,205,958
Enrollment 667,871
Number of Schools 1,008
Median Household Income \$68,374
Poverty Rate 9.0%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



- 100% (All Rooms Covered)
- ■80% 99% Covered
- ■60% 79% Covered
- Less that 60% covered (or no Wi-Fi)

SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	79,995	29,181	-21,796	-17%
Laptops Windows OS	72,958	13,019	30,817	56%
Desktops Mac	18,199	3,629	-2,445	-10%
Laptops Mac	25,831	15,658	4,816	13%
Chromebooks Google	421,238	4,981	157,504	59%
Tablets Windows	15,447	1,858	8.017	86%
Tablets Android	1,840	282	208	11%
Tablets IOS	103,272	20,899	19,731	19%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS

Computing Devices Per FTE
Technical Support Staff

1,212

Teachers Per FTE
Instructional Tech Support Staff

145.3

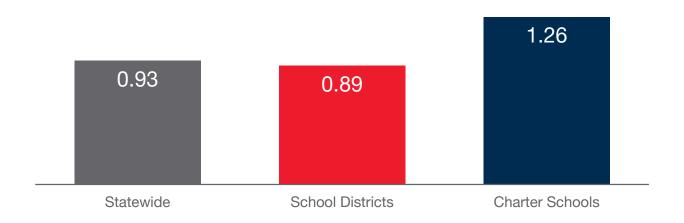
STATEWIDE

STATEWIDE





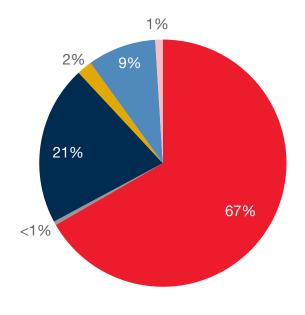
TECHNICAL SUPPORT FTE PER 1,000 STUDENT DEVICES



MOBILE DEVICE DEPLOYMENT POLICIES IN UTAH SCHOOLS



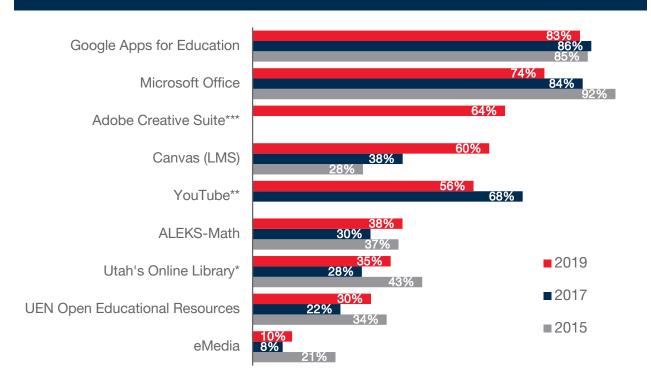
- No school-owned mobile computing devices, but students are allowed to use their own personal mobile devices under a BYOD ("Bring Your Own Device") policy
- On a 1:1 basis (devices cannot be removed from school)
- Available for check-out from library, media center, or computer lab
- On a 1:1 basis (students can take the devices home at night)
- No mobile devices in school use







TOP EDUCATIONAL SOFTWARE TOOLS IN UTAH



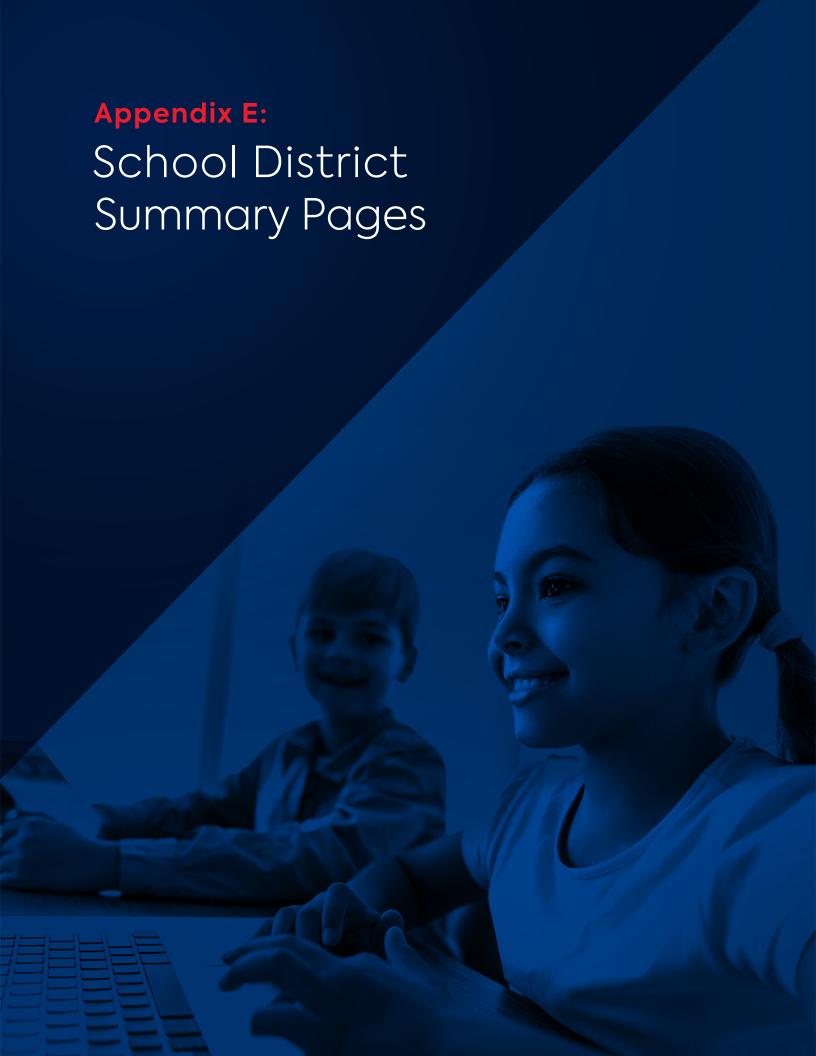
^{*}Previously "Pioneer Online Library"

TOOLS AND SOFTWARE NEEDED BY SCHOOL DISTRICTS AND CHARTER SCHOOLS



^{**}Option not offered in 2015

^{***}Option not offered in 2015-2017







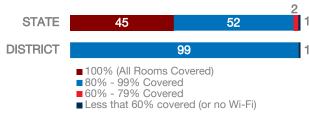
Alpine School District

DISTRICT FACTS

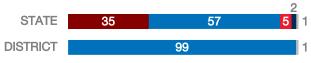
Area Population	341,089
Enrollment	80,757
Number of Schools	89
Urban or Rural	Urban
Median Household Income	\$78,459
Poverty Rate	8.3%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

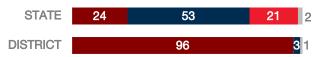


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

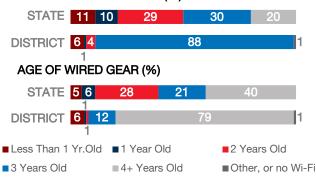
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



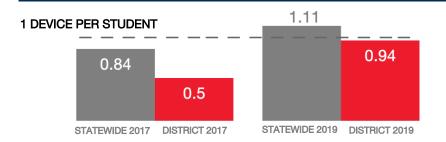
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

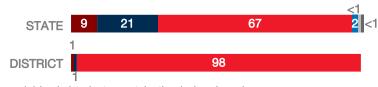


COMPUTING DEVICES USED IN SCHOOLS

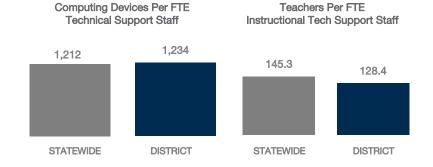
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	5,038	971	4	0%
Laptops Windows OS	2,370	1,309	856	30%
Desktops Mac	5,150	692	357	7%
Laptops Mac	1,191	4,440	1,039	23%
Chromebooks Google	50,093	207	31,509	168%
Tablets Windows	43	29	41	132%
Tablets Android	49	7	0	0%
Tablets IOS	12,070	2,679	4,212	40%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







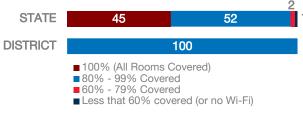
Beaver County School District

DISTRICT FACTS

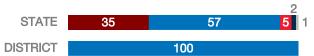
Area Population 6,443
Enrollment 1,519
Number of Schools 5
Urban or Rural Rural
Median Household Income \$54,212
Poverty Rate 8.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

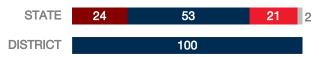


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

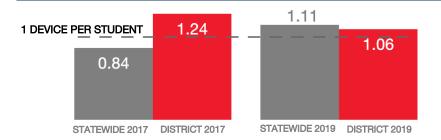
AGE OF WIRELESS GEAR (%)

STATE	11 1	29		30	20
DISTRICT			80		20
AGE OF V	VIRED (GEAR (%	b)		
STATE	5 6	28	21	4	0
DISTRICT			100		
■ Less Than 1	Yr.Old	■1 Year	Old	■2 Ye	ears Old

■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT

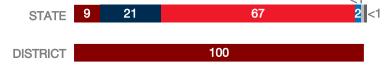


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	99	112	-7	-3%
Laptops Windows OS	0	14	2	17%
Desktops Mac	36	2	0	0%
Laptops Mac	0	3	0	0%
Chromebooks Google	1,341	103	-123	-8%
Tablets Windows	0	0	0	N/A
Tablets Android	115	16	-145	-53%
Tablets IOS	25	101	25	25%

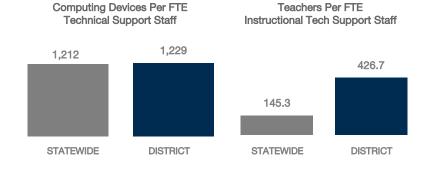
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





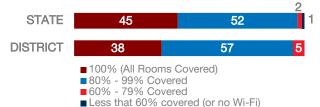
Box Elder School District

DISTRICT FACTS

Area Population 53,001
Enrollment 11,861
Number of Schools 21
Urban or Rural Urban
Median Household Income \$59,937
Poverty Rate 9.3%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

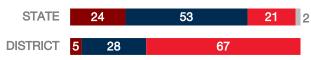


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

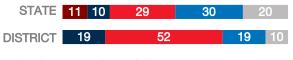
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED

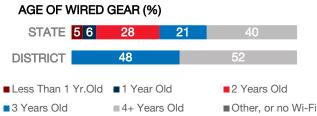


- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

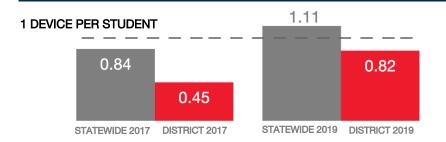
NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)





COMPUTING DEVICES PER STUDENT

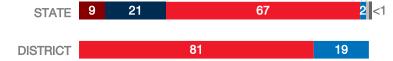


COMPUTING DEVICES USED IN SCHOOLS

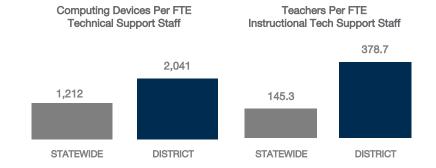
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	2,267	979	421	15%
Laptops Windows OS	41	204	19	8%
Desktops Mac	1	1	-4	-67%
Laptops Mac	2	13	12	400%
Chromebooks Google	7,169	12	3,970	124%
Tablets Windows	0	0	-25	-100%
Tablets Android	3	0	3	N/A
Tablets IOS	203	314	384	289%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







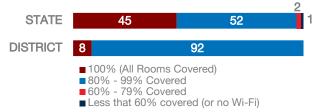
Cache County School District

DISTRICT FACTS

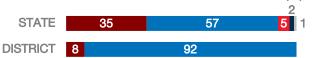
Area Population 71,858
Enrollment 18,393
Number of Schools 25
Urban or Rural Urban
Median Household Income \$71,257
Poverty Rate 7.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

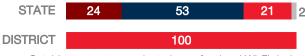


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



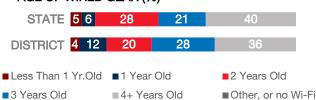
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

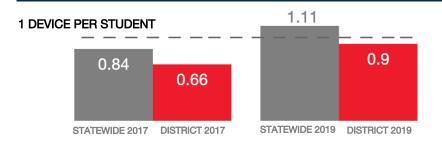
AGE OF WIRELESS GEAR (%)

STATE	11	10	29	9	30	20
DISTRICT	4	16	16	20		44

AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT



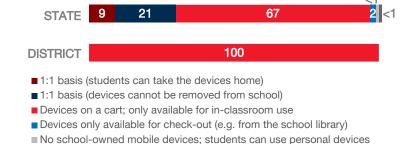
COMPUTING DEVICES USED IN SCHOOLS

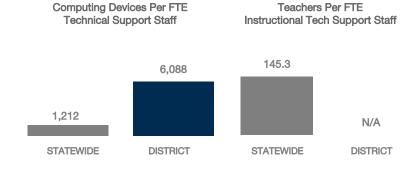
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	2,303	1,270	-112	-3%
Laptops Windows OS	281	928	1,130	1430%
Desktops Mac	289	13	9	3%
Laptops Mac	0	0	0	N/A
Chromebooks Google	12,483	0	4,382	54%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	1,143	773	-537	-22%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









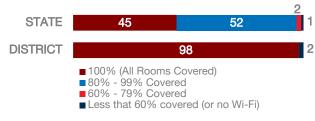
Canyons School District

DISTRICT FACTS

Area Population	218,404
Enrollment	34,134
Number of Schools	49
Urban or Rural	Urban
Median Household Income	\$85,585
Poverty Rate	6.9%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

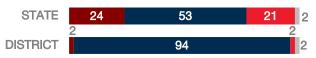


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

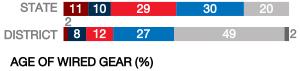
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED

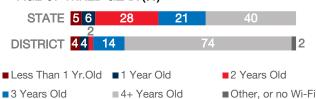


- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

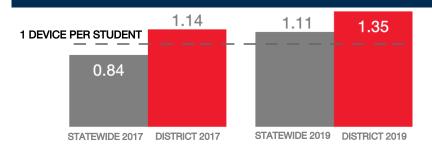
NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)





COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

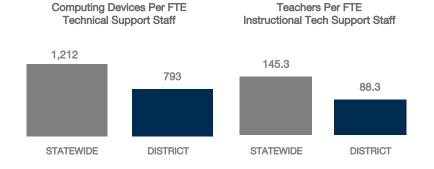
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	3,087	558	-308	-8%
Laptops Windows OS	499	445	36	4%
Desktops Mac	2,087	396	-244	-9%
Laptops Mac	2,009	2,225	-1,031	-20%
Chromebooks Google	29,820	50	8,265	38%
Tablets Windows	0	6	-2	-25%
Tablets Android	22	13	-127	-78%
Tablets IOS	8,574	1,748	1,262	14%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







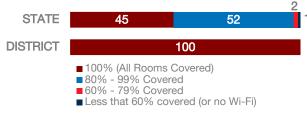
Carbon School District

DISTRICT FACTS

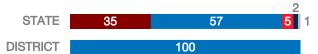
Area Population 20,356
Enrollment 3,636
Number of Schools 9
Urban or Rural Rural
Median Household Income \$50,278
Poverty Rate 15.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

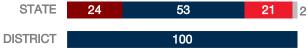


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

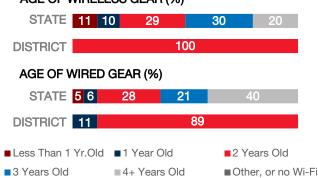
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



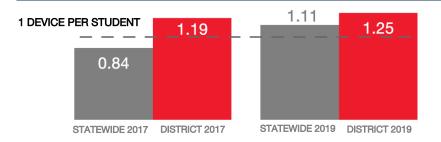
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

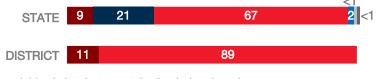


COMPUTING DEVICES USED IN SCHOOLS

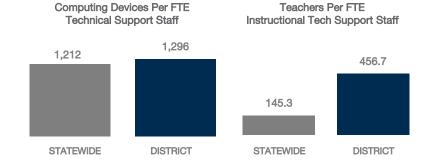
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	519	310	-63	-7%
Laptops Windows OS	233	32	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	3,454	266	384	12%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	330	40	-22	-6%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Daggett School District

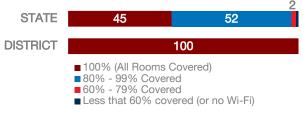
Area Population 612 Enrollment 206 Number of Schools 3 Urban or Rural Rural Median Household Income \$81,250

WI-FI NETWORKS

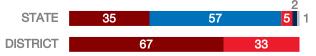
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

4.7%

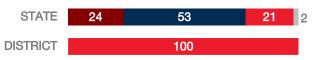


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

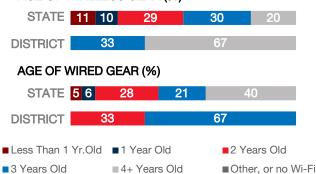
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



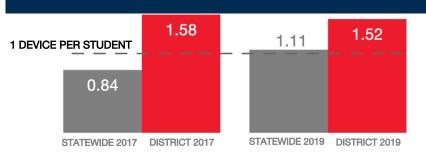
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	3	0	0%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	72	18	-5	-5%
Laptops Mac	166	10	-1	-1%
Chromebooks Google	8	0	8	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	68	20	0	0%

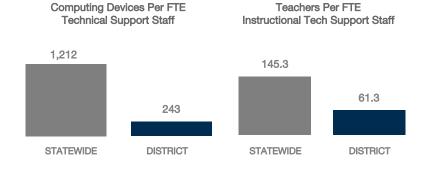
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



DISTRICT 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







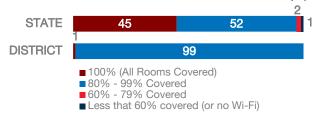
Davis School District

DISTRICT FACTS

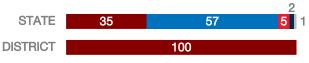
Area Population 340,621
Enrollment 72,904
Number of Schools 90
Urban or Rural Urban
Median Household Income \$79,690
Poverty Rate 5.5%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

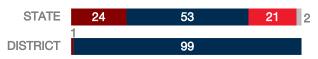


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

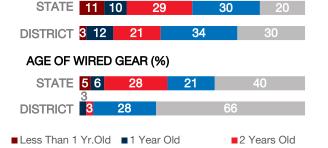
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

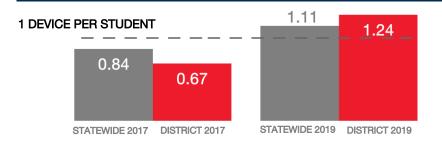
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	10,150	5,930	-5,677	-26%
Laptops Windows OS	39,385	882	29,858	287%
Desktops Mac	43	12	-7	-11%
Laptops Mac	66	64	4	3%
Chromebooks Google	855	69	634	219%
Tablets Windows	14,908	1,499	7,889	93%
Tablets Android	115	142	130	102%
Tablets IOS	25,104	3,808	9,305	47%

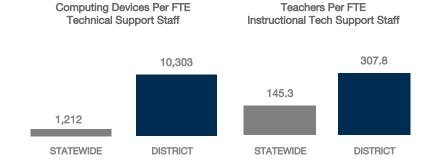
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





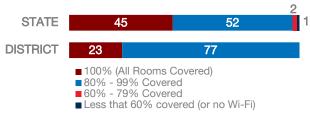
Duchesne County School District

DISTRICT FACTS

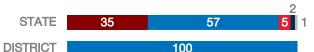
Area Population	20,219
Enrollment	5,343
Number of Schools	13
Urban or Rural	Rural
Median Household Income	\$63,919
Poverty Rate	13.3%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

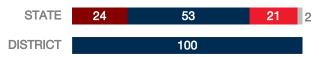


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

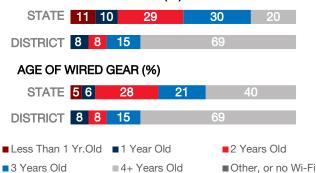
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

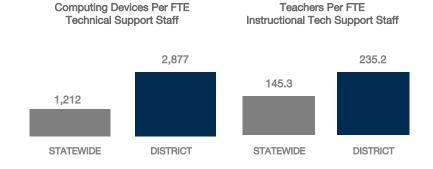
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	340	65	-36	-8%
Laptops Windows OS	235	109	2	1%
Desktops Mac	707	191	0	0%
Laptops Mac	415	353	4	1%
Chromebooks Google	2,050	61	835	65%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	550	210	40	6%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







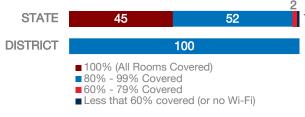
Emery County School District

DISTRICT FACTS

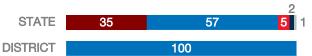
Area Population	10,248
Enrollment	2,293
Number of Schools	10
Urban or Rural	Rural
Median Household Income	\$52,055
Poverty Rate	12.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

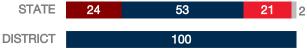


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

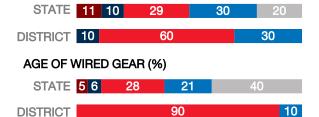
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)

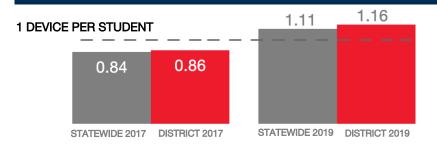


■ Less Than 1 Yr.Old ■ 1 Year Old ■3 Years Old

■4+ Years Old Other, or no Wi-Fi

2 Years Old

COMPUTING DEVICES PER STUDENT

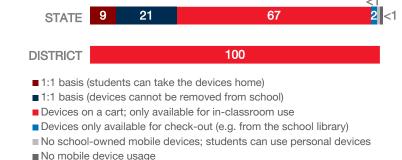


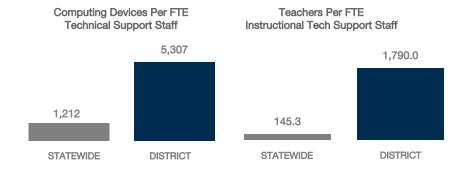
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	898	197	106	11%
Laptops Windows OS	4	34	-1	-3%
Desktops Mac	10	10	-27	-57%
Laptops Mac	0	4	-7	-64%
Chromebooks Google	1,328	10	615	85%
Tablets Windows	0	0	0	N/A
Tablets Android	5	0	0	0%
Tablets IOS	339	0	-104	-23%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









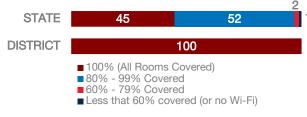
Garfield County School District

DISTRICT FACTS

Area Population	5,017
Enrollment	903
Number of Schools	9
Urban or Rural	Rural
Median Household Income	\$52,337
Poverty Rate	17.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



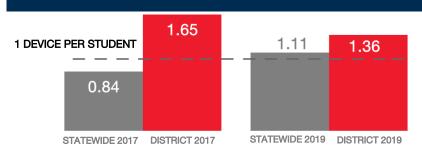
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

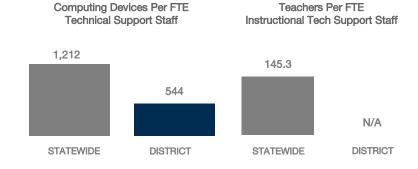
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	218	101	-87	-21%
Laptops Windows OS	3	42	-36	-44%
Desktops Mac	3	2	1	25%
Laptops Mac	1	9	3	43%
Chromebooks Google	973	52	43	4%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	-3	-100%
Tablets IOS	26	24	10	25%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage



10,189





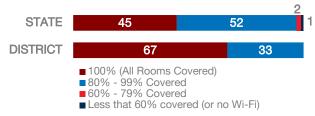
Grand County School District

Area Population

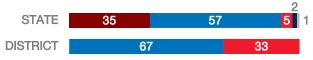
Enrollment 1,498
Number of Schools 3
Urban or Rural Rural
Median Household Income \$48,202
Poverty Rate 8.6%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

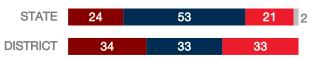


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- ■Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time Other, or no Wi-Fi

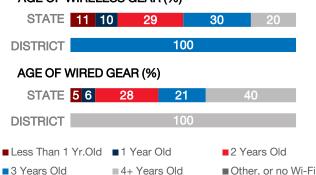
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



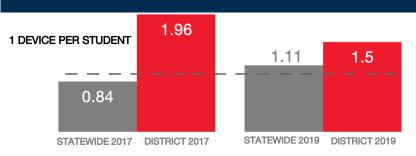
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

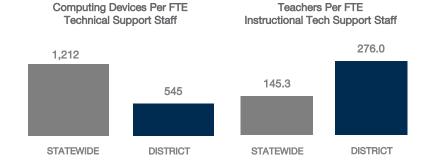
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	359	187	61	13%
Laptops Windows OS	33	10	-77	-64%
Desktops Mac	24	2	2	8%
Laptops Mac	0	6	4	200%
Chromebooks Google	1,773	6	829	87%
Tablets Windows	0	0	0	N/A
Tablets Android	25	0	-15	-38%
Tablets IOS	40	42	42	105%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







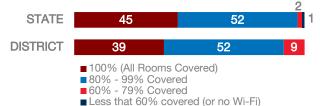
Granite School District

DISTRICT FACTS

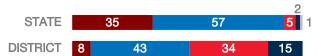
Area Population 398,901 **Enrollment** 65,586 Number of Schools 88 Urban or Rural Urban Median Household Income \$63,450 **Poverty Rate** 11.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

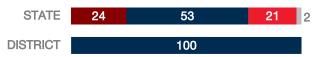


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

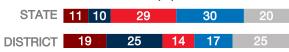
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



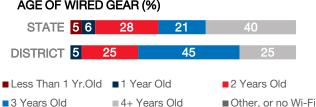
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

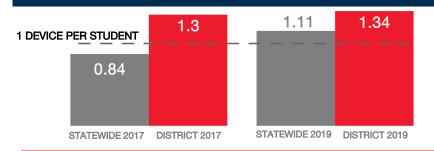
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

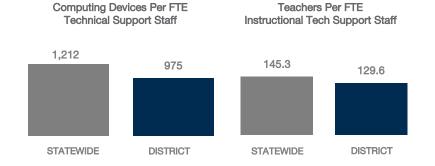
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	12,863	2,661	-9,715	-38%
Laptops Windows OS	1,193	1,269	291	13%
Desktops Mac	838	32	61	8%
Laptops Mac	20	141	-83	-34%
Chromebooks Google	68,301	0	8,906	15%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	4,795	18	-1,683	-26%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







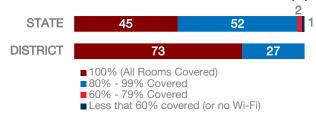
Iron County School District

DISTRICT FACTS

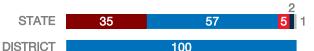
Area Population	49,691
Enrollment	9,547
Number of Schools	15
Urban or Rural	Rural
Median Household Income	\$46,809
Poverty Rate	19.6%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)

			-,				
STATE 1	1 10	29		30	20		
DISTRICT	33			67			
AGE OF WIRED GEAR (%)							
STATE 5	6 28	3	21	4	10		
DISTRICT 6		47		47	7		

■4+ Years Old

2 Years Old

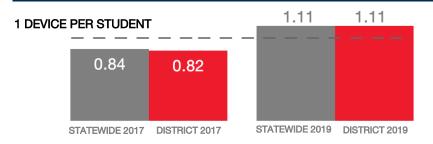
Other, or no Wi-Fi

2020 Utah School Technology Inventory

■ Less Than 1 Yr.Old ■ 1 Year Old

■3 Years Old

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

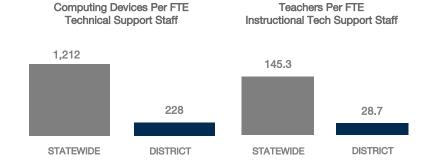
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	708	46	65	9%
Laptops Windows OS	22	17	18	86%
Desktops Mac	340	405	-286	-28%
Laptops Mac	75	209	58	26%
Chromebooks Google	8,984	16	2,942	49%
Tablets Windows	0	0	0	N/A
Tablets Android	0	1	1	N/A
Tablets IOS	422	120	31	6%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







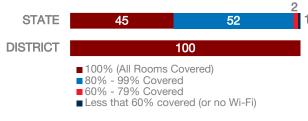
Jordan School District

DISTRICT FACTS

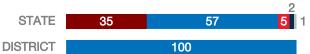
Area Population	269,775
Enrollment	56,574
Number of Schools	61
Urban or Rural	Urban
Median Household Income	\$90,408
Poverty Rate	4.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

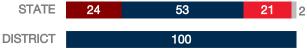


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

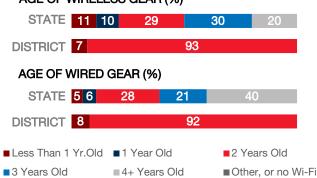
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



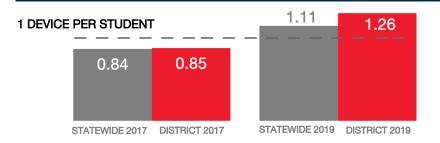
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

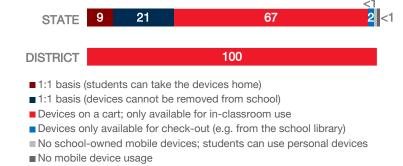


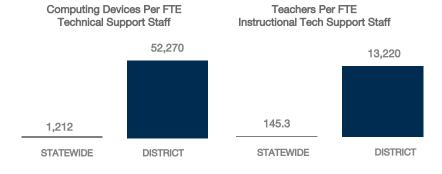
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	5,267	980	-168	-3%
Laptops Windows OS	1,686	1,106	-1,013	-27%
Desktops Mac	1,899	522	-749	-24%
Laptops Mac	5,115	2,662	735	10%
Chromebooks Google	50,378	92	27,307	118%
Tablets Windows	0	0	-16	-100%
Tablets Android	24	0	7	41%
Tablets IOS	6,775	2,794	-273	-3%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









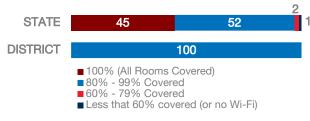
Juab School District

DISTRICT FACTS

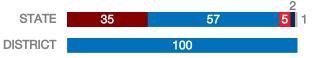
Area Population	10,183
Enrollment	2,685
Number of Schools	5
Urban or Rural	Rural
Median Household Income	\$63,242
Poverty Rate	11.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

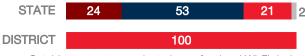


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

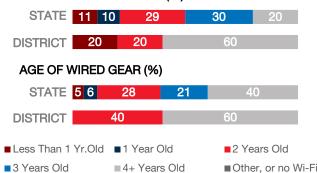
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



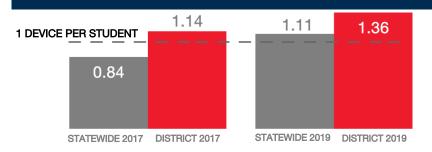
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

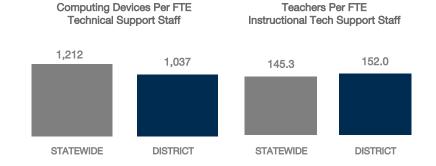
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	91	6	28	41%
Laptops Windows OS	20	8	11	65%
Desktops Mac	383	21	-28	-6%
Laptops Mac	29	257	7	3%
Chromebooks Google	448	0	209	87%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	2,679	205	543	23%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







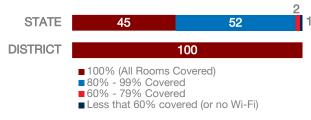
Kane County School District

DISTRICT FACTS

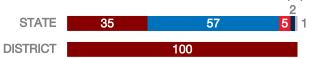
Area Population	7,350
Enrollment	1,253
Number of Schools	7
Urban or Rural	Rural
Median Household Income	\$48,269
Poverty Rate	12.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

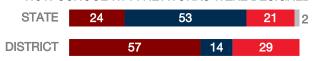


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

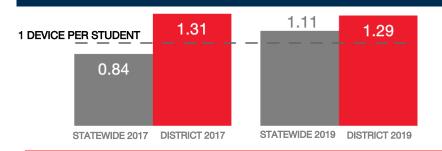
AGE OF WIRELESS GEAR (%)

STATE	11 1	0	29		30	20
DISTRICT	14	14	4	13		29
AGE OF V	VIRED (GEAR	(%)			
STATE	5 6	28	2	21	4	0
DISTRICT	14	29			57	
■Less Than 1	Yr.Old	■1 Ye	ar Old		■2 Ye	ars Old

■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	191	120	-88	-22%
Laptops Windows OS	2	13	3	25%
Desktops Mac	19	4	-7	-23%
Laptops Mac	0	0	0	N/A
Chromebooks Google	1,369	69	62	5%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	20	40	-5	-8%

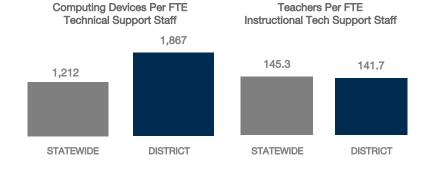
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





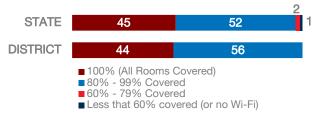
Logan City School District

DISTRICT FACTS

Area Population	50,478
Enrollment	5,533
Number of Schools	9
Urban or Rural	Urban
Median Household Income	\$39,693
Poverty Rate	26.3%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

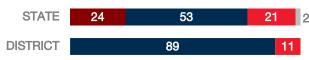


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

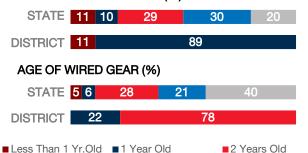
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

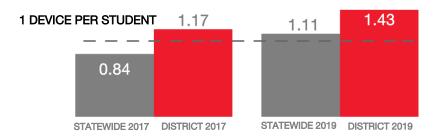
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT

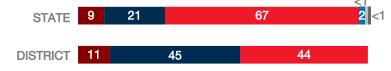


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	635	452	125	13%
Laptops Windows OS	464	193	85	15%
Desktops Mac	332	47	156	70%
Laptops Mac	1,945	317	125	6%
Chromebooks Google	4,151	0	993	31%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	397	315	81	13%

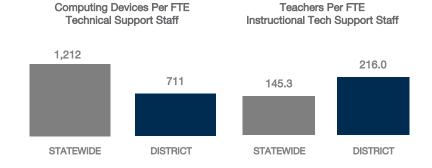
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





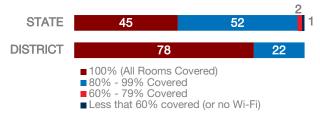
Millard School District

DISTRICT FACTS

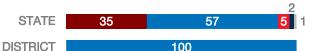
Area Population 12,733
Enrollment 2,968
Number of Schools 9
Urban or Rural Rural
Median Household Income \$60,445
Poverty Rate 11.4%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

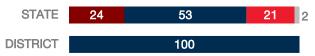


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

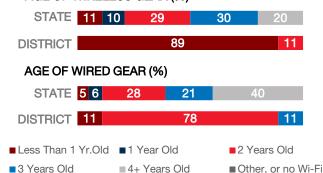
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



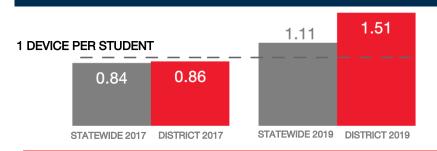
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	396	278	-428	-39%
Laptops Windows OS	91	254	-135	-28%
Desktops Mac	4	3	0	0%
Laptops Mac	4	8	0	0%
Chromebooks Google	3,736	425	2,102	102%
Tablets Windows	5	18	4	21%
Tablets Android	42	1	42	4200%
Tablets IOS	196	132	24	8%

MOBILE DEPLOYMENT

DISTRICT

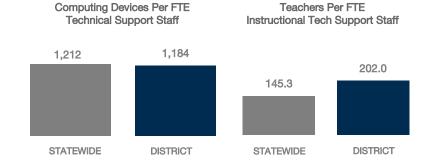
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







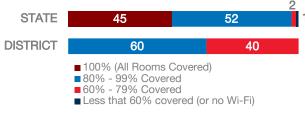
Morgan County School District

DISTRICT FACTS

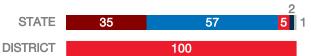
Area Population	11,391
Enrollment	3,183
Number of Schools	5
Urban or Rural	Rural
Median Household Income	\$89,274
Poverty Rate	3.0%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

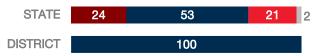


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



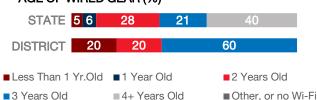
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

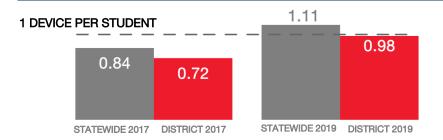
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

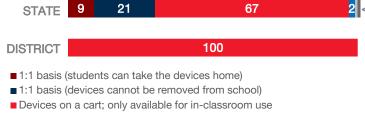


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	238	159	104	35%
Laptops Windows OS	70	60	25	24%
Desktops Mac	36	2	0	0%
Laptops Mac	0	3	0	0%
Chromebooks Google	2,375	40	730	43%
Tablets Windows	15	2	0	0%
Tablets Android	180	2	0	0%
Tablets IOS	165	30	65	50%

MOBILE DEPLOYMENT

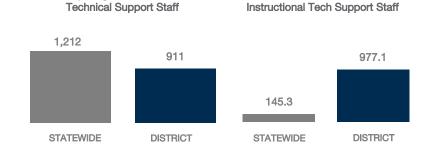
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

Computing Devices Per FTE

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



Teachers Per FTE





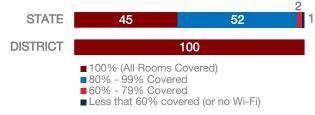
Murray City School District

DISTRICT FACTS

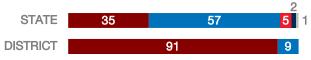
Area Population	38,033
Enrollment	6,555
Number of Schools	11
Urban or Rural	Urban
Median Household Income	\$59,829
Poverty Rate	8.6%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

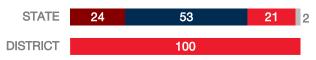


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

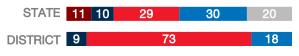
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



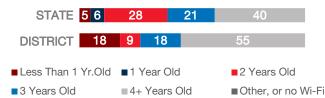
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

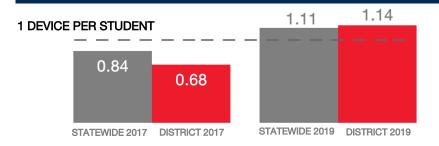
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

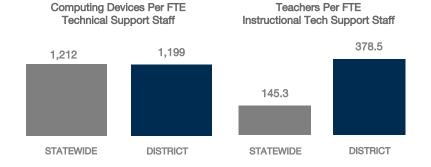
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	825	65	-249	-22%
Laptops Windows OS	71	387	-551	-55%
Desktops Mac	72	0	-5	-6%
Laptops Mac	0	190	123	184%
Chromebooks Google	6,411	197	3,817	137%
Tablets Windows	36	0	36	N/A
Tablets Android	6	0	-18	-75%
Tablets IOS	56	76	75	132%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







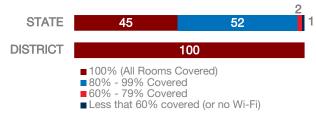
Nebo School District

DISTRICT FACTS

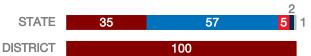
Area Population 133,493
Enrollment 34,062
Number of Schools 43
Urban or Rural Urban
Median Household Income \$72,576
Poverty Rate 6.8%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

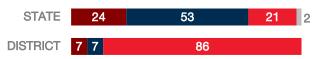


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

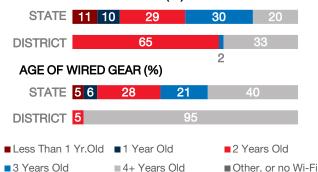
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



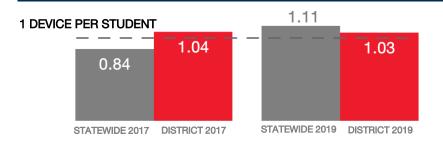
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

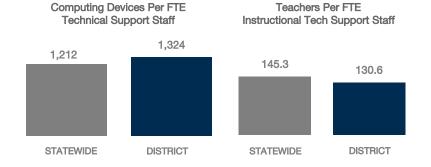
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	4,996	2,080	-2,756	-28%
Laptops Windows OS	0	215	3	1%
Desktops Mac	200	1	1	1%
Laptops Mac	0	24	24	N/A
Chromebooks Google	26,362	0	3,118	13%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	3,680	2,153	477	9%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







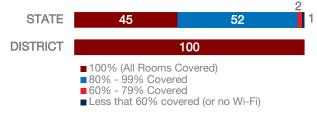
North Sanpete School District

DISTRICT FACTS

Area Population	11,708
Enrollment	2,666
Number of Schools	8
Urban or Rural	Rural
Median Household Income	\$55,464
Poverty Rate	14.4%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

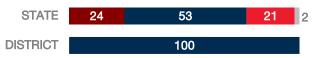


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
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- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

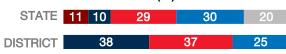
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



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NETWORK GEAR IN SCHOOLS

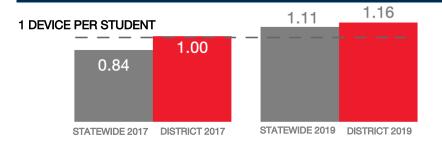
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	115	5	-26	-18%
Laptops Windows OS	0	1	-2	-67%
Desktops Mac	466	19	14	3%
Laptops Mac	409	161	46	9%
Chromebooks Google	240	3	88	57%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	1,860	133	474	31%

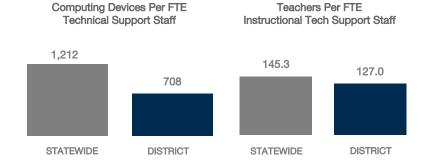
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



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- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



Teachers Per FTE





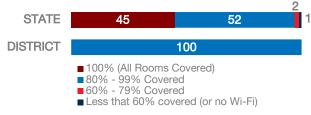
North Summit School District

DISTRICT FACTS

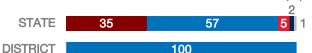
Area Population	5,899
Enrollment	1,016
Number of Schools	3
Urban or Rural	Rural
Median Household Income	\$82,109
Poverty Rate	4.6%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

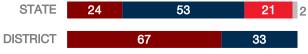


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

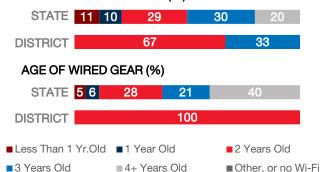
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



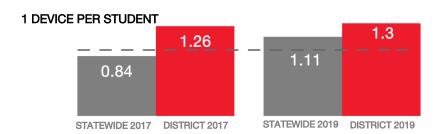
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- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

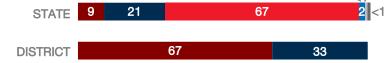


COMPUTING DEVICES USED IN SCHOOLS

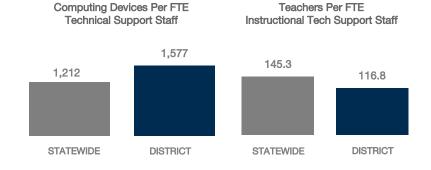
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	30	3	0	0%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	172	35	-63	-23%
Laptops Mac	720	140	35	4%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	402	75	-7	-1%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







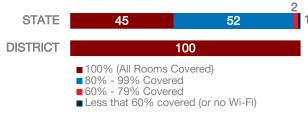
Ogden City School District

DISTRICT FACTS

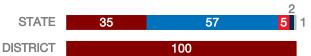
Area Population 86,126 **Enrollment** 11,466 Number of Schools 21 Urban or Rural Urban Median Household Income \$46,807 **Poverty Rate** 19.6%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

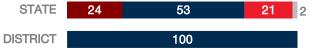


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
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- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

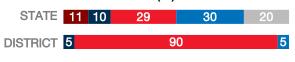
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



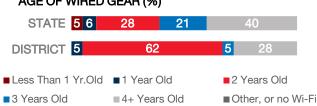
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

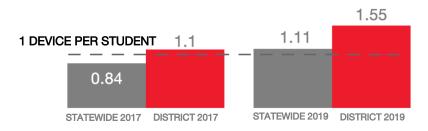
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

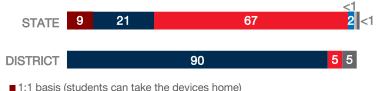


COMPUTING DEVICES USED IN SCHOOLS

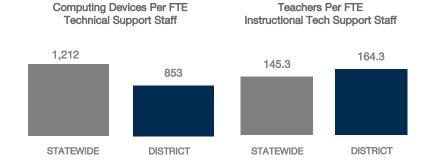
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	3,584	1,175	-109	-2%
Laptops Windows OS	882	102	-195	-17%
Desktops Mac	55	2	-5	-8%
Laptops Mac	0	8	0	0%
Chromebooks Google	11,113	0	4,911	79%
Tablets Windows	0	0	-18	-100%
Tablets Android	0	0	0	N/A
Tablets IOS	2,121	140	360	19%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







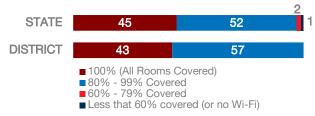
Park City School District

DISTRICT FACTS

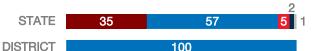
Area Population 26,916
Enrollment 4,795
Number of Schools 7
Urban or Rural Rural
Median Household Income \$119,523
Poverty Rate 6.9%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

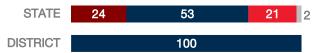


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

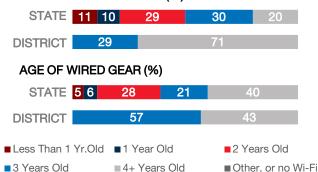
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



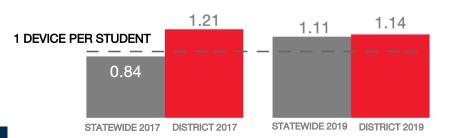
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

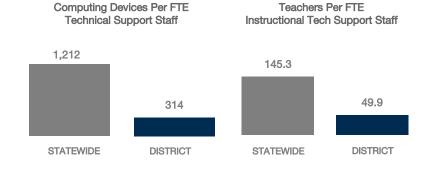
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	47	25	6	9%
Laptops Windows OS	11	9	7	54%
Desktops Mac	234	37	-1	0%
Laptops Mac	4,537	485	-334	-6%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	10	1	0	0%
Tablets IOS	650	227	-93	-10%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







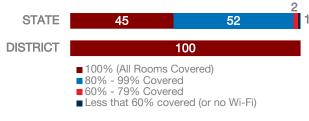
Piute School District

DISTRICT FACTS

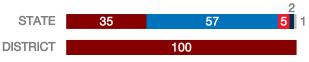
Area Population	1,904
Enrollment	306
Number of Schools	3
Urban or Rural	Rural
Median Household Income	\$39,440
Poverty Rate	17.1%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

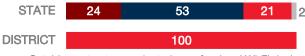


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

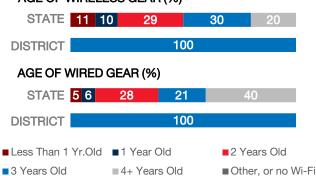
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



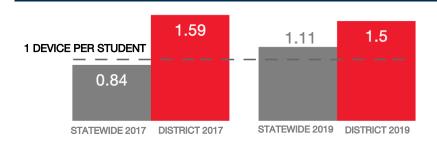
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

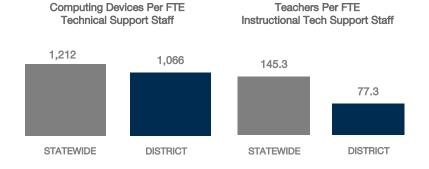
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	0	-1	-100%
Desktops Mac	49	32	-12	-13%
Laptops Mac	106	8	42	58%
Chromebooks Google	157	0	13	9%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	147	34	-68	-27%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







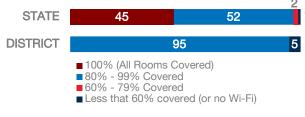
Provo City School District

DISTRICT FACTS

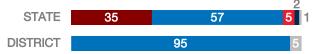
Area Population 115,858
Enrollment 16,586
Number of Schools 20
Urban or Rural Urban
Median Household Income \$46,635
Poverty Rate 25.9%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

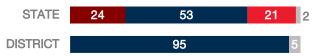


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

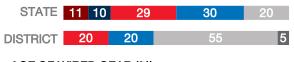
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

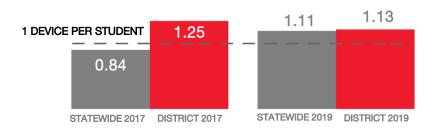
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

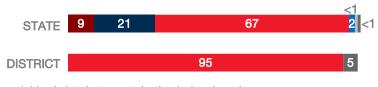


COMPUTING DEVICES USED IN SCHOOLS

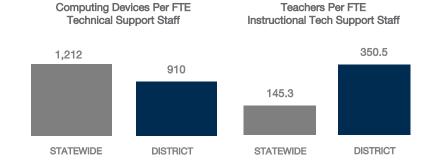
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	890	93	-276	-22%
Laptops Windows OS	92	73	-24	-13%
Desktops Mac	1,313	54	-1,260	-48%
Laptops Mac	778	942	-367	-18%
Chromebooks Google	14,021	153	3,941	39%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	1,611	460	-1,062	-34%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Rich School District

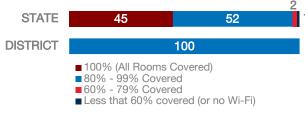
Area Population 2,350 Enrollment 499 Number of Schools 4 Urban or Rural Rural Median Household Income \$49,886

WI-FI NETWORKS

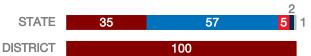
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

15.9%

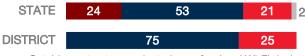


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

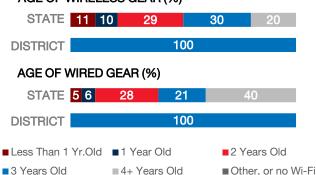
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



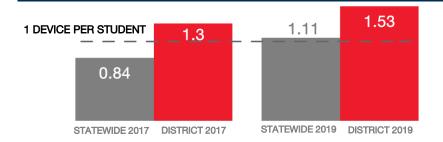
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

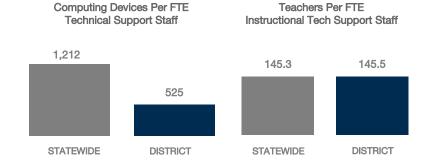
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	103	35	2	1%
Laptops Windows OS	39	23	18	41%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	375	30	44	12%
Tablets Android	0	0	0	N/A
Tablets IOS	245	16	23	10%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







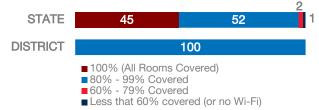
Salt Lake City School District

DISTRICT FACTS

Area Population	195,692
Enrollment	22,548
Number of Schools	37
Urban or Rural	Urban
Median Household Income	\$56,360
Poverty Rate	17.9%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

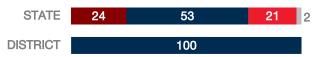


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

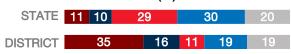
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



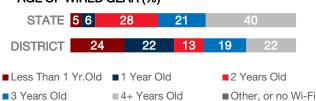
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

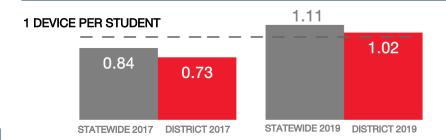
AGE OF WIRELESS GEAR (%)



AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

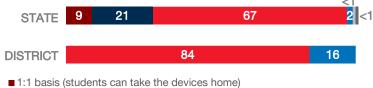


COMPUTING DEVICES USED IN SCHOOLS

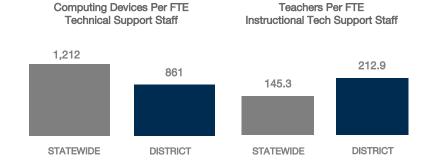
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	5,481	1,994	-1,382	-16%
Laptops Windows OS	12,884	759	5,856	75%
Desktops Mac	244	19	111	73%
Laptops Mac	0	165	29	21%
Chromebooks Google	0	0	0	N/A
Tablets Windows	29	60	-5	-5%
Tablets Android	0	0	0	N/A
Tablets IOS	4,352	705	737	17%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







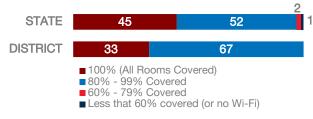
San Juan School District

DISTRICT FACTS

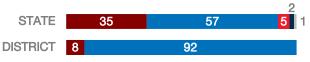
Area Population 14,708
Enrollment 3,127
Number of Schools 12
Urban or Rural Rural
Median Household Income \$44,578
Poverty Rate 27.1%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

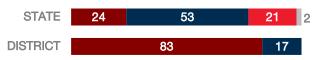


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

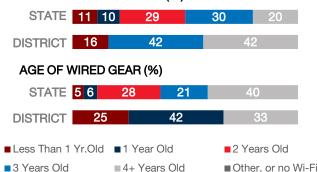
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



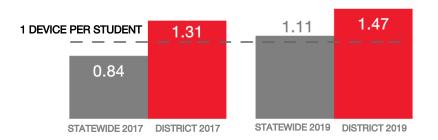
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

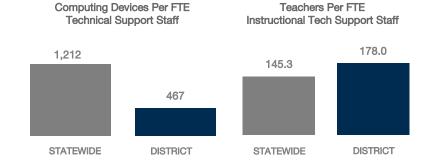
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	1,156	307	-166	-10%
Laptops Windows OS	0	81	-74	-48%
Desktops Mac	0	1	1	N/A
Laptops Mac	0	0	-1	-100%
Chromebooks Google	3,383	116	940	37%
Tablets Windows	0	0	-1	-100%
Tablets Android	0	0	0	N/A
Tablets IOS	52	43	-76	-44%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







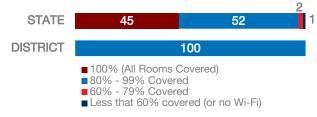
Sevier School District

DISTRICT FACTS

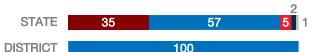
Area Population	21,118
Enrollment	4,648
Number of Schools	12
Urban or Rural	Rural
Median Household Income	\$53,020
Poverty Rate	13.4%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

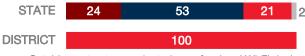


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

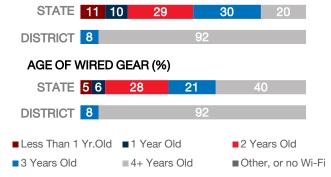
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



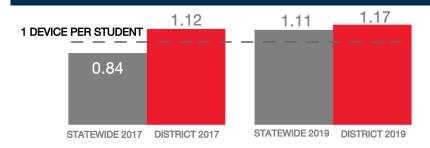
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

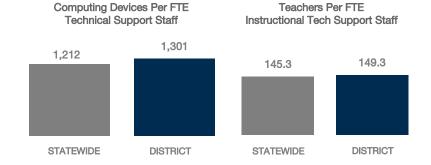
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	180	22	0	0%
Laptops Windows OS	0	5	0	0%
Desktops Mac	843	222	-282	-21%
Laptops Mac	76	51	0	0%
Chromebooks Google	3,463	10	501	17%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	858	123	-239	-20%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







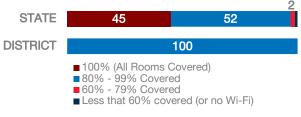
South Sanpete School District

DISTRICT FACTS

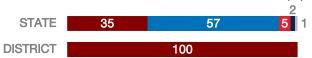
Area Population	17,658
Enrollment	3,477
Number of Schools	7
Urban or Rural	Rural
Median Household Income	\$47,114
Poverty Rate	18.1%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

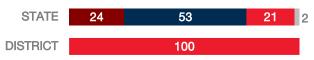


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

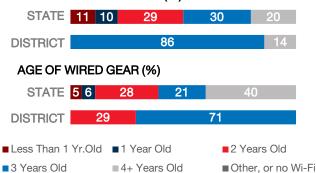
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

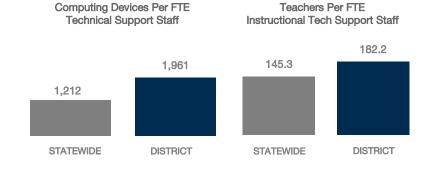
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	25	2	-6	-18%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	486	244	-71	-9%
Laptops Mac	130	45	25	17%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	3,227	254	346	11%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







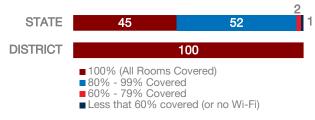
South Summit School District

DISTRICT FACTS

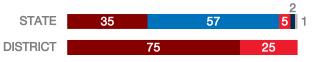
Area Population	7,696
Enrollment	1,766
Number of Schools	4
Urban or Rural	Rural
Median Household Income	\$76,274
Poverty Rate	6.4%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

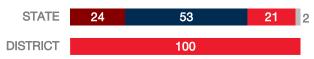


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

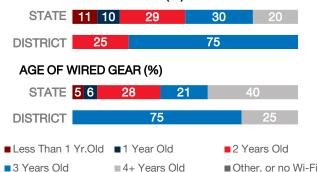
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



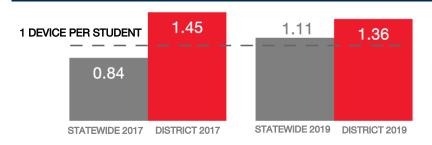
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

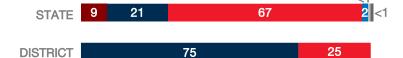


COMPUTING DEVICES USED IN SCHOOLS

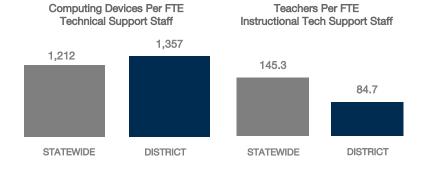
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	35	3	0	0%
Laptops Windows OS	120	4	91	276%
Desktops Mac	68	128	-152	-44%
Laptops Mac	1,740	149	4	0%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	430	36	-118	-20%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







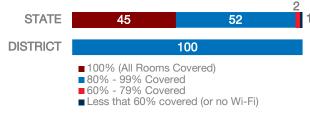
Tintic School District

DISTRICT FACTS

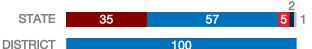
Area Population 765
Enrollment 213
Number of Schools 4
Urban or Rural Rural
Median Household Income \$53,906
Poverty Rate 14.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

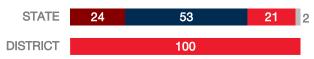


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

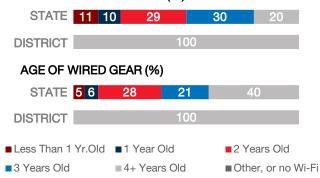
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

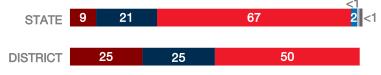


COMPUTING DEVICES USED IN SCHOOLS

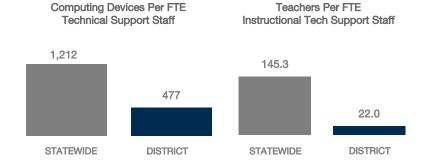
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	50	26	0	0%
Laptops Windows OS	24	15	0	0%
Desktops Mac	6	5	0	0%
Laptops Mac	0	5	0	0%
Chromebooks Google	309	5	0	0%
Tablets Windows	0	4	0	0%
Tablets Android	0	0	0	N/A
Tablets IOS	20	8	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







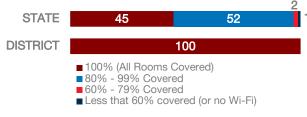
Tooele County School District

DISTRICT FACTS

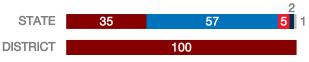
Area Population	65,185
Enrollment	17,619
Number of Schools	24
Urban or Rural	Urban
Median Household Income	\$71,020
Poverty Rate	6.7%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

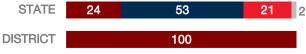


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

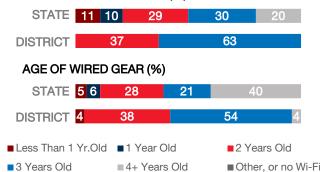
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



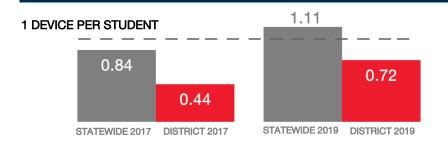
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

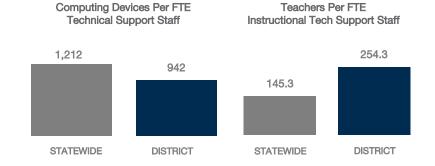
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	3,184	1,137	262	6%
Laptops Windows OS	3,786	115	751	24%
Desktops Mac	128	16	-25	-15%
Laptops Mac	171	26	87	79%
Chromebooks Google	3,547	46	3,476	2971%
Tablets Windows	0	0	-3	-100%
Tablets Android	246	0	240	4000%
Tablets IOS	1,519	214	611	54%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







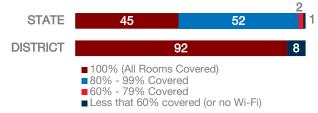
Uintah School District

DISTRICT FACTS

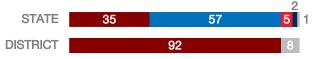
Area Population 36,323
Enrollment 6,976
Number of Schools 12
Urban or Rural Rural
Median Household Income \$66,736
Poverty Rate 11.9%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

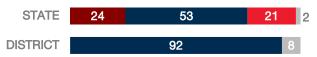


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

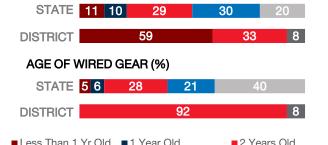
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

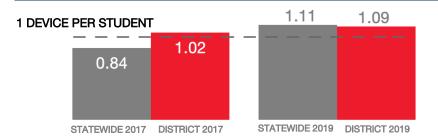
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT

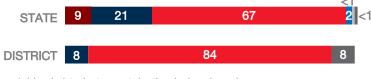


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	1,181	448	-882	-35%
Laptops Windows OS	150	99	0	0%
Desktops Mac	90	37	0	0%
Laptops Mac	0	8	0	0%
Chromebooks Google	5,911	237	1,056	21%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	257	25	-82	-23%

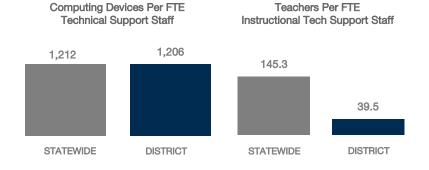
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





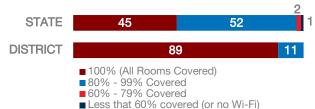
Wasatch School District

DISTRICT FACTS

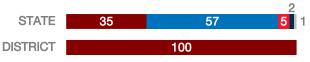
Area Population	30,523
Enrollment	7,368
Number of Schools	9
Urban or Rural	Rural
Median Household Income	\$77,449
Poverty Rate	7.2%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

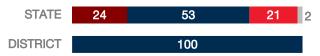


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

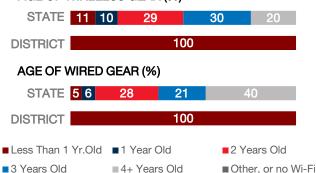
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



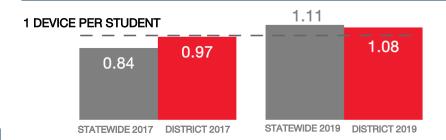
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

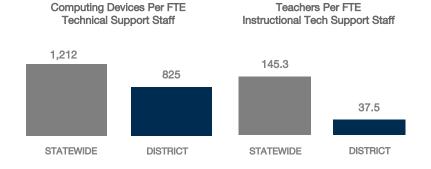
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	40	62	-182	-64%
Laptops Windows OS	280	124	-6,490	-94%
Desktops Mac	96	22	2	2%
Laptops Mac	2,468	587	3,025	10083%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	5,110	514	5,235	1346%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







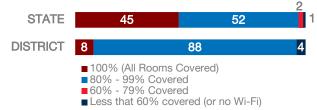
Washington County School District

DISTRICT FACTS

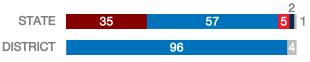
Area Population 160,537 **Enrollment** 33,396 Number of Schools 50 Urban or Rural Urban Median Household Income \$56,877 **Poverty Rate** 12.4%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

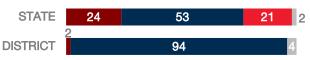


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

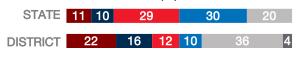
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



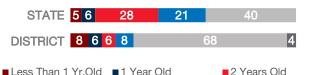
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



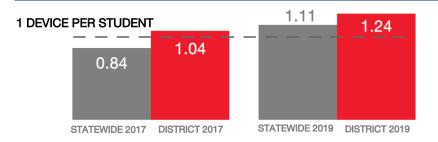
AGE OF WIRED GEAR (%)



Other, or no Wi-Fi

■3 Years Old ■4+ Years Old

COMPUTING DEVICES PER STUDENT

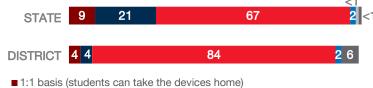


COMPUTING DEVICES USED IN SCHOOLS

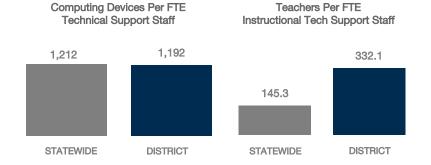
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	4,375	2,017	-634	-9%
Laptops Windows OS	668	488	-1,021	-47%
Desktops Mac	319	59	12	3%
Laptops Mac	8	198	51	33%
Chromebooks Google	32,684	411	11,402	53%
Tablets Windows	14	14	-24	-46%
Tablets Android	288	11	-62	-17%
Tablets IOS	2,669	580	-812	-20%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







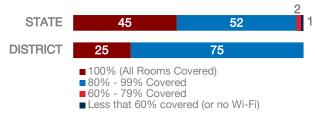
Wayne County School District

DISTRICT FACTS

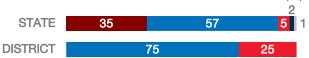
Area Population	2,694
Enrollment	432
Number of Schools	4
Urban or Rural	Rural
Median Household Income	\$44,694
Poverty Rate	8.5%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

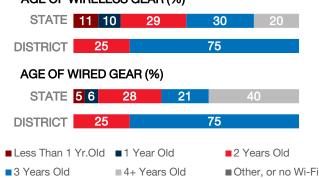
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



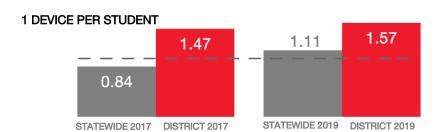
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	20	2	5	29%
Laptops Windows OS	3	1	0	0%
Desktops Mac	92	53	-4	-3%
Laptops Mac	64	17	23	40%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	499	57	-59	-10%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS

Computing Devices Per FTE Teachers Per FTE Instructional Tech Support Staff

1,212

145.3

284

N/A

STATEWIDE DISTRICT STATEWIDE DISTRICT





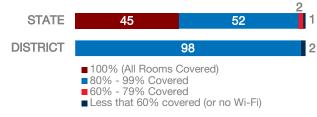
Weber School District

DISTRICT FACTS

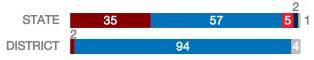
Area Population	161,605
Enrollment	32,683
Number of Schools	46
Urban or Rural	Urban
Median Household Income	\$74,083
Poverty Rate	7.0%

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

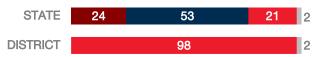


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

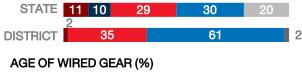
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED

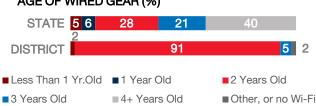


- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

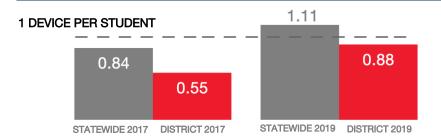
NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)





COMPUTING DEVICES PER STUDENT

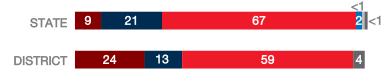


COMPUTING DEVICES USED IN SCHOOLS

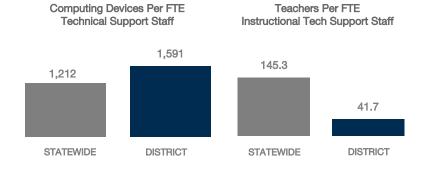
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	3,898	2,433	-198	-3%
Laptops Windows OS	19	283	-53	-15%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	22,519	1,298	12,698	114%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	2,387	5	-24	-1%

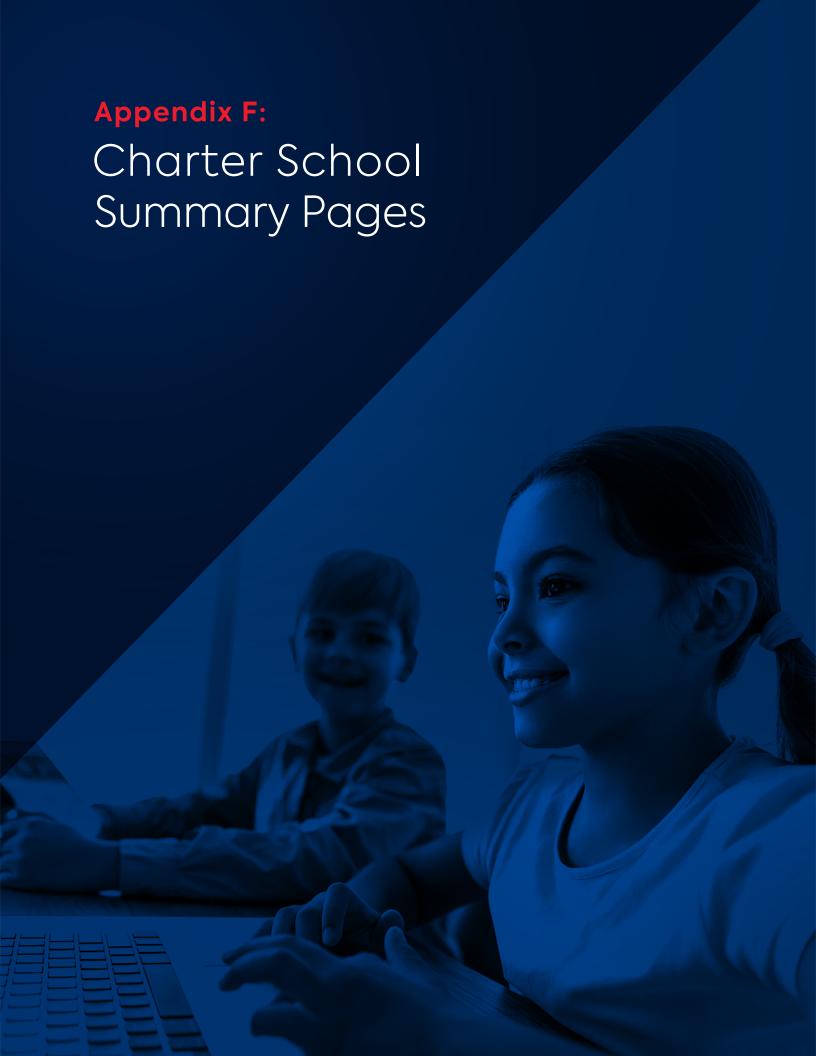
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage









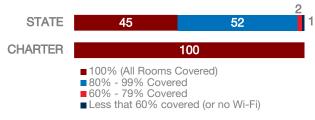
Academy for Math Engineering & Science (AMES)

CHARTER FACTS

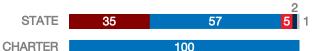
Area Population	N/A
Enrollment	499
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

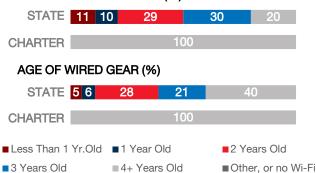
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



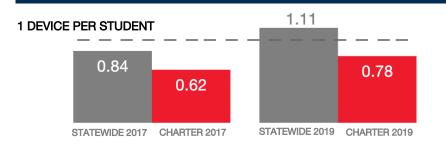
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



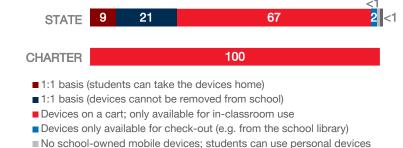
COMPUTING DEVICES USED IN SCHOOLS

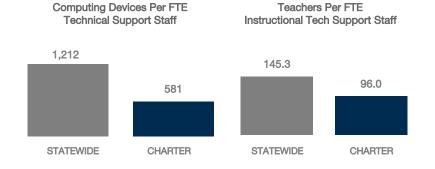
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	101	5	-1	-1%
Laptops Windows OS	175	31	25	14%
Desktops Mac	12	1	4	44%
Laptops Mac	0	1	0	0%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	100	10	46	72%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









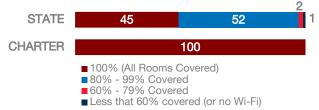
American Academy of Innovation (6-12)

Area Population N/A Enrollment 403 Number of Schools 1 Urban or Rural Urban

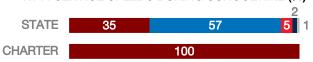
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

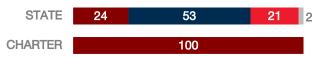


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

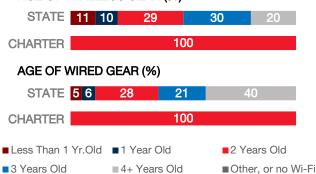
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

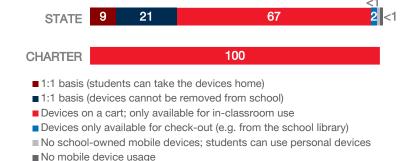


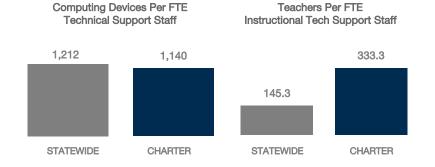
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	6	3	-1	-10%
Laptops Windows OS	30	5	0	0%
Desktops Mac	32	2	-1	-3%
Laptops Mac	105	30	-5	-4%
Chromebooks Google	90	0	-90	-50%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	210	0	30	17%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









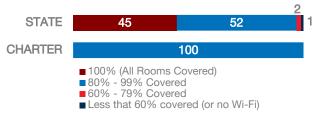
American Leadership Academy

CHARTER FACTS

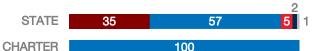
Area Population	N/A
Enrollment	1,772
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

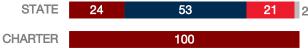


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

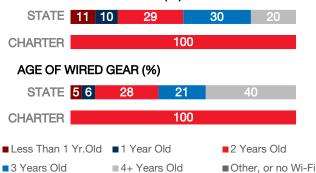
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



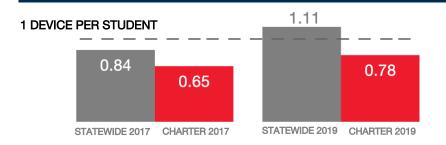
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



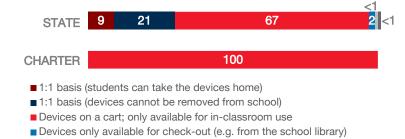
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	84	45	0	0%
Laptops Windows OS	650	130	315	68%
Desktops Mac	52	4	-1	-2%
Laptops Mac	0	10	0	0%
Chromebooks Google	360	2	-62	-15%
Tablets Windows	0	0	-38	-100%
Tablets Android	0	0	0	N/A
Tablets IOS	210	6	0	0%

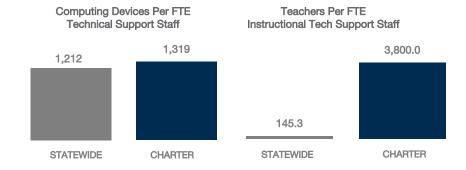
MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No school-owned mobile devices; students can use personal devices







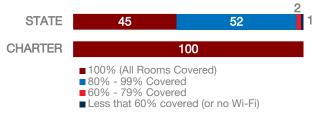
American Preparatory Academy

CHARTER FACTS

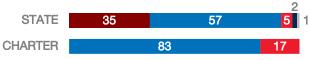
Area Population N/A
Enrollment 4,802
Number of Schools 6
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

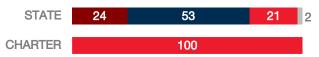


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



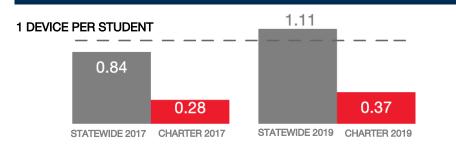
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)

	(,	-,	
STATE 11 1	0 29	30	20
CHARTER 17		83	
AGE OF WIRED	GEAR (%)		
STATE 5 6	28	21	40
CHARTER		100	
■ Less Than 1 Yr.Old	■1 Year Old	= 2	Years Old
■3 Years Old	■4+ Years O	ld 🔳 C	Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT

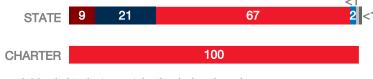


COMPUTING DEVICES USED IN SCHOOLS

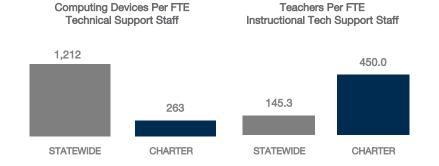
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	33	0	3	10%
Laptops Windows OS	0	1	0	0%
Desktops Mac	0	22	8	57%
Laptops Mac	1,680	404	569	38%
Chromebooks Google	5	0	-111	-96%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	75	15	25	38%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







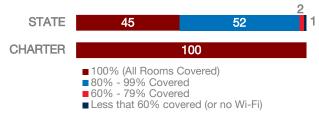
Ascent Academies of Utah

CHARTER FACTS

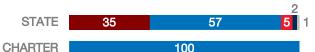
Area Population	N/A
Enrollment	2,349
Number of Schools	4
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

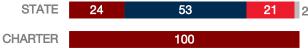


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

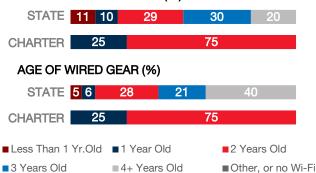
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



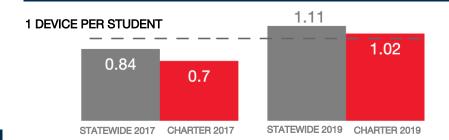
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

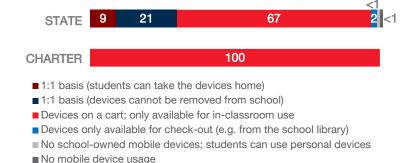


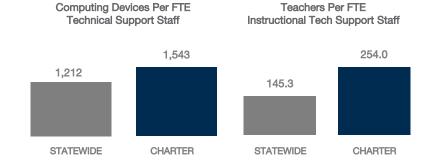
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	36	2	-55	-59%
Desktops Mac	0	0	0	N/A
Laptops Mac	140	156	80	37%
Chromebooks Google	1,685	15	815	92%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	539	127	228	52%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









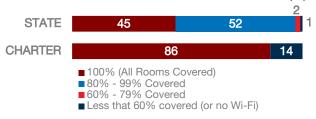
Athenian eAcademy

CHARTER FACTS

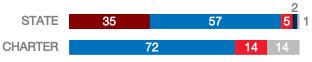
Area Population N/A
Enrollment 673
Number of Schools 7
Urban or Rural Rural
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

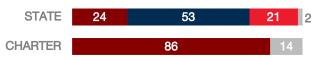


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



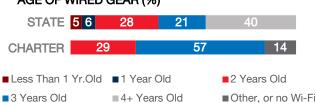
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)

STATE	11 10	29	30	20
CHARTER	29		57	14

AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

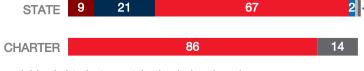


COMPUTING DEVICES USED IN SCHOOLS

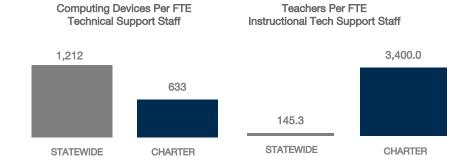
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	8	4	100%
Laptops Windows OS	0	37	6	19%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	588	0	256	77%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







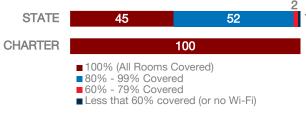
Athlos Academy of Utah

CHARTER FACTS

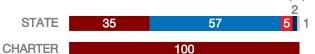
Area Population N/A **Enrollment** 840 **Number of Schools** Urban or Rural Rural Median Household Income N/A **Poverty Rate** N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

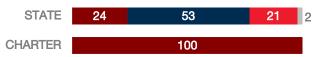


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

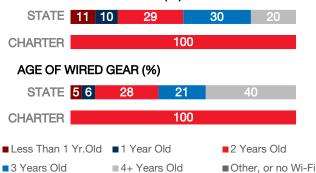
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



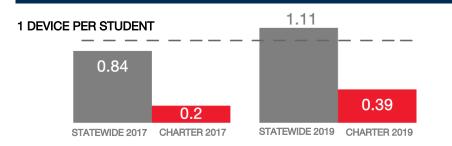
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

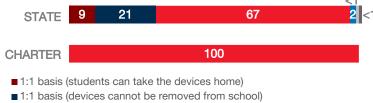


COMPUTING DEVICES USED IN SCHOOLS

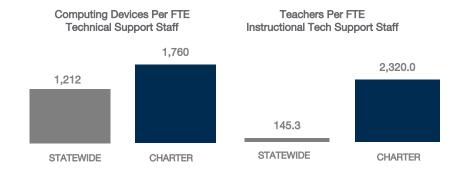
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	90	2	30	48%
Laptops Windows OS	40	60	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	60	0	50	500%
Tablets Windows	0	0	0	N/A
Tablets Android	15	0	0	0%
Tablets IOS	122	7	83	180%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







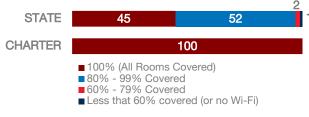
Bear River Charter School

CHARTER FACTS

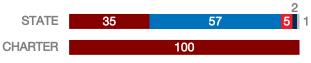
Area Population	N/A
Enrollment	176
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

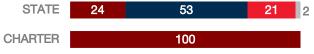


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

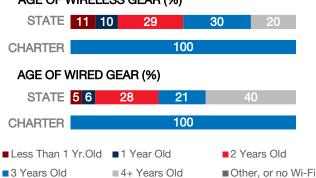
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

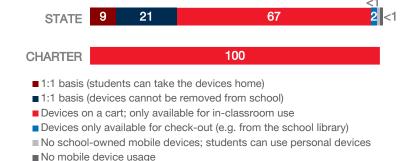


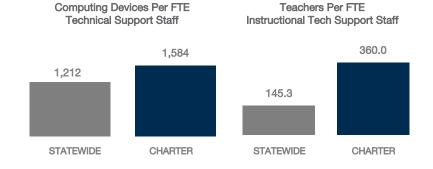
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	10	4	-13	-48%
Laptops Windows OS	0	9	-30	-77%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	150	0	120	400%
Tablets Windows	0	0	0	N/A
Tablets Android	5	0	0	0%
Tablets IOS	20	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









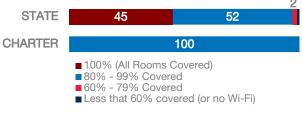
Beehive Science & Technology Academy (BSTA)

Area Population N/A Enrollment 320

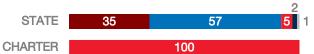
Number of Schools 1
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

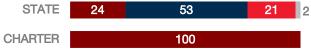


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

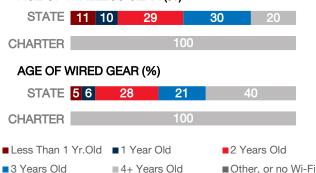
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



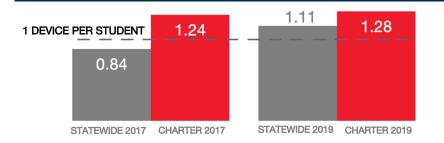
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	25	0	-24	-49%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	54	1	27	96%
Laptops Mac	10	24	10	42%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	320	24	9	3%

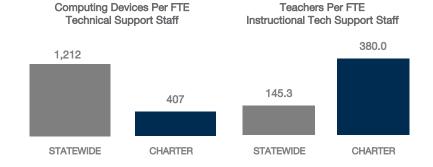
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices on a cart, only available for in-classiforn use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







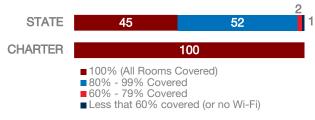
Bonneville Academy

CHARTER FACTS

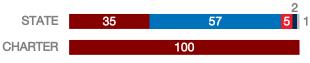
Area Population	N/A
Enrollment	556
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

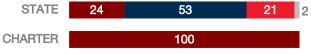


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

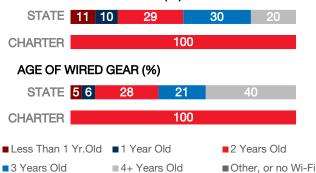
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



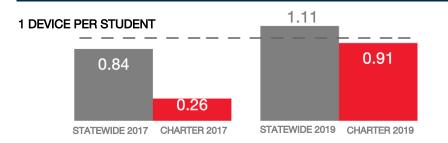
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

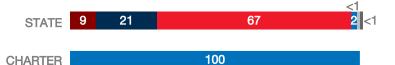


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	58	5	3	5%
Laptops Windows OS	26	60	26	43%
Desktops Mac	0	1	1	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	356	356	622	691%
Tablets Windows	0	0	0	N/A
Tablets Android	5	0	5	N/A
Tablets IOS	60	60	85	243%

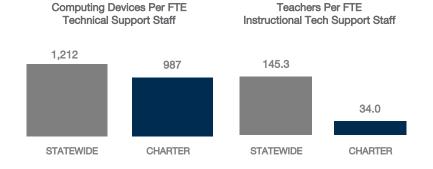
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







C. S. Lewis Academy

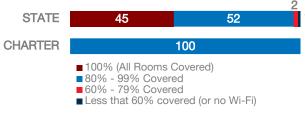
Area Population N/A Enrollment 321 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

WI-FI NETWORKS

Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

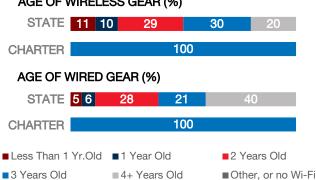
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

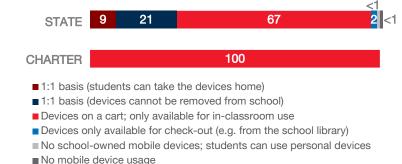


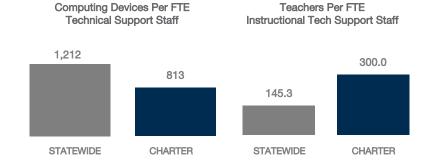
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	15	-11	-42%
Laptops Windows OS	0	50	36	257%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	139	0	-1	-1%
Tablets Windows	0	0	0	N/A
Tablets Android	30	0	15	100%
Tablets IOS	5	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









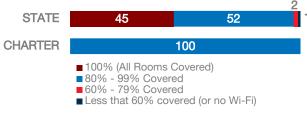
Canyon Grove Academy

CHARTER FACTS

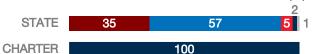
Area Population	N/A
Enrollment	640
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

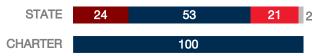


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

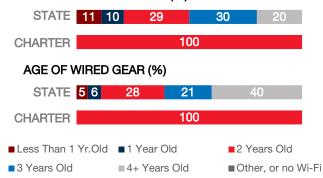
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



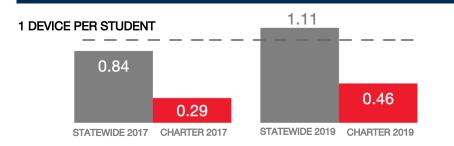
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

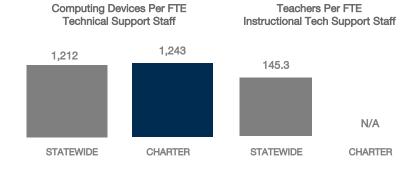
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	30	11	6	17%
Laptops Windows OS	15	10	-109	-81%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	2	2	N/A
Chromebooks Google	200	50	247	8233%
Tablets Windows	1	1	2	N/A
Tablets Android	50	0	-34	-40%
Tablets IOS	0	3	1	50%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







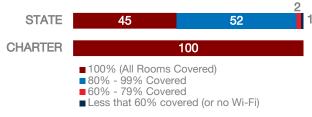
Canyon Rim Academy

CHARTER FACTS

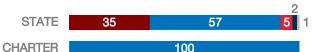
Area Population N/A
Enrollment 513
Number of Schools 1
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

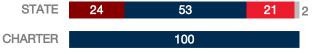


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

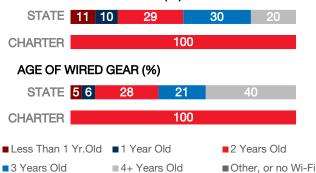
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

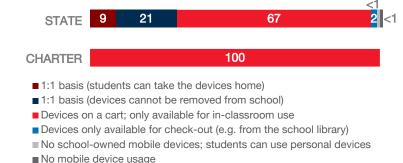


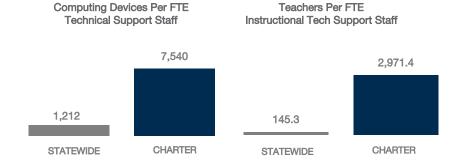
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	37	0	0%
Laptops Windows OS	130	20	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	2	0	0%
Chromebooks Google	153	0	50	49%
Tablets Windows	0	0	0	N/A
Tablets Android	15	0	10	200%
Tablets IOS	20	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









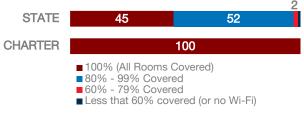
Capstone Classical Academy

CHARTER FACTS

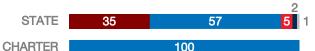
Area Population N/A
Enrollment 177
Number of Schools 1
Urban or Rural Rural
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

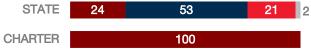


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

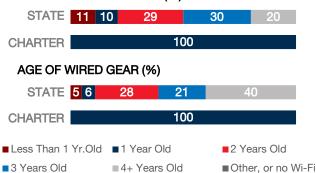
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



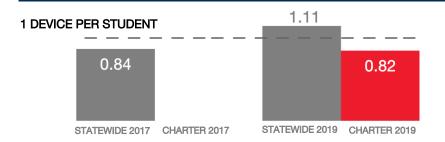
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

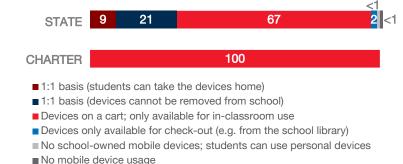


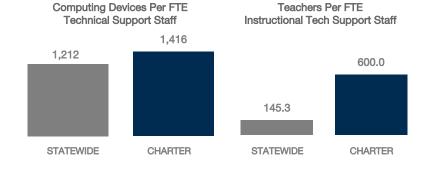
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	4	4	N/A
Laptops Windows OS	30	28	58	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	115	0	115	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









Center for Creativity Innovation And Discovery

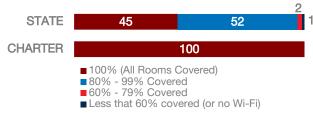
N/A

Area Population N/A Enrollment 510 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

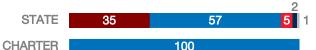
WI-FI NETWORKS

Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

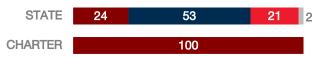


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

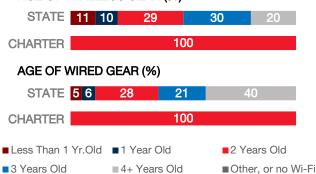
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



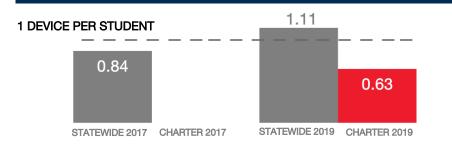
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

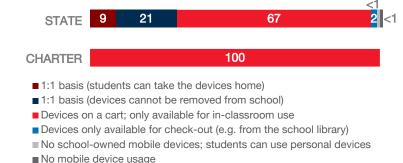


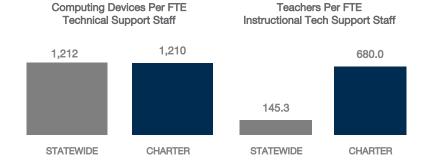
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	12	2	14	N/A
Laptops Windows OS	0	2	2	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	17	17	N/A
Chromebooks Google	211	2	213	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	30	0	30	N/A
Tablets IOS	70	17	87	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









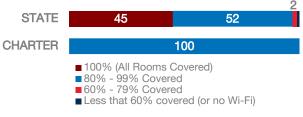
Channing Hall

CHARTER FACTS

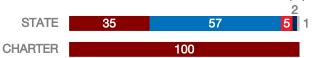
Area Population N/A
Enrollment 621
Number of Schools 1
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

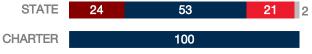


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

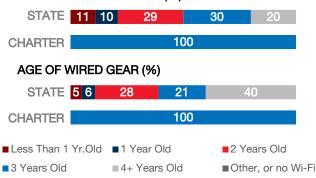
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

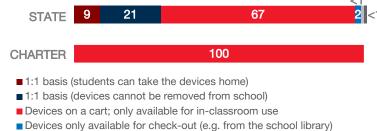


COMPUTING DEVICES USED IN SCHOOLS

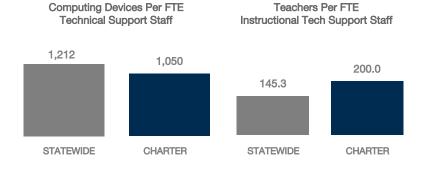
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	14	24	-5	-12%
Laptops Windows OS	0	54	-39	-42%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	537	0	261	95%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	21	6	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- No school supped mobile devices students can use neveral device
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







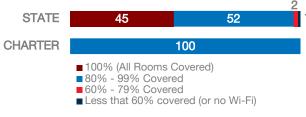
City Academy

CHARTER FACTS

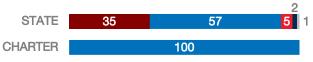
Area Population	N/A
Enrollment	168
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

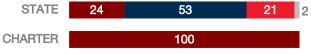


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

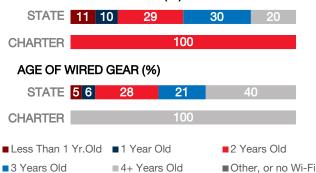
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



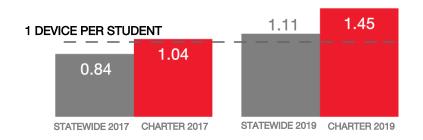
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



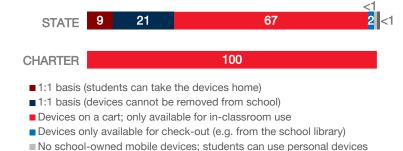
COMPUTING DEVICES USED IN SCHOOLS

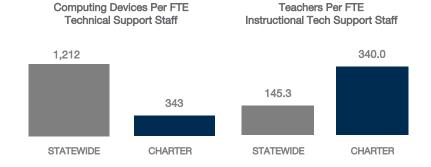
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	20	20	5	14%
Laptops Windows OS	4	9	4	44%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	220	10	83	56%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	-10	-100%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









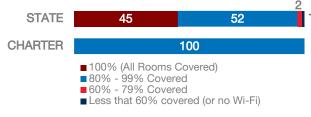
DaVinci Academy of Science & The Arts

CHARTER FACTS

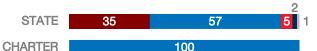
Area Population N/A **Enrollment** 1.190 **Number of Schools** Urban or Rural Urban Median Household Income N/A **Poverty Rate** N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

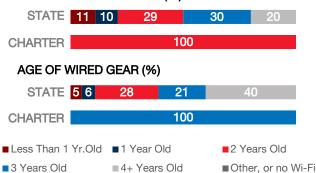
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED

STATE 24	53	21 2
CHARTER	100	

- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

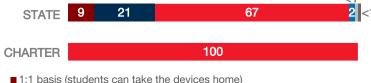


COMPUTING DEVICES USED IN SCHOOLS

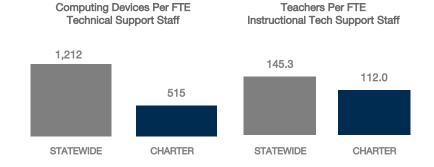
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	160	95	40	19%
Laptops Windows OS	850	110	400	71%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	380	120	320	178%
Tablets Windows	0	3	0	0%
Tablets Android	80	30	50	83%
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







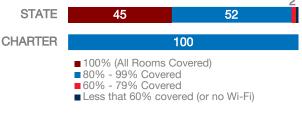
Dixie Montessori Academy

CHARTER FACTS

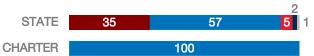
Area Population	N/A
Enrollment	277
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

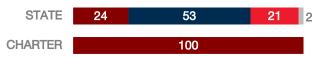


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

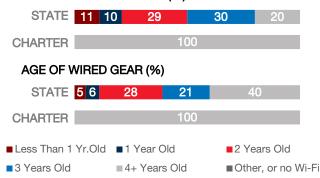
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

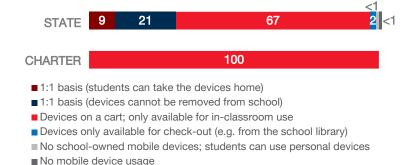


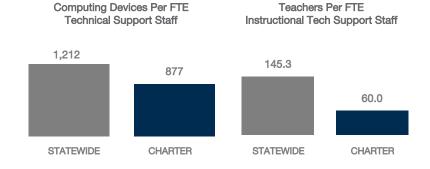
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	14	0	0%
Laptops Windows OS	0	4	0	0%
Desktops Mac	0	1	0	0%
Laptops Mac	0	1	0	0%
Chromebooks Google	250	17	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	40	2	-8	-16%
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









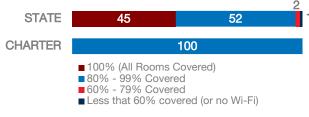
Dual Immersion Academy

CHARTER FACTS

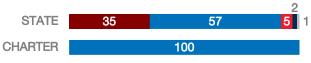
Area Population	N/A
Enrollment	470
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

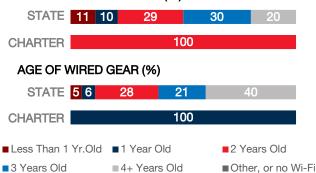
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



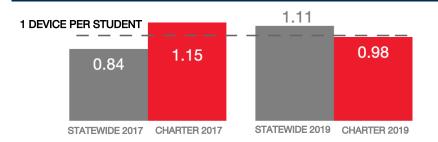
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

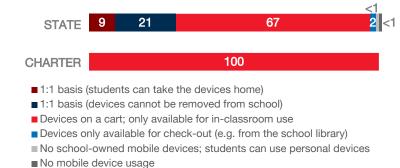


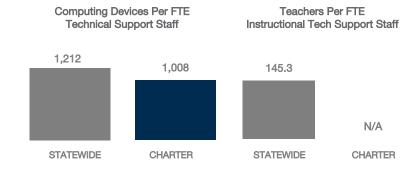
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	60	100	0	0%
Laptops Windows OS	0	25	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	400	5	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	15	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









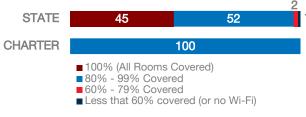
East Hollywood High School

CHARTER FACTS

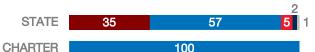
Area Population	N/A
Enrollment	320
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

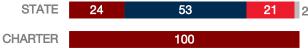


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

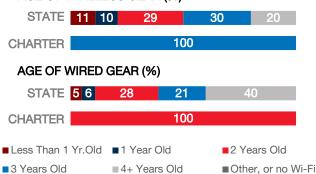
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



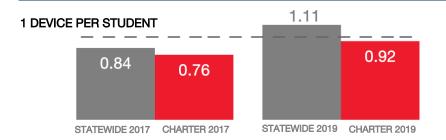
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	50	30	-50	-38%
Laptops Windows OS	15	0	-45	-75%
Desktops Mac	30	3	0	0%
Laptops Mac	0	0	-5	-100%
Chromebooks Google	200	0	120	150%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

CHARTER

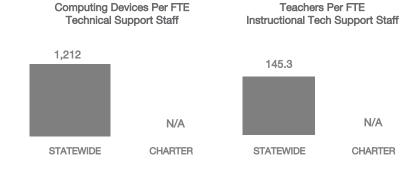
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







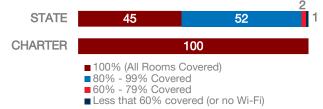
Edith Bowen Laboratory School

CHARTER FACTS

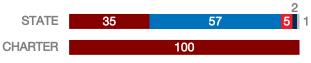
Area Population	N/A
Enrollment	358
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

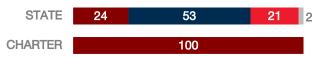


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

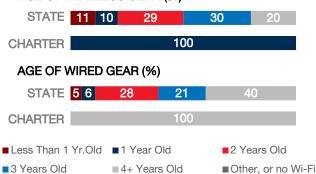
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



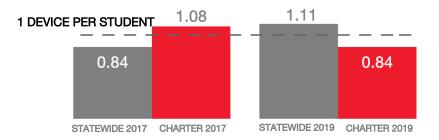
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	7	1	17%
Laptops Windows OS	0	3	-1	-25%
Desktops Mac	8	0	-4	-33%
Laptops Mac	0	27	13	93%
Chromebooks Google	213	0	-147	-41%
Tablets Windows	0	2	-1	-33%
Tablets Android	0	1	1	N/A
Tablets IOS	80	30	89	424%

MOBILE DEPLOYMENT

CHARTER

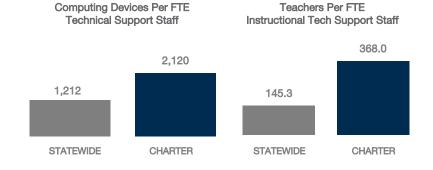
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Endeavor Hall

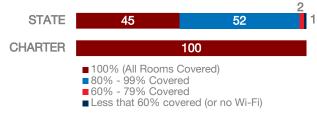
Area Population N/A Enrollment 343 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

WI-FI NETWORKS

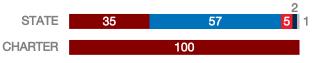
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

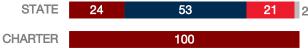


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

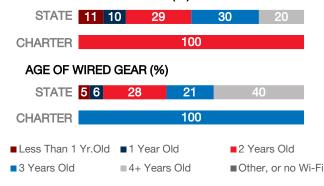
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

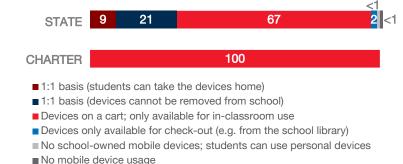


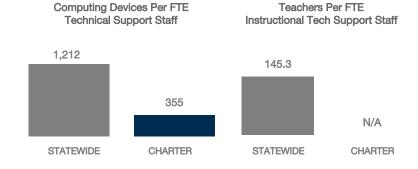
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	3	1	50%
Laptops Windows OS	150	45	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	151	0	36	31%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









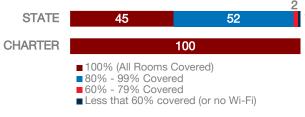
Entheos Academy

CHARTER FACTS

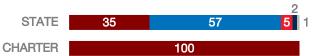
Area Population N/A
Enrollment 1,057
Number of Schools 2
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

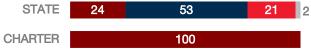


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

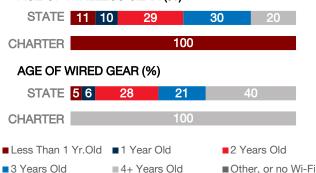
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



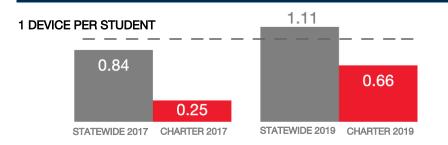
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

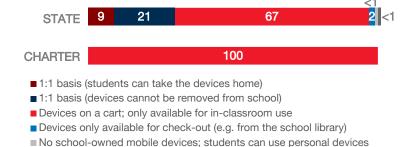


COMPUTING DEVICES USED IN SCHOOLS

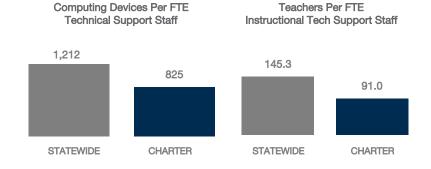
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	88	3	4	5%
Laptops Windows OS	78	110	73	63%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	514	0	334	186%
Tablets Windows	0	0	0	N/A
Tablets Android	12	11	23	N/A
Tablets IOS	9	0	-1	-10%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No mobile device usage







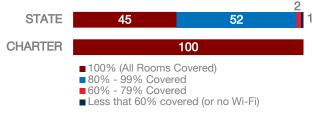
Esperanza Elementary

CHARTER FACTS

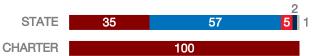
Area Population	N/A
Enrollment	535
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

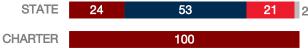


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time ■ Other, or no Wi-Fi

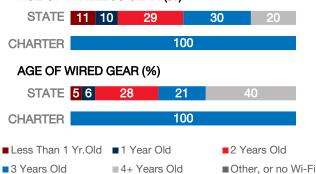
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



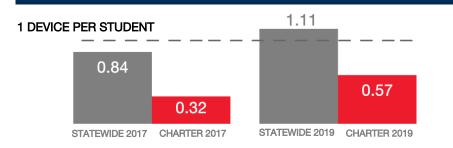
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

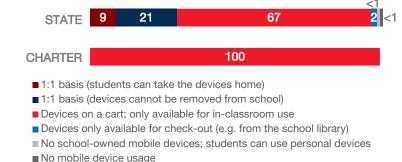


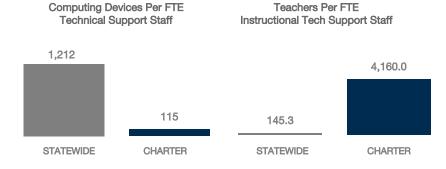
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	26	30	0	0%
Laptops Windows OS	0	10	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	270	0	180	200%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	10	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









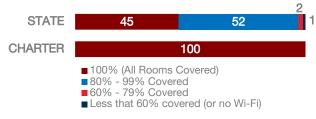
Excelsior Academy

CHARTER FACTS

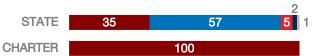
Area Population	N/A
Enrollment	1,325
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

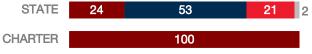


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

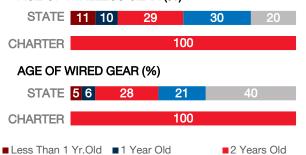
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

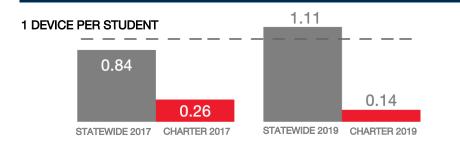
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT

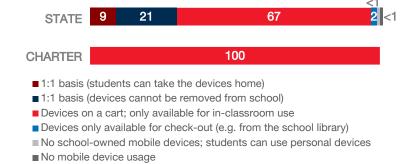


COMPUTING DEVICES USED IN SCHOOLS

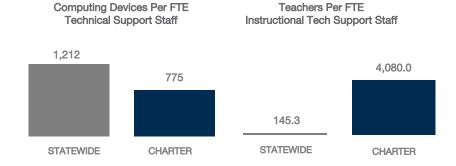
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	90	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	60	0	0	0%
Chromebooks Google	120	0	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	40	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old



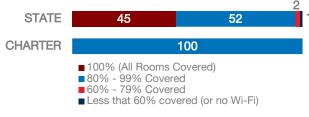


Fast Forward Charter High School

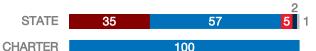
Area Population N/A Enrollment 260 Number of Schools 1 Urban or Rural Urban Median Household Income N/A Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

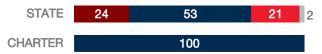


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

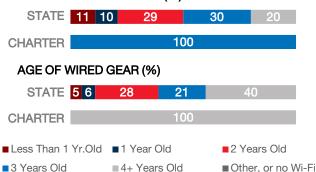
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



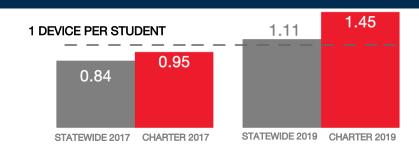
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

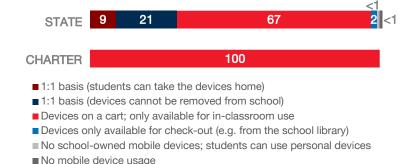


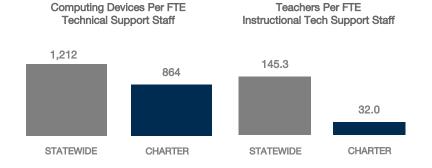
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	40	20	0	0%
Laptops Windows OS	30	4	-20	-37%
Desktops Mac	17	3	-1	-5%
Laptops Mac	40	3	20	87%
Chromebooks Google	250	0	150	150%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	25	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









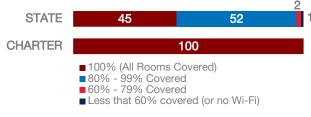
Franklin Discovery Academy

CHARTER FACTS

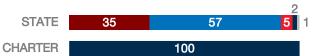
Area Population	N/A
Enrollment	576
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

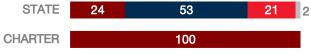


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

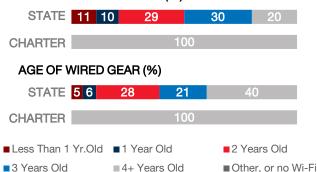
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



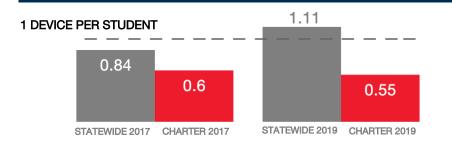
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



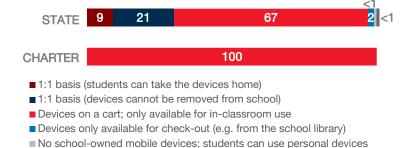
COMPUTING DEVICES USED IN SCHOOLS

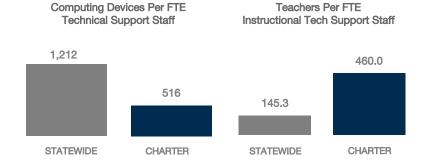
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	10	1	11	N/A
Laptops Windows OS	0	34	14	70%
Desktops Mac	0	3	-1	-25%
Laptops Mac	0	15	5	50%
Chromebooks Google	300	15	-5	-2%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	7	2	7	350%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









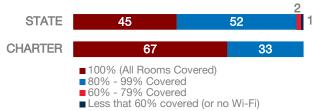
Freedom Preparatory Academy

CHARTER FACTS

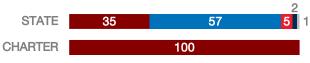
Area Population	N/A
Enrollment	1,952
Number of Schools	3
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

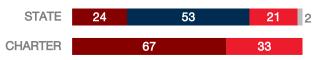


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

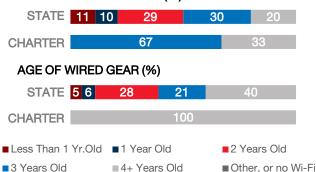
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



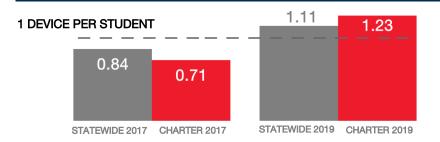
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

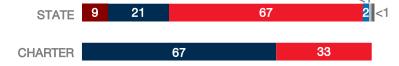


COMPUTING DEVICES USED IN SCHOOLS

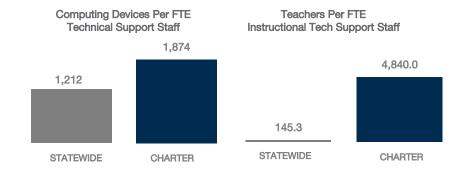
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	79	116	15	8%
Laptops Windows OS	27	6	-70	-68%
Desktops Mac	37	27	-2	-3%
Laptops Mac	0	7	2	40%
Chromebooks Google	1,966	0	1,376	233%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	300	12	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







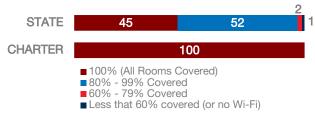
Gateway Preparatory Academy

CHARTER FACTS

Area Population	N/A
Enrollment	680
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Median Household income	

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

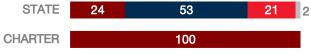


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

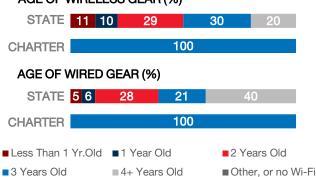
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



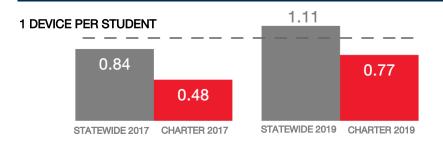
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

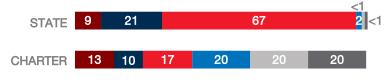


COMPUTING DEVICES USED IN SCHOOLS

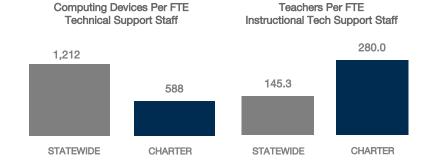
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	30	10	5	14%
Laptops Windows OS	0	35	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	2	-2	-50%
Chromebooks Google	450	0	160	55%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	45	16	33	118%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







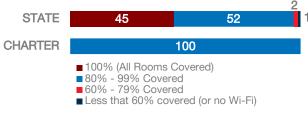
George Washington Academy

CHARTER FACTS

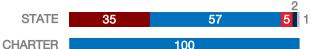
Area Population	N/A
Enrollment	998
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

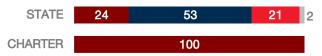


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

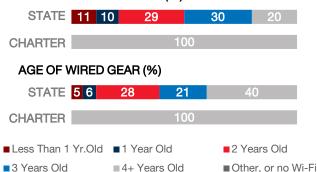
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



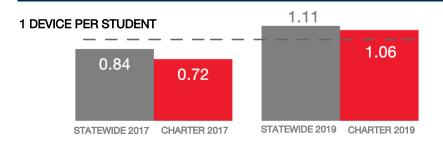
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

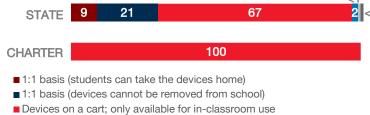


COMPUTING DEVICES USED IN SCHOOLS

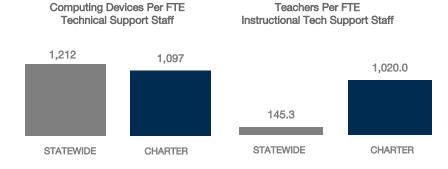
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	92	66	0	0%
Laptops Windows OS	37	3	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	1	2	3	N/A
Chromebooks Google	892	15	314	53%
Tablets Windows	2	0	2	N/A
Tablets Android	4	0	4	N/A
Tablets IOS	32	6	7	23%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







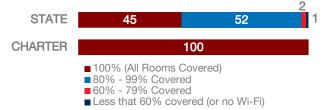
Good Foundations Academy

CHARTER FACTS

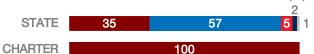
Area Population	N/A
Enrollment	489
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

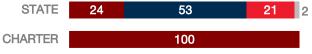


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

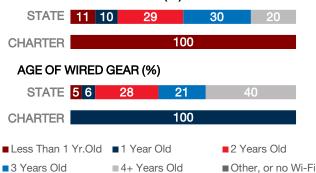
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



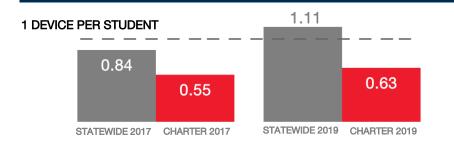
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

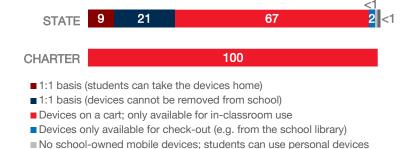


COMPUTING DEVICES USED IN SCHOOLS

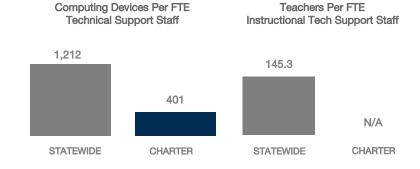
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	30	-26	-46%
Laptops Windows OS	0	4	-20	-83%
Desktops Mac	26	1	1	4%
Laptops Mac	0	0	0	N/A
Chromebooks Google	260	0	80	44%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	20	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No mobile device usage







Greenwood Charter School

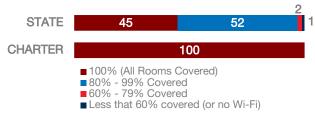
Area Population N/A Enrollment 380 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

WI-FI NETWORKS

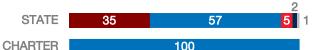
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

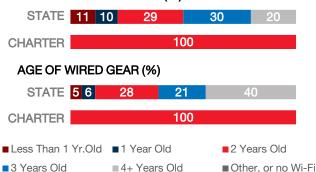
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

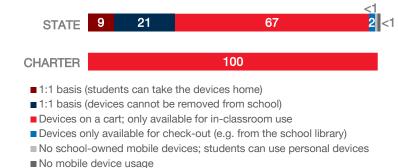


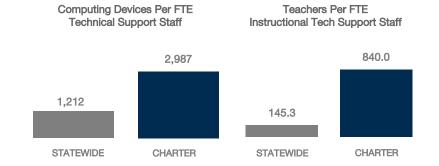
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	50	30	0	0%
Laptops Windows OS	0	4	-6	-60%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	130	0	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	-50	-100%
Tablets IOS	10	0	10	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









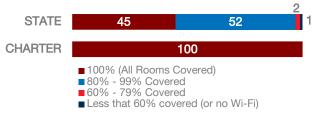
Guadalupe School

CHARTER FACTS

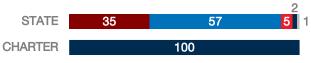
Area Population N/A **Enrollment** 425 Number of Schools Urban or Rural Urban Median Household Income N/A **Poverty Rate** N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

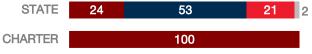


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

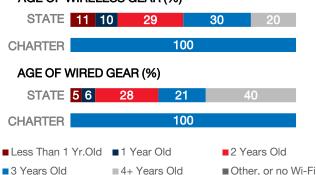
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



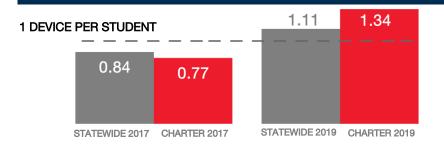
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

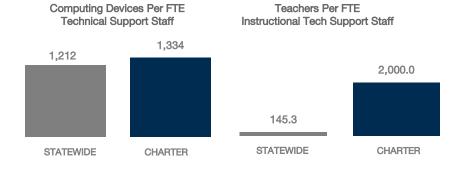
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	26	48	24	48%
Laptops Windows OS	196	40	161	215%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	198	0	-82	-29%
Tablets Windows	0	0	0	N/A
Tablets Android	150	9	150	1667%
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







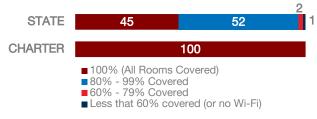
Hawthorn Academy

CHARTER FACTS

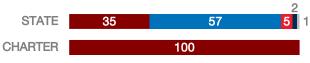
Area Population	N/A
Enrollment	1,409
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

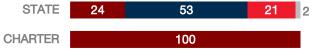


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

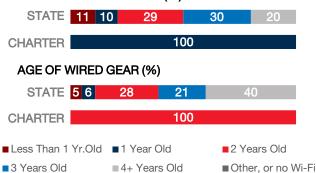
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



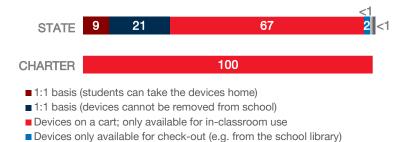
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	67	10	6	8%
Laptops Windows OS	675	96	215	39%
Desktops Mac	0	1	0	0%
Laptops Mac	0	0	0	N/A
Chromebooks Google	764	0	425	125%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	83	63	0	0%

MOBILE DEPLOYMENT

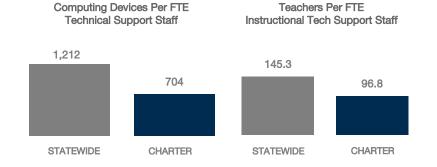
■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS

■ No school-owned mobile devices; students can use personal devices







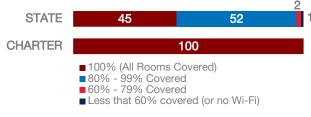
Highmark Charter School

CHARTER FACTS

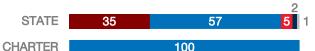
Area Population	N/A
Enrollment	621
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

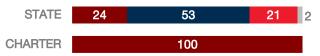


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

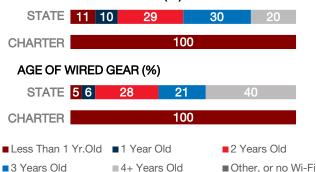
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



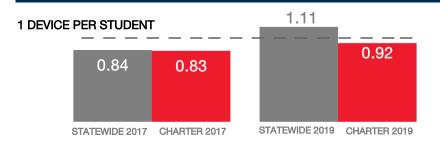
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

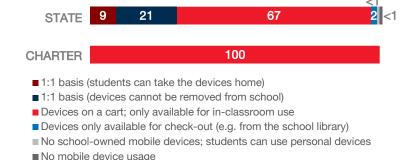


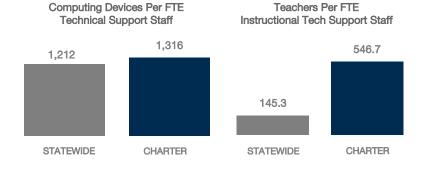
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	540	70	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	30	51	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









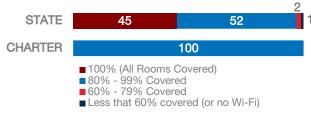
Ignite Entrepreneurship Academy

CHARTER FACTS

Area Population	N/A
Enrollment	545
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



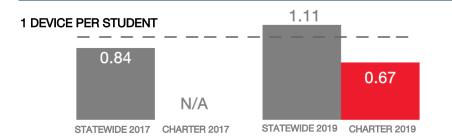
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

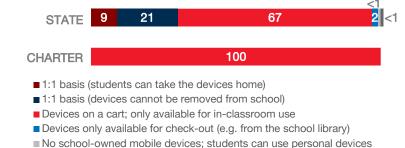


COMPUTING DEVICES USED IN SCHOOLS

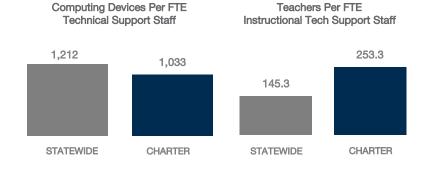
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	33	33	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	360	25	385	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	4	4	8	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No mobile device usage







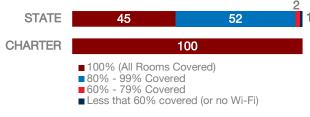
Intech Collegiate High School

CHARTER FACTS

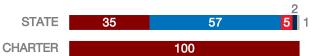
Area Population	N/A
Enrollment	158
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

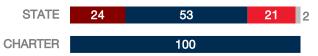


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

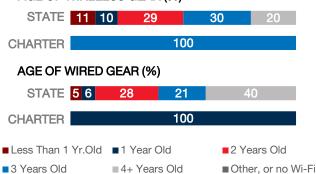
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

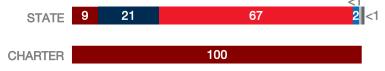


COMPUTING DEVICES USED IN SCHOOLS

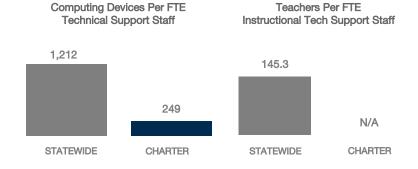
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	11	13	2	9%
Laptops Windows OS	163	15	-15	-8%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	1	0	0%
Tablets Windows	0	2	-1	-33%
Tablets Android	0	0	-2	-100%
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage





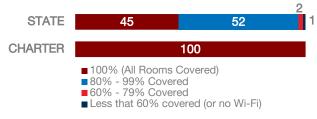


Itineris Early College High School

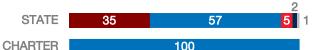
Area Population N/A Enrollment 414 Number of Schools 1 Urban or Rural Urban Median Household Income N/A Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

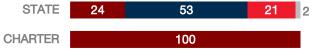


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

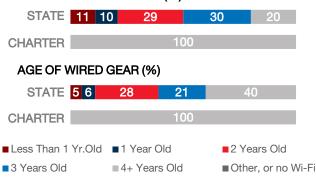
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



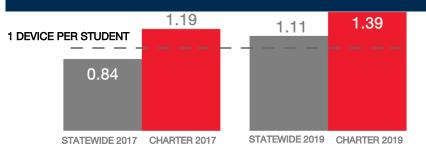
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

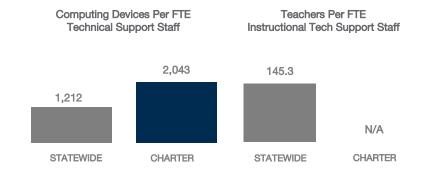
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	75	2	76	7600%
Desktops Mac	0	2	-10	-83%
Laptops Mac	0	22	3	16%
Chromebooks Google	500	0	15	3%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	12	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Jefferson Academy

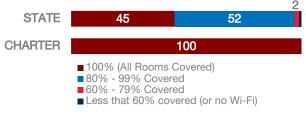
Area Population N/A Enrollment 580 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

WI-FI NETWORKS

Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

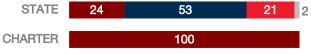


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

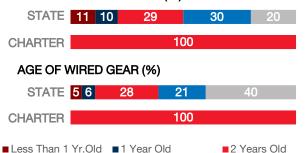
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

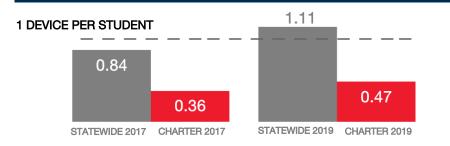
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



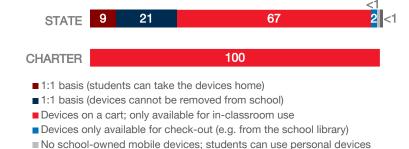
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	58	6	0	0%
Laptops Windows OS	3	8	0	0%
Desktops Mac	0	3	0	0%
Laptops Mac	0	32	0	0%
Chromebooks Google	210	0	60	40%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	30	0	0%

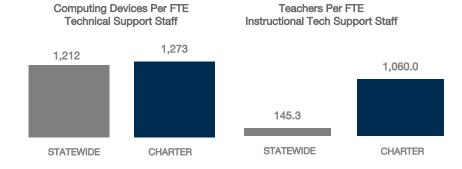
MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





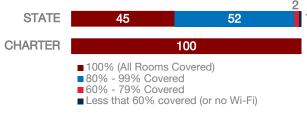
John Hancock Charter School

CHARTER FACTS

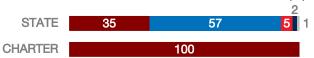
Area Population	N/A
Enrollment	159
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

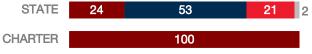


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

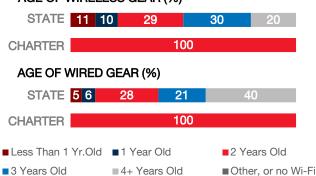
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



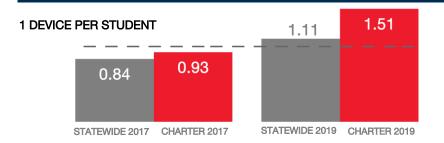
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	0	0%
Laptops Windows OS	0	0	-1	-100%
Desktops Mac	24	2	0	0%
Laptops Mac	24	18	-6	-13%
Chromebooks Google	144	0	72	100%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	48	12	0	0%

MOBILE DEPLOYMENT

CHARTER

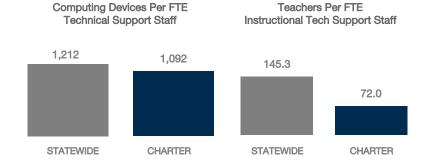
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







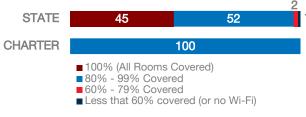
Karl G Maeser Preparatory Academy

CHARTER FACTS

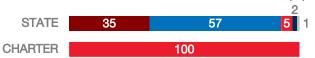
Area Population	N/A
Enrollment	640
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

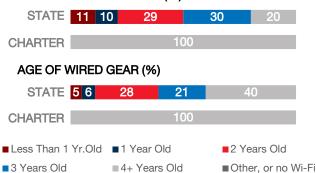
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

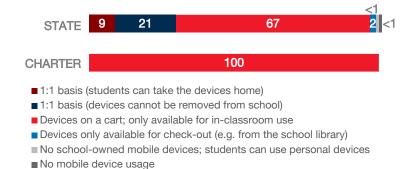


COMPUTING DEVICES USED IN SCHOOLS

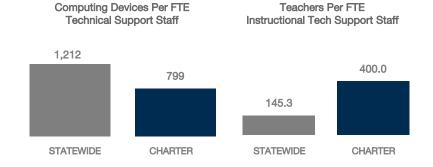
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	40	0	10	33%
Laptops Windows OS	0	55	-30	-35%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	700	0	200	40%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	-2	-100%
Tablets IOS	4	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



Teachers Per FTE





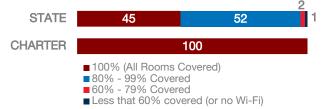
Lakeview Academy

CHARTER FACTS

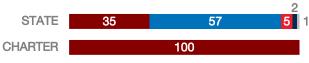
Area Population	N/A
Enrollment	1,000
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

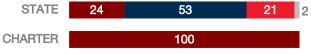


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

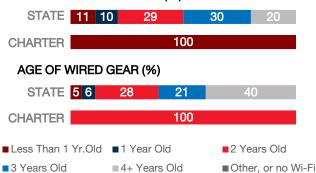
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



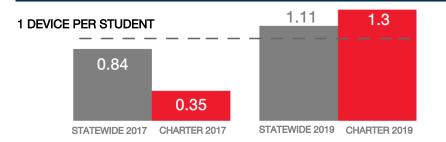
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



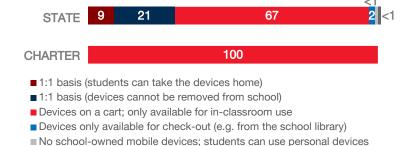
COMPUTING DEVICES USED IN SCHOOLS

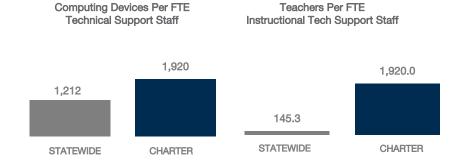
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	50	20	0	0%
Laptops Windows OS	0	100	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	900	0	700	350%
Tablets Windows	0	0	0	N/A
Tablets Android	50	0	0	0%
Tablets IOS	300	20	-30	-9%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









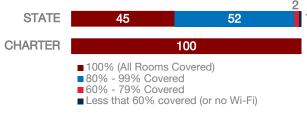
Leadership Academy of Utah

CHARTER FACTS

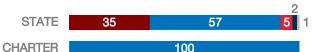
Area Population	N/A
Enrollment	503
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

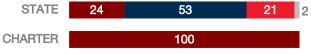


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

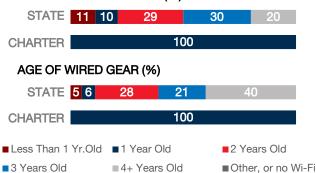
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



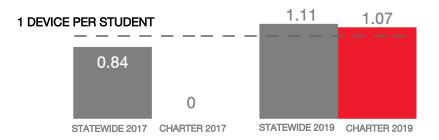
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

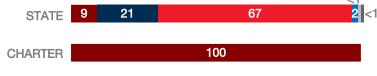


COMPUTING DEVICES USED IN SCHOOLS

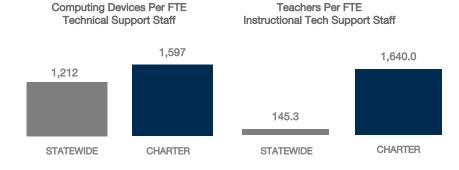
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	290	10	300	N/A
Desktops Mac	0	5	5	N/A
Laptops Mac	0	4	4	N/A
Chromebooks Google	250	0	250	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







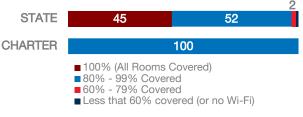
Leadership Learning Academy

CHARTER FACTS

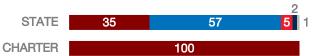
Area Population	N/A
Enrollment	879
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

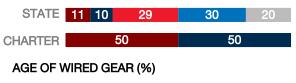
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)





COMPUTING DEVICES PER STUDENT

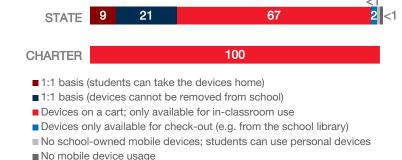


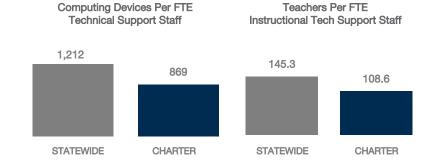
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	1	N/A
Laptops Windows OS	230	52	143	103%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	3	3	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	18	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









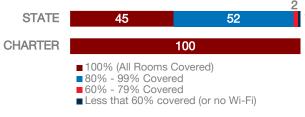
Legacy Preparatory Academy

CHARTER FACTS

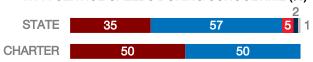
Area Population	N/A
Enrollment	1,119
Number of Schools	2
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

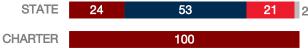


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

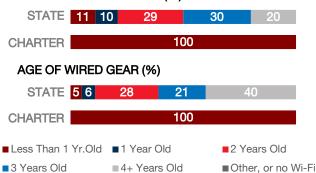
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



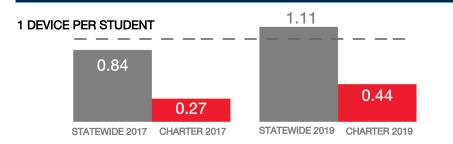
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

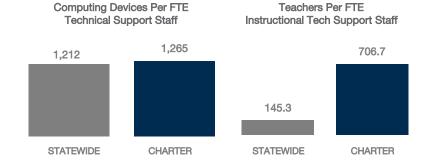
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	179	75	117	85%
Laptops Windows OS	49	70	77	183%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	240	0	60	33%
Tablets Windows	0	0	0	N/A
Tablets Android	0	18	0	0%
Tablets IOS	28	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







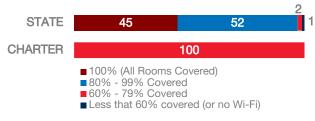
Lincoln Academy

CHARTER FACTS

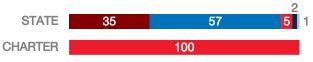
Area Population	N/A
Enrollment	862
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

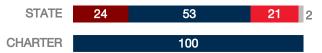


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

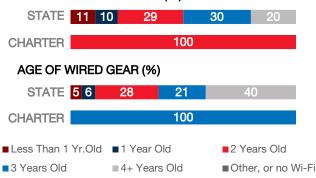
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

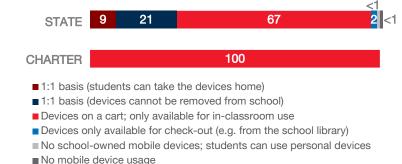


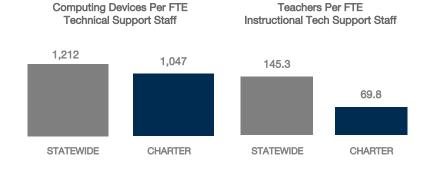
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	2	0	0%
Desktops Mac	106	24	0	0%
Laptops Mac	6	77	0	0%
Chromebooks Google	732	5	527	251%
Tablets Windows	0	0	0	N/A
Tablets Android	3	0	0	0%
Tablets IOS	60	58	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









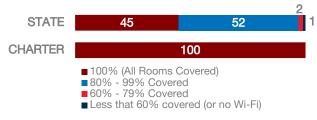
Lumen Scholar

CHARTER FACTS

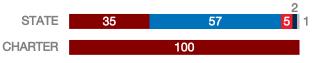
Area Population	N/A
Enrollment	345
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

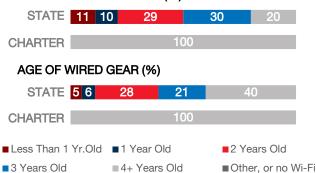
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

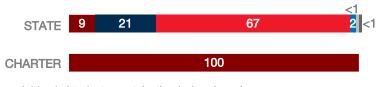


COMPUTING DEVICES USED IN SCHOOLS

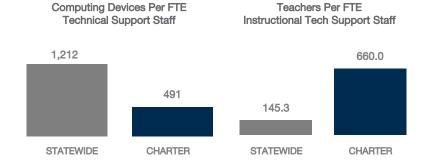
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	2	-28	-93%
Laptops Windows OS	181	6	-238	-56%
Desktops Mac	0	3	-28	-90%
Laptops Mac	17	7	-35	-59%
Chromebooks Google	90	2	-108	-54%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	116	6	-37	-23%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







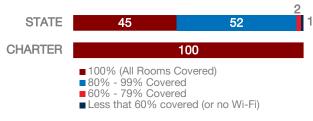
Mana Academy Charter School

CHARTER FACTS

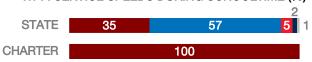
Area Population	N/A
Enrollment	218
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

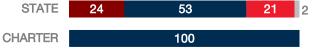


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

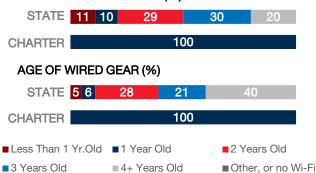
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



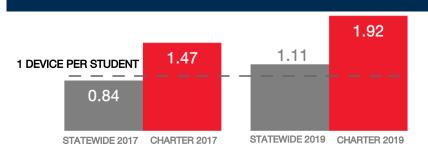
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	5	8	-2	-13%
Laptops Windows OS	0	20	2	11%
Desktops Mac	0	1	-1	-50%
Laptops Mac	0	4	2	100%
Chromebooks Google	402	20	-83	-16%
Tablets Windows	0	0	0	N/A
Tablets Android	7	0	0	0%
Tablets IOS	5	0	0	0%

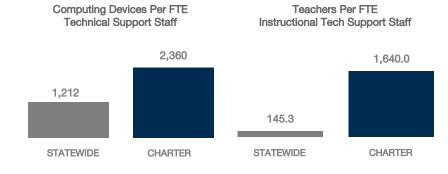
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







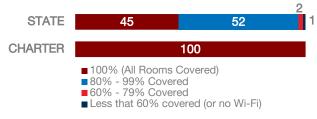
Maria Montessori Academy

CHARTER FACTS

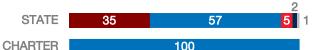
Area Population	N/A
Enrollment	638
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

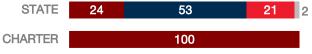


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

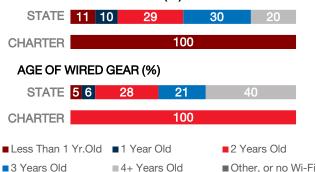
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



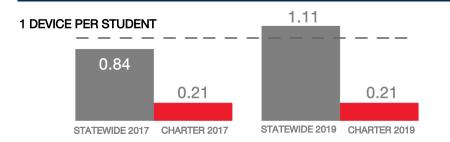
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

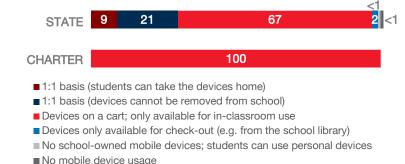


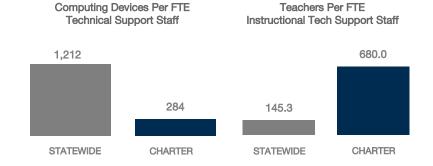
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	25	2	0	0%
Laptops Windows OS	78	50	0	0%
Desktops Mac	30	1	0	0%
Laptops Mac	0	5	0	0%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	4	18	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









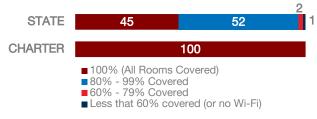
Merit College Preparatory Academy

CHARTER FACTS

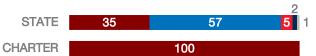
Area Population	N/A
Enrollment	450
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

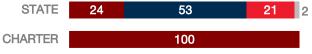


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

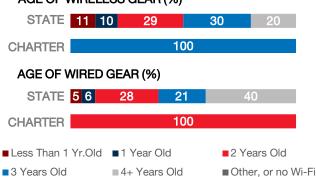
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

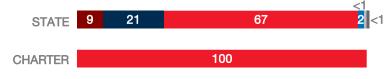


COMPUTING DEVICES USED IN SCHOOLS

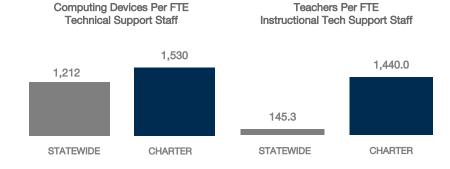
Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
55	6	0	0%
0	40	11	38%
0	0	-1	-100%
0	0	0	N/A
200	0	0	0%
0	0	0	N/A
5	0	0	0%
0	0	-75	-100%
	55 0 0 0 200 0	Use Admin Use 55 6 0 40 0 0 0 200 0 0 5 0	Use Admin Use of Devices Since 2017 55 6 0 0 40 11 0 0 -1 0 0 0 200 0 0 0 0 0 0 0 0 5 0 0

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Moab Charter School

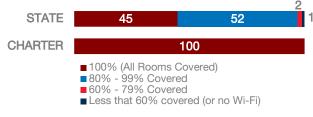
Area Population N/A Enrollment 78 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

WI-FI NETWORKS

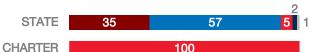
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

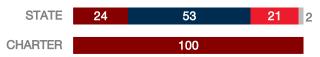


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

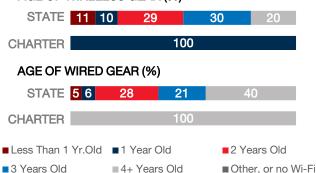
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



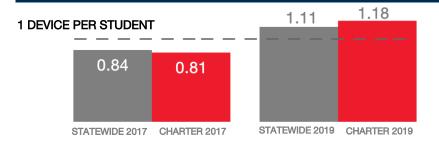
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

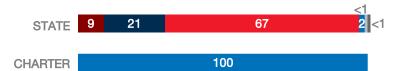


COMPUTING DEVICES USED IN SCHOOLS

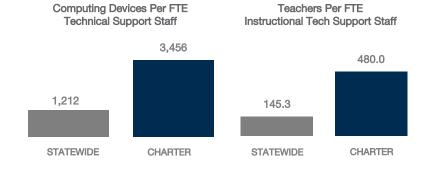
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	-40	-98%
Laptops Windows OS	0	8	-17	-68%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	2	0	0%
Chromebooks Google	77	0	52	208%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







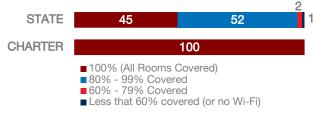
Monticello Academy

CHARTER FACTS

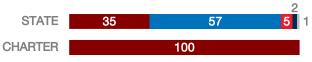
Area Population	N/A
Enrollment	663
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

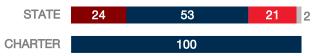


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

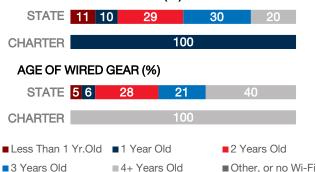
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



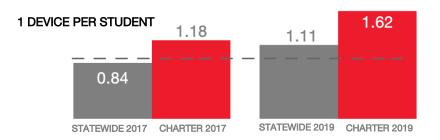
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	78	2	0	0%
Laptops Windows OS	0	45	-15	-25%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	1	0	0%
Chromebooks Google	853	10	233	37%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	-90	-100%
Tablets IOS	140	10	-5	-3%

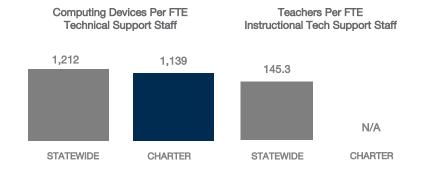
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







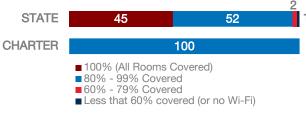
Mountain Heights Academy

CHARTER FACTS

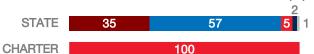
Area Population	N/A
Enrollment	834
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

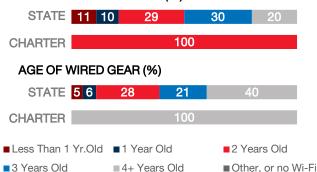
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



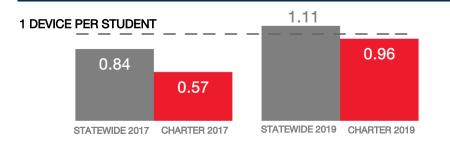
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	7	2	40%
Laptops Windows OS	0	0	-440	-100%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	-5	-100%
Chromebooks Google	800	75	830	1844%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

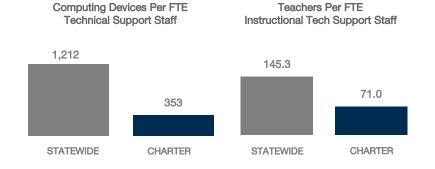
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices on a cart, only available for in-classiforn use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







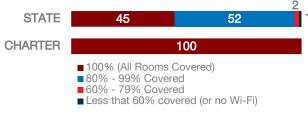
Mountain West Montessori Academy

CHARTER FACTS

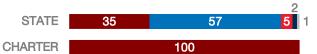
Area Population	N/A
Enrollment	503
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

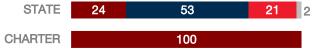


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

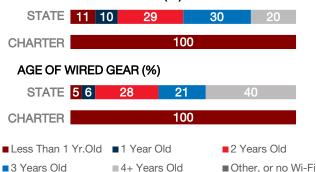
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



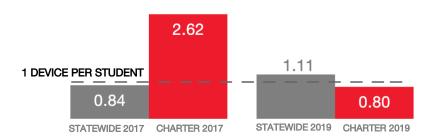
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

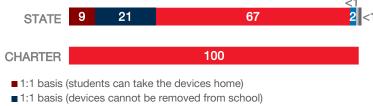


COMPUTING DEVICES USED IN SCHOOLS

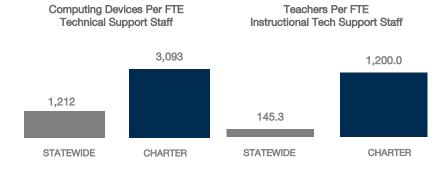
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	20	0	0	0%
Laptops Windows OS	30	33	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	340	0	68	25%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	13	28	13	46%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







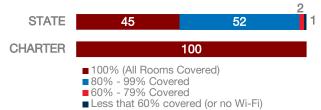
Mountainville Academy

CHARTER FACTS

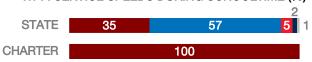
Area Population	N/A
Enrollment	658
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

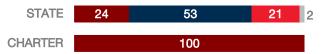


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

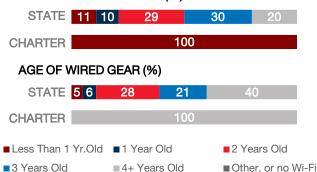
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



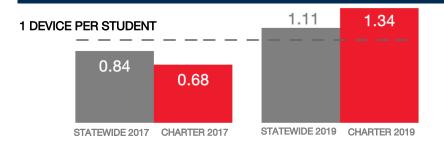
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	30	5	-55	-61%
Laptops Windows OS	0	60	-30	-33%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	780	0	390	100%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	70	60	72	124%

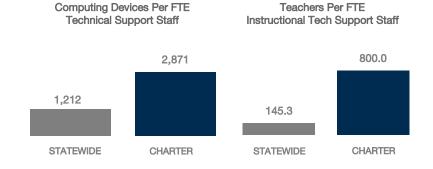
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







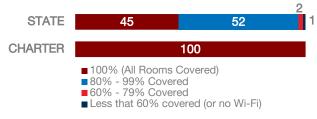
Navigator Pointe Academy

CHARTER FACTS

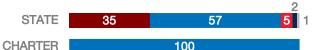
Area Population	N/A
Enrollment	455
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

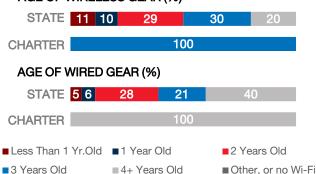
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



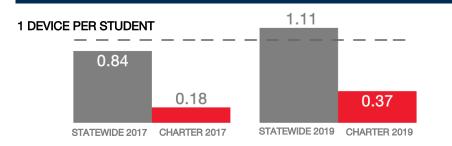
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	-3	-75%
Laptops Windows OS	134	47	56	45%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	1	0	0%
Chromebooks Google	32	0	32	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	1	2	1	50%

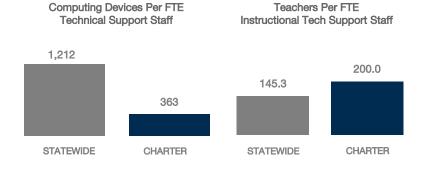
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
 Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







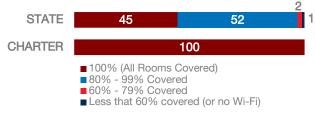
Noah Webster Academy

CHARTER FACTS

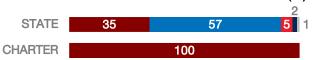
Area Population	N/A
Enrollment	524
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

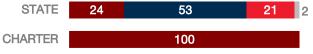


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

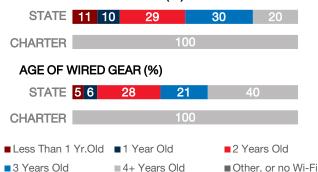
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



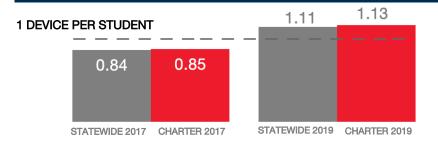
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	28	-17	-38%
Laptops Windows OS	0	7	-1	-13%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	540	0	90	20%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	50	0	25	100%

MOBILE DEPLOYMENT

CHARTER

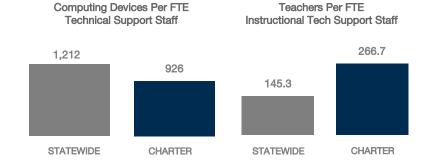
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







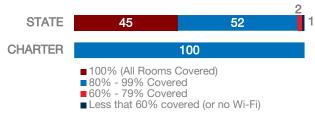
North Davis Preparatory Academy

CHARTER FACTS

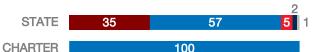
Area Population	N/A
Enrollment	1,019
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

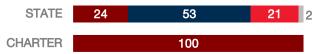


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

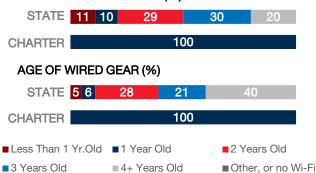
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



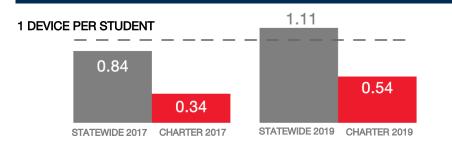
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

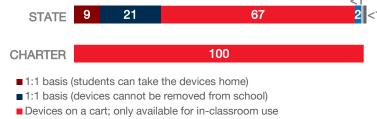


COMPUTING DEVICES USED IN SCHOOLS

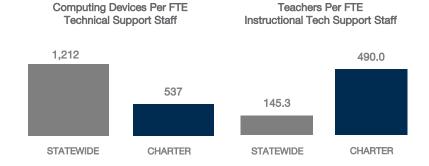
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	47	14	-17	-22%
Laptops Windows OS	214	32	109	80%
Desktops Mac	0	0	0	N/A
Laptops Mac	30	6	-19	-35%
Chromebooks Google	95	0	94	9400%
Tablets Windows	0	0	0	N/A
Tablets Android	20	0	14	233%
Tablets IOS	140	46	53	40%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







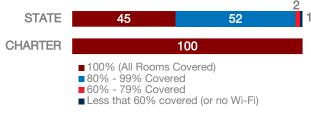
North Star Academy

CHARTER FACTS

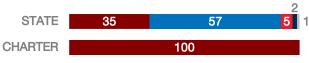
Area Population	N/A
Enrollment	530
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

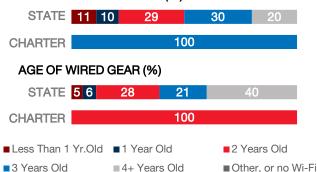
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

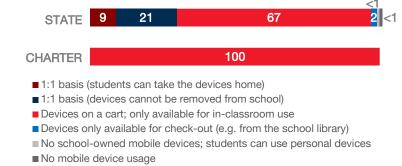


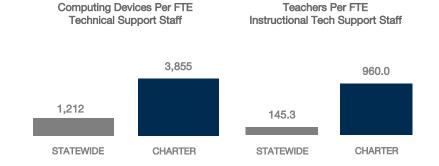
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	-1	-100%
Laptops Windows OS	0	0	-29	-100%
Desktops Mac	62	3	-31	-32%
Laptops Mac	0	32	0	0%
Chromebooks Google	423	0	201	91%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	5	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









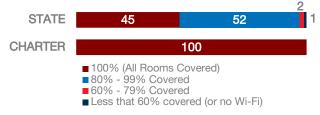
Northern Utah Academy for Math Engineering And Science

CHARTER FACTS

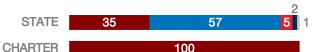
Area Population N/A
Enrollment 1,035
Number of Schools 2
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

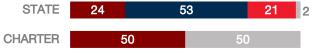


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

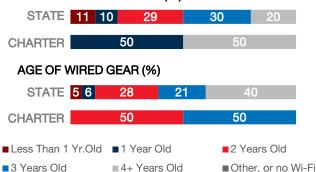
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



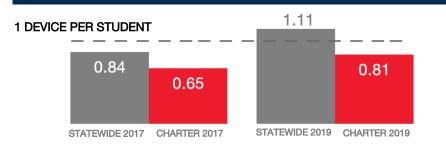
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

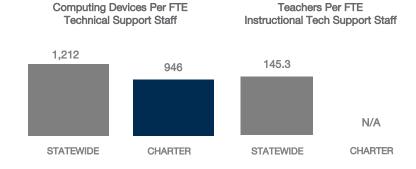
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	565	72	173	37%
Laptops Windows OS	270	38	234	316%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	1	1	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







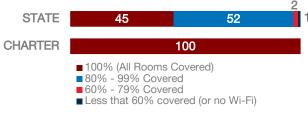
Odyssey Charter School

CHARTER FACTS

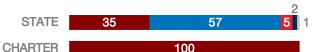
Area Population	N/A
Enrollment	431
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

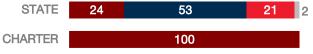


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

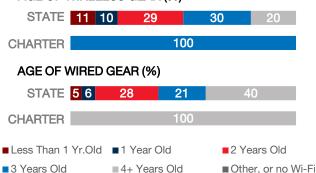
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



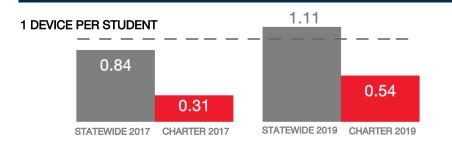
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

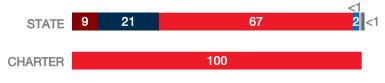


COMPUTING DEVICES USED IN SCHOOLS

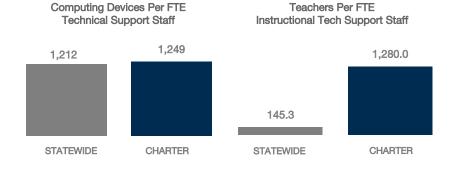
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	58	6	7	12%
Laptops Windows OS	0	43	3	8%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	-2	-100%
Chromebooks Google	174	0	84	93%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







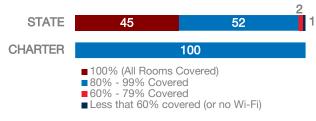
Ogden Preparatory Academy

CHARTER FACTS

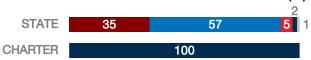
Area Population	N/A
Enrollment	1,049
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

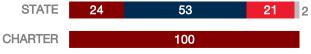


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

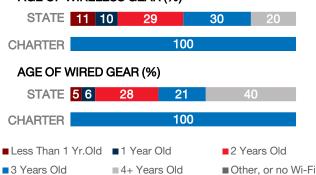
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	10	7	233%
Laptops Windows OS	0	0	-1	-100%
Desktops Mac	0	1	1	N/A
Laptops Mac	0	10	-5	-33%
Chromebooks Google	910	60	249	35%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	100	2	-18	-15%

MOBILE DEPLOYMENT

CHARTER

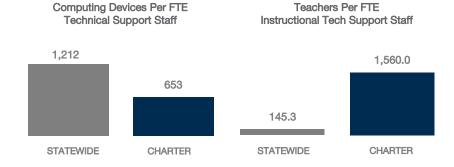
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







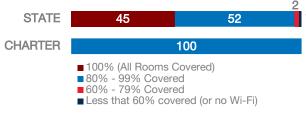
Open Classroom

CHARTER FACTS

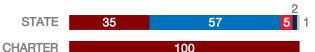
Area Population N/A
Enrollment 323
Number of Schools 1
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

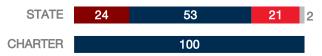


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

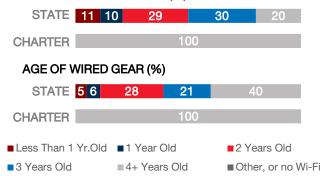
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



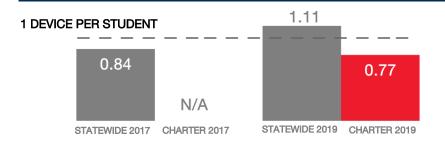
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

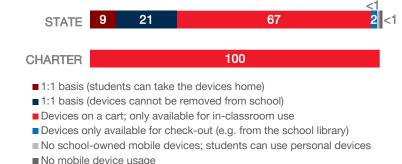


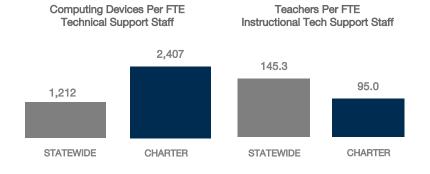
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	59	37	96	N/A
Laptops Windows OS	133	71	204	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	58	3	61	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









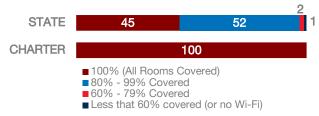
Pacific Heritage Academy

CHARTER FACTS

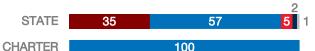
Area Population	N/A
Enrollment	389
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

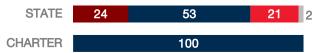


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

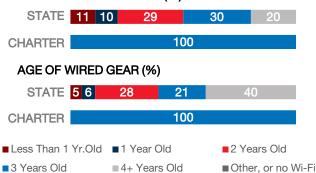
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



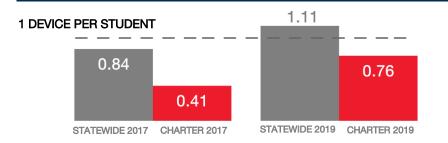
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

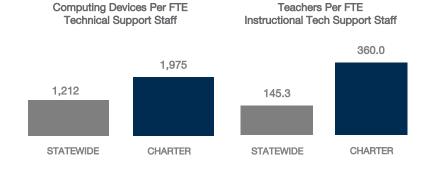
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	51	51	N/A
Laptops Windows OS	0	36	-6	-14%
Desktops Mac	39	1	40	N/A
Laptops Mac	0	3	0	0%
Chromebooks Google	180	0	60	50%
Tablets Windows	0	0	0	N/A
Tablets Android	66	7	37	103%
Tablets IOS	6	2	8	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







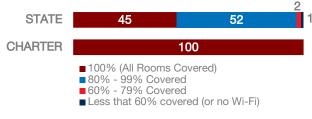
Paradigm High School

CHARTER FACTS

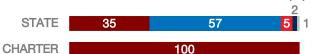
Area Population	N/A
Enrollment	438
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

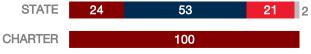


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

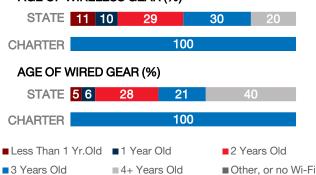
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



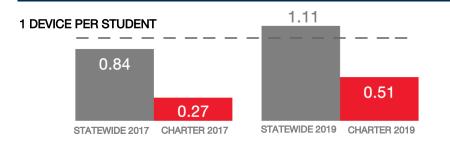
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	40	10	0	0%
Laptops Windows OS	20	40	0	0%
Desktops Mac	0	1	1	N/A
Laptops Mac	0	1	0	0%
Chromebooks Google	85	8	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

CHARTER

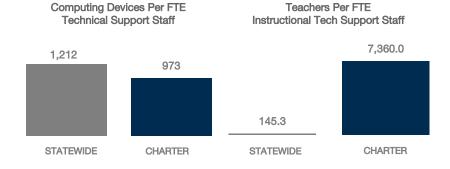
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







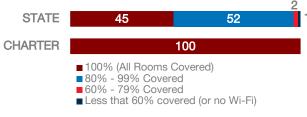
Pinnacle Canyon Academy

CHARTER FACTS

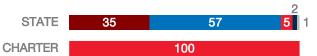
Area Population	N/A
Enrollment	473
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

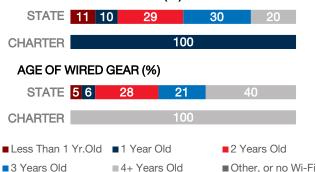
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

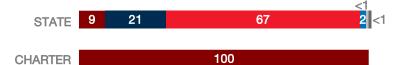


COMPUTING DEVICES USED IN SCHOOLS

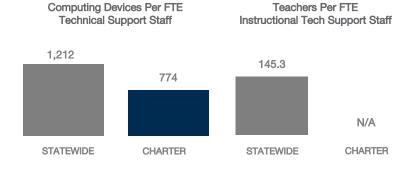
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	6	0	0%
Laptops Windows OS	0	5	-100	-95%
Desktops Mac	73	6	0	0%
Laptops Mac	221	42	96	57%
Chromebooks Google	30	0	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	550	35	-9	-2%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Promontory School of Expeditionary Learning

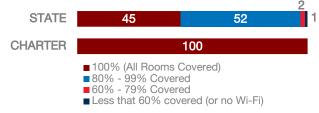
N/A

Area Population N/A Enrollment 435 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

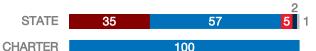
WI-FI NETWORKS

Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

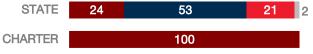


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

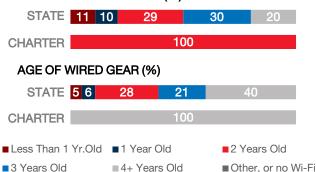
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

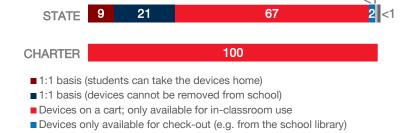


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	28	35	0	0%
Laptops Windows OS	56	25	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	1	3	1	33%
Chromebooks Google	220	20	171	248%
Tablets Windows	0	0	0	N/A
Tablets Android	25	0	0	0%
Tablets IOS	10	4	0	0%

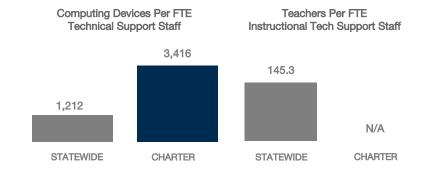
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No school-owned mobile devices; students can use personal devices

■ No mobile device usage







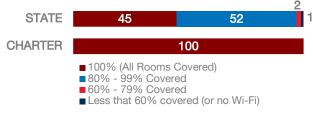
Providence Hall

CHARTER FACTS

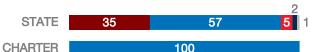
Area Population	N/A
Enrollment	2,081
Number of Schools	3
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

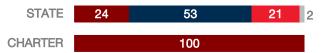


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

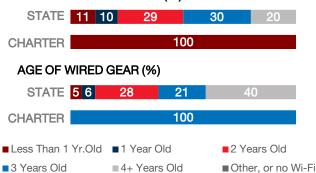
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



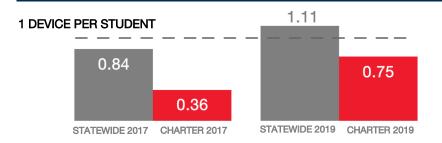
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

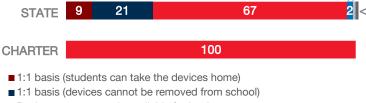


COMPUTING DEVICES USED IN SCHOOLS

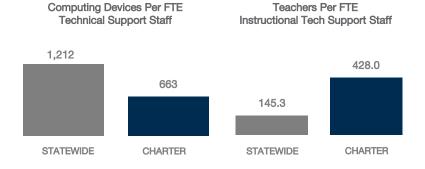
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	5	5	N/A
Laptops Windows OS	0	0	0	N/A
Desktops Mac	18	20	4	12%
Laptops Mac	512	181	194	39%
Chromebooks Google	850	0	510	150%
Tablets Windows	0	0	0	N/A
Tablets Android	7	0	7	N/A
Tablets IOS	124	16	63	82%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Quest Academy

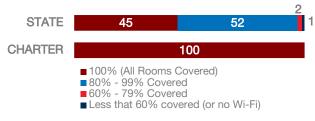
Area Population N/A Enrollment 1,000 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

WI-FI NETWORKS

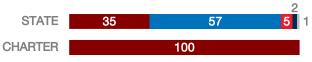
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

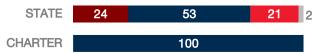


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

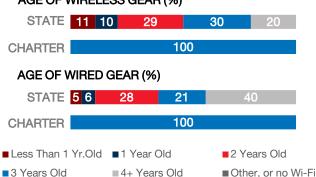
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



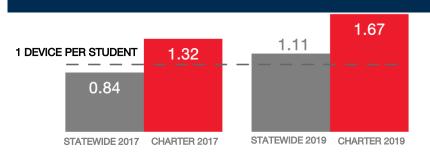
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	30	5	-72	-67%
Desktops Mac	30	4	-19	-36%
Laptops Mac	375	68	53	14%
Chromebooks Google	852	0	552	184%
Tablets Windows	0	0	0	N/A
Tablets Android	6	3	0	0%
Tablets IOS	375	68	-117	-21%

MOBILE DEPLOYMENT

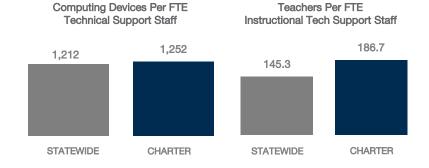
CHARTER

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







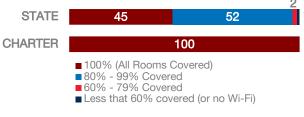
Reagan Academy

CHARTER FACTS

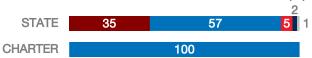
Area Population	N/A
Enrollment	677
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

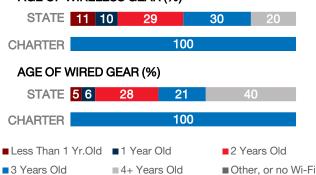
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



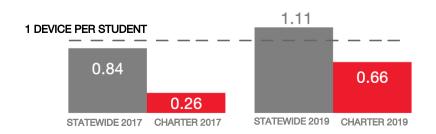
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

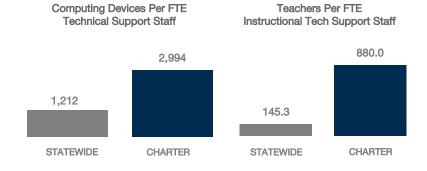
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	130	50	72	67%
Laptops Windows OS	0	3	3	N/A
Desktops Mac	27	0	0	0%
Laptops Mac	0	1	1	N/A
Chromebooks Google	230	3	155	199%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	60	20	60	300%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- No school-owned mobile devices; students can use personal devices
- No mobile device usage







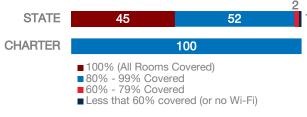
Real Salt Lake Academy

CHARTER FACTS

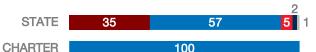
Area Population	N/A
Enrollment	338
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

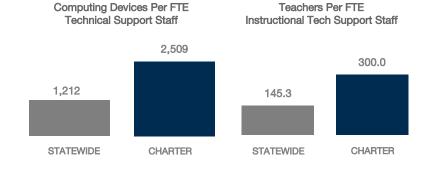
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	22	5	0	0%
Laptops Windows OS	30	1	30	3000%
Desktops Mac	5	0	0	0%
Laptops Mac	15	0	0	0%
Chromebooks Google	338	18	175	97%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	2	3	2	67%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







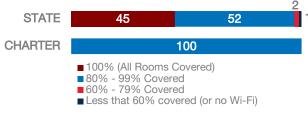
Renaissance Academy

CHARTER FACTS

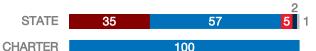
Area Population	N/A
Enrollment	757
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

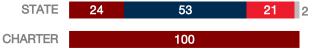


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

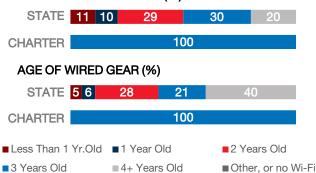
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



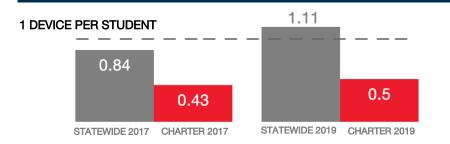
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

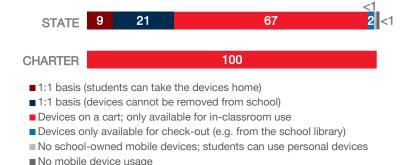


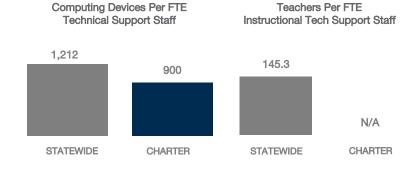
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	32	10	10	31%
Laptops Windows OS	12	60	2	3%
Desktops Mac	24	2	1	4%
Laptops Mac	0	0	0	N/A
Chromebooks Google	250	0	106	74%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	60	0	-126	-68%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









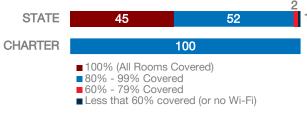
Rockwell Charter High School

CHARTER FACTS

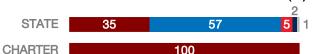
Area Population	N/A
Enrollment	456
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

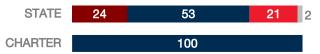


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



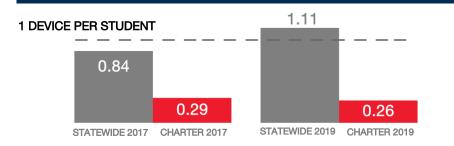
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

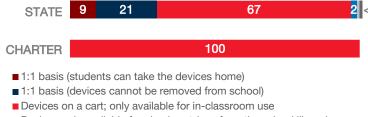


COMPUTING DEVICES USED IN SCHOOLS

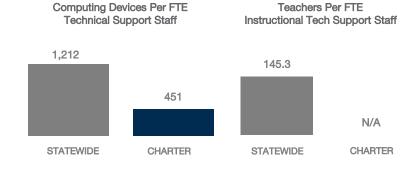
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	18	1	0	0%
Laptops Windows OS	0	4	-25	-86%
Desktops Mac	50	35	0	0%
Laptops Mac	30	1	1	3%
Chromebooks Google	10	0	-3	-23%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	10	10	10	100%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







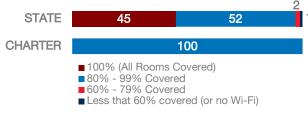
Roots Charter High School

DISTRICT FACTS

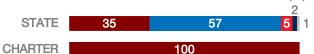
Area Population	N/A
Enrollment	197
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

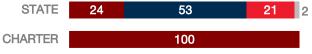


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

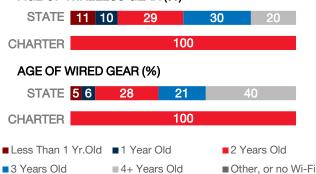
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

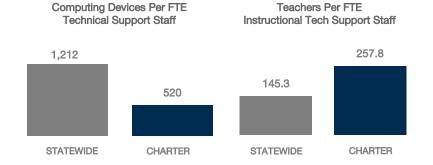
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	0	0	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	20	1	5%
Chromebooks Google	110	10	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	2	1	2	200%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







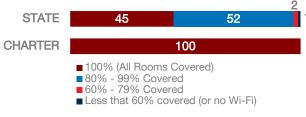
Salt Lake Arts Academy

CHARTER FACTS

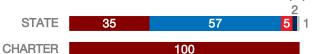
Area Population	N/A
Enrollment	408
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

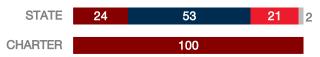


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

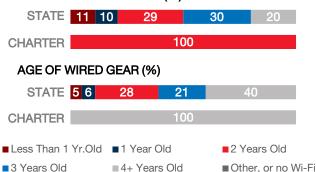
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



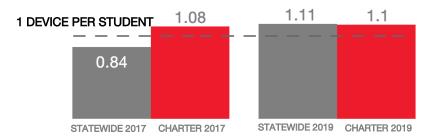
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

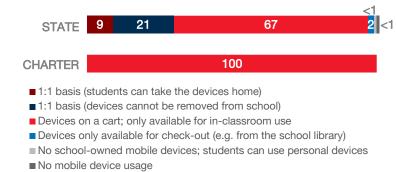


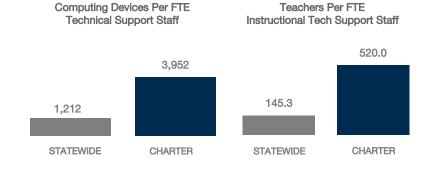
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	3	1	50%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	25	10	0	0%
Laptops Mac	0	25	0	0%
Chromebooks Google	400	0	25	7%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	25	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









Salt Lake Center For Science Education

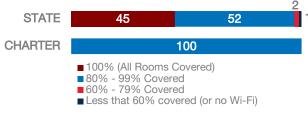
N/A

CHARTER FACTS Area Population

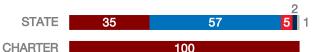
Enrollment 392
Number of Schools 1
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

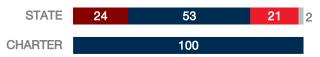


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

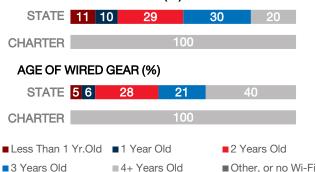
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



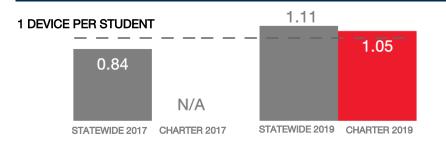
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

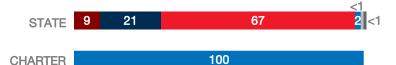


COMPUTING DEVICES USED IN SCHOOLS

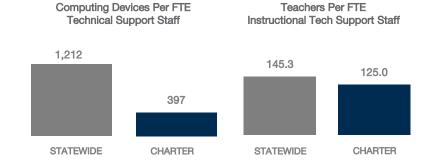
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	100	47	147	N/A
Laptops Windows OS	244	16	260	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	15	1	16	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	53	0	53	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







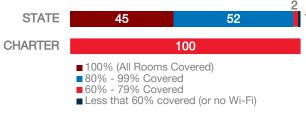
Salt Lake School of Performing Arts

CHARTER FACTS

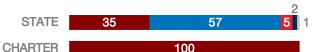
Area Population	N/A
Enrollment	287
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

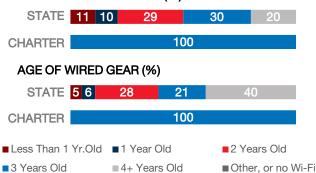
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

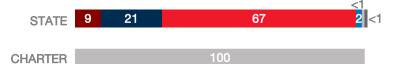


COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	8	24	-26	-45%
Laptops Windows OS	24	0	-1	-4%
Desktops Mac	43	3	26	130%
Laptops Mac	0	5	2	67%
Chromebooks Google	77	5	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	9	2	1	10%

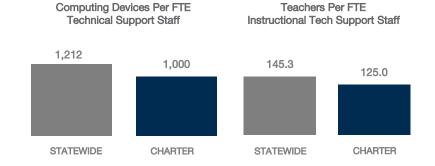
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage





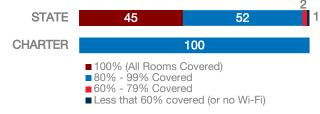


Scholar Academy

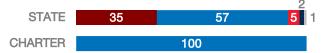
CHARTER FACTS Area Population N/A **Enrollment** 660 **Number of Schools** 1 Urban or Rural Urban Median Household Income N/A **Poverty Rate** N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

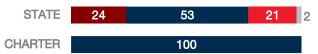


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

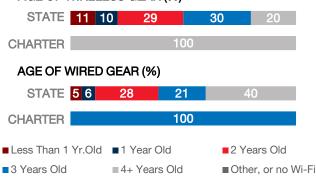
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

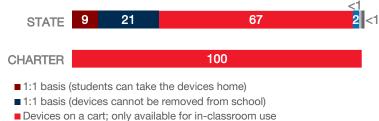


COMPUTING DEVICES USED IN SCHOOLS

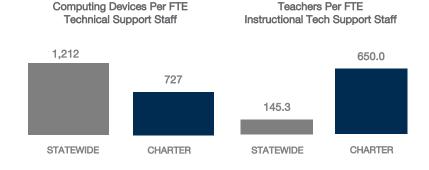
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	62	40	40	65%
Laptops Windows OS	294	15	151	96%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	30	0	9	43%
Tablets IOS	65	30	43	83%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







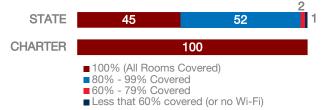
Soldier Hollow Charter School

CHARTER FACTS

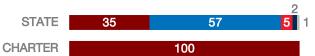
Area Population	N/A
Enrollment	315
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

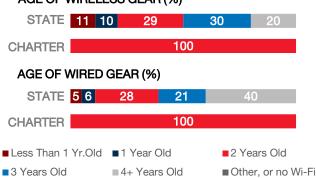
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



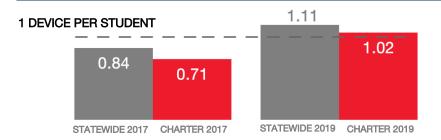
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

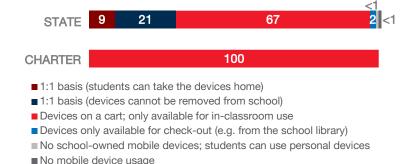


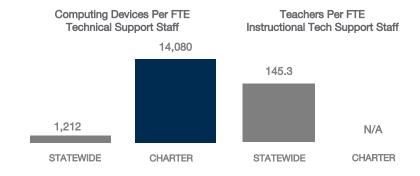
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	6	0	0%
Laptops Windows OS	94	19	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	188	0	99	111%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	40	5	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









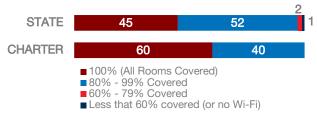
Spectrum Academy

CHARTER FACTS

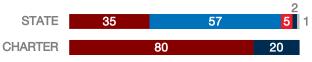
Area Population N/A
Enrollment 1,500
Number of Schools 5
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

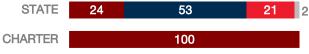


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

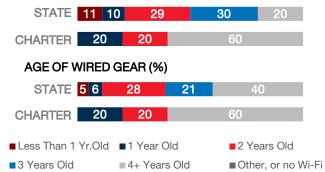
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

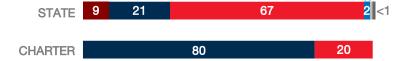


COMPUTING DEVICES USED IN SCHOOLS

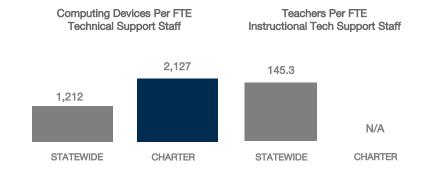
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	150	60	32	18%
Laptops Windows OS	15	150	9	6%
Desktops Mac	0	1	1	N/A
Laptops Mac	1	20	21	N/A
Chromebooks Google	1,470	25	619	71%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	175	60	-225	-49%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







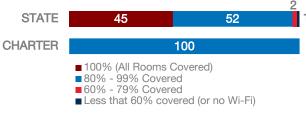
St. George Academy

CHARTER FACTS

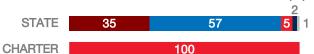
Area Population	N/A
Enrollment	252
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

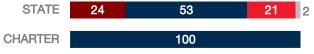


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

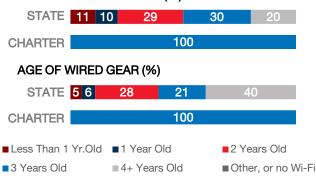
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

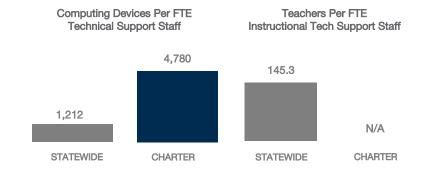
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	0	0%
Laptops Windows OS	0	4	0	0%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	9	0	0%
Chromebooks Google	225	0	14	7%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







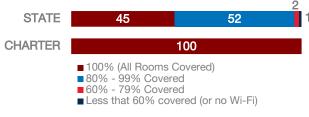
Success Academy

CHARTER FACTS

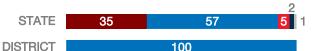
Area Population N/A
Enrollment 436
Number of Schools 2
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

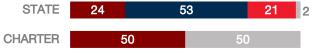


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

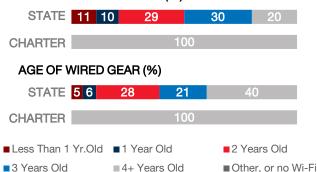
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



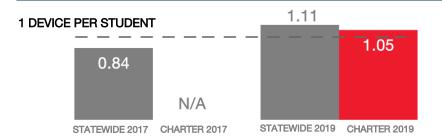
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	24	28	52	N/A
Laptops Windows OS	1	4	5	N/A
Desktops Mac	63	2	65	N/A
Laptops Mac	1	1	2	N/A
Chromebooks Google	370	24	394	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

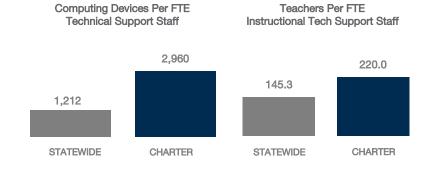
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







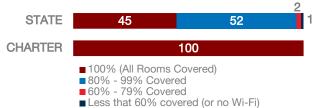
Summit Academy

CHARTER FACTS

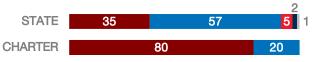
Area Population N/A
Enrollment 2,944
Number of Schools 5
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

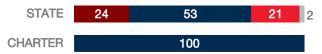


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



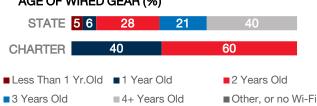
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

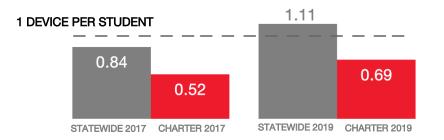
AGE OF WIRELESS GEAR (%)

STATE	11 10	29	30	20
CHARTER		80		20

AGE OF WIRED GEAR (%)



COMPUTING DEVICES PER STUDENT

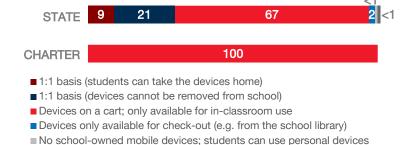


COMPUTING DEVICES USED IN SCHOOLS

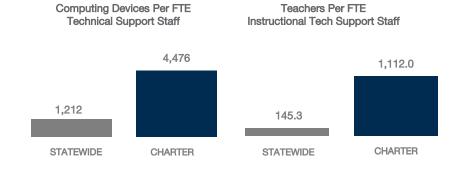
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	165	21	-59	-24%
Laptops Windows OS	20	198	20	10%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	1,360	0	430	46%
Tablets Windows	0	0	0	N/A
Tablets Android	20	0	0	0%
Tablets IOS	454	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■ No mobile device usage







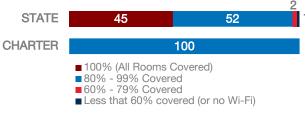
Syracuse Arts Academy (K-6)

CHARTER FACTS

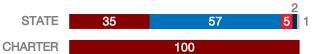
Area Population	N/A
Enrollment	1,775
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

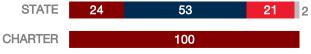


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

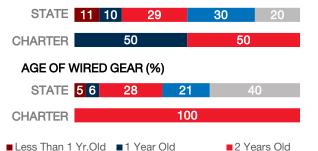
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

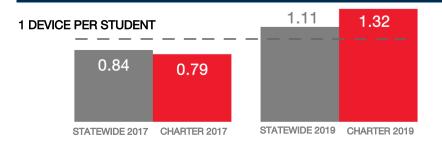
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	-32	-100%
Laptops Windows OS	480	93	-387	-40%
Desktops Mac	0	0	-4	-100%
Laptops Mac	0	0	0	N/A
Chromebooks Google	1,212	0	1,212	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	652	90	112	18%

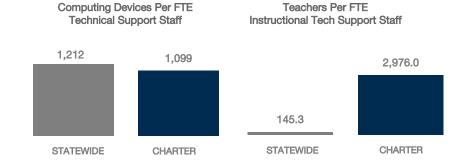
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





Terra Academy

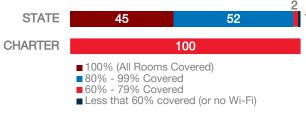
Area Population N/A Enrollment 631 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

WI-FI NETWORKS

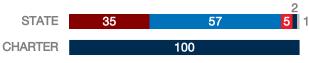
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

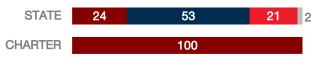


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

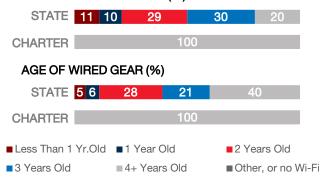
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	6	6	-18	-60%
Laptops Windows OS	0	56	26	87%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	725	3	107	17%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	2	2	N/A

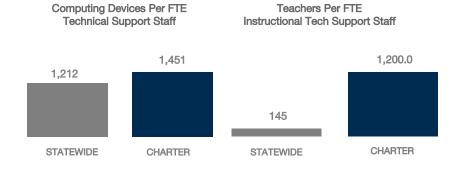
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







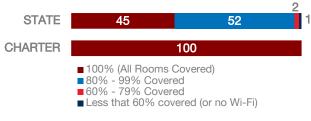
The Early Light Academy at Daybreak

CHARTER FACTS

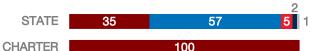
Area Population	N/A
Enrollment	1,006
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

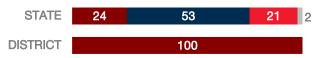


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



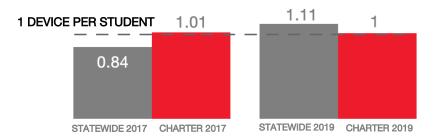
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

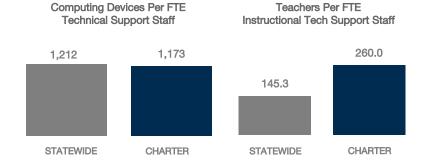
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	20	1	0	0%
Laptops Windows OS	30	2	0	0%
Desktops Mac	0	6	0	0%
Laptops Mac	40	60	0	0%
Chromebooks Google	620	15	0	0%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	300	50	0	0%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









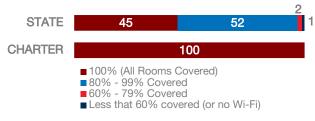
The Ranches Academy

CHARTER FACTS

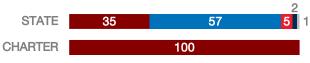
Area Population	N/A
Enrollment	365
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

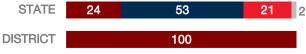


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

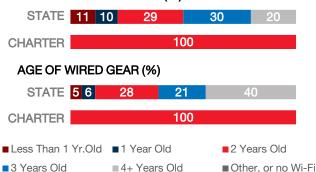
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

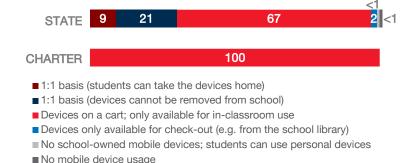


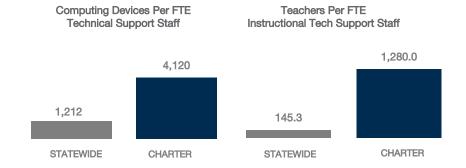
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	2	3	3	150%
Desktops Mac	31	20	23	82%
Laptops Mac	0	5	2	67%
Chromebooks Google	265	3	-21	-7%
Tablets Windows	0	0	0	N/A
Tablets Android	0	2	1	100%
Tablets IOS	64	17	11	16%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









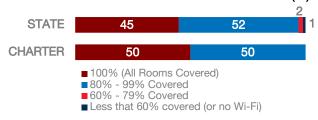
Thomas Edison Charter School

CHARTER FACTS

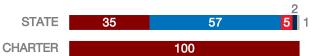
Area Population	N/A
Enrollment	1,145
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

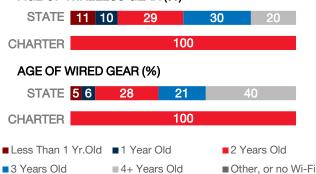
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



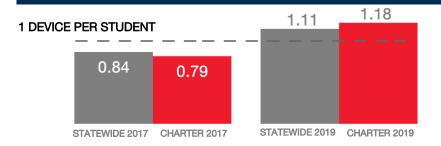
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

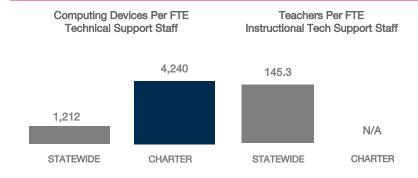
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	136	70	6	3%
Laptops Windows OS	10	45	-30	-35%
Desktops Mac	0	1	0	0%
Laptops Mac	0	0	0	N/A
Chromebooks Google	1,200	0	-300	-20%
Tablets Windows	0	0	-70	-100%
Tablets Android	0	5	4	400%
Tablets IOS	10	7	4	31%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







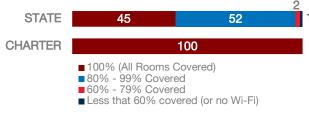
Timpanogos Academy

CHARTER FACTS

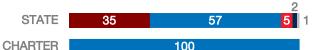
Area Population	N/A
Enrollment	509
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

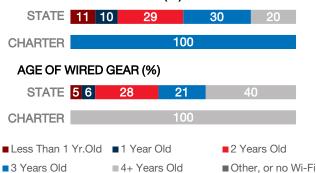
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



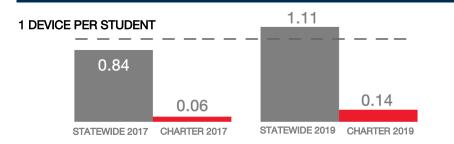
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	40	2	12	40%
Laptops Windows OS	30	45	35	88%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	1	1	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	10	10	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

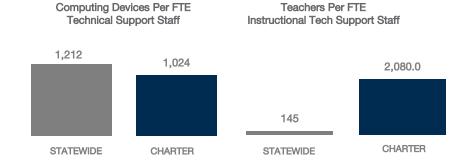
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







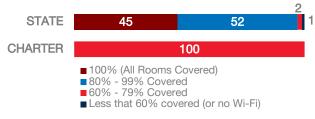
Treeside Charter School

CHARTER FACTS

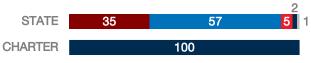
Area Population	N/A
Enrollment	461
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

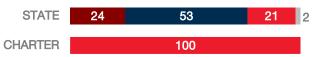


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

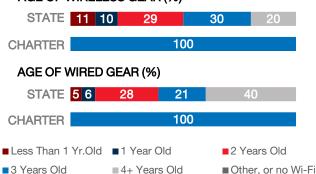
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



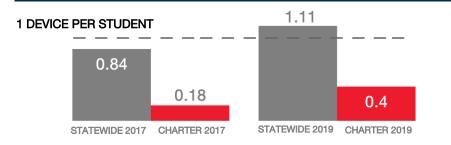
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

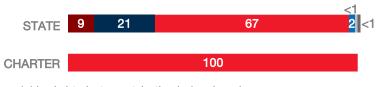


COMPUTING DEVICES USED IN SCHOOLS

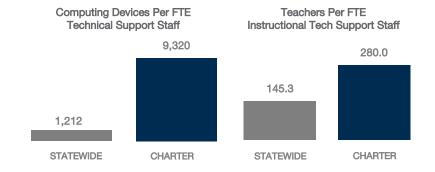
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	-21	-95%
Laptops Windows OS	0	33	32	3200%
Desktops Mac	0	1	0	0%
Laptops Mac	0	1	1	N/A
Chromebooks Google	180	0	105	140%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	5	12	12	240%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







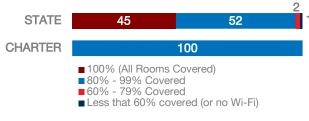
Tuacahn High School for The Performing Arts

Area Population N/A Enrollment 398 Number of Schools 1

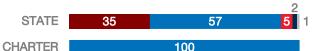
Urban or Rural Rural
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)



SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

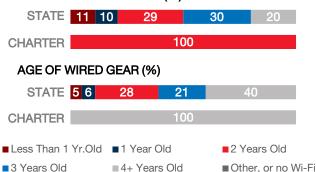
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



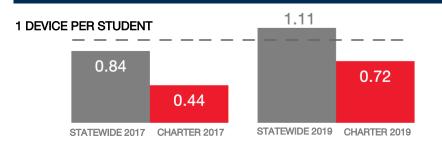
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

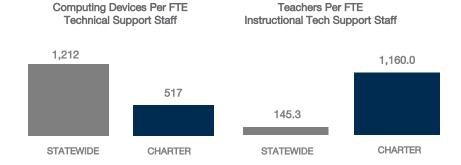
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	42	8	-17	-25%
Laptops Windows OS	28	0	-10	-26%
Desktops Mac	9	0	7	350%
Laptops Mac	0	13	1	8%
Chromebooks Google	200	0	118	144%
Tablets Windows	0	14	14	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	8	1	-21	-70%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







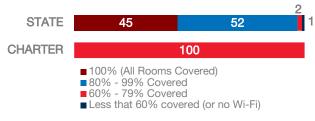
Uintah River High School

CHARTER FACTS

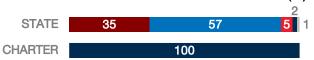
Area Population	N/A
Enrollment	75
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

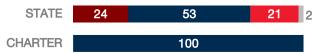


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

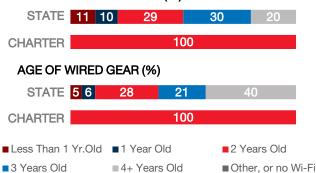
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

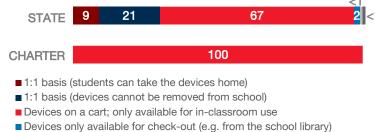


COMPUTING DEVICES USED IN SCHOOLS

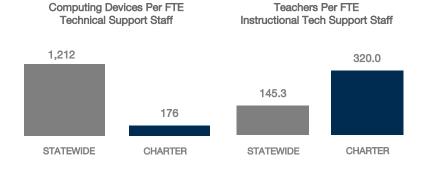
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	32	11	6	16%
Laptops Windows OS	0	7	2	40%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	76	0	56	280%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	15	0	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- No school-owned mobile devices; students can use personal devices
- No mobile device usage







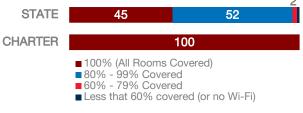
Utah Career Path High School

CHARTER FACTS

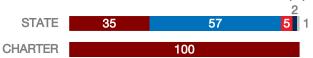
Area Population	N/A
Enrollment	171
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

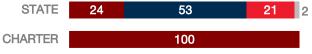


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

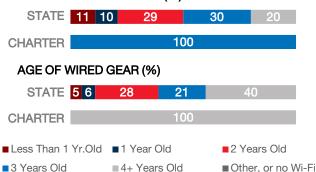
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



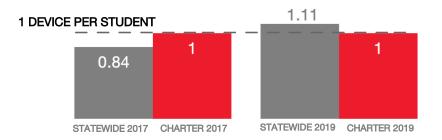
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

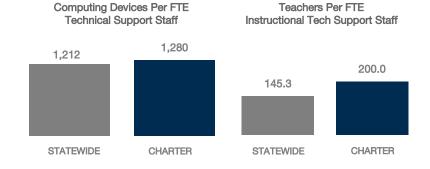
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	1	0	0%
Desktops Mac	0	2	0	0%
Laptops Mac	171	18	-6	-3%
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- ■1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







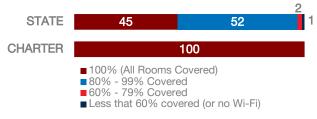
Utah County Academy of Sciences

CHARTER FACTS

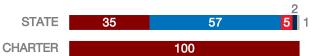
Area Population	N/A
Enrollment	607
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

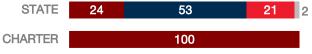


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

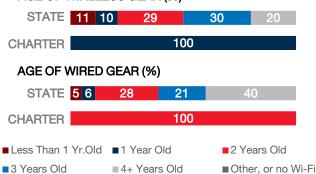
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



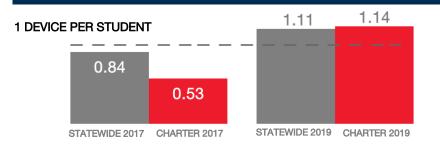
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

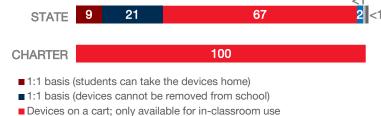


COMPUTING DEVICES USED IN SCHOOLS

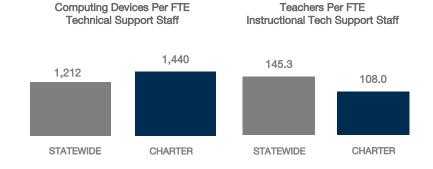
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	90	27	42	56%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	3	3	N/A
Chromebooks Google	600	0	450	300%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart, only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Utah International Charter School

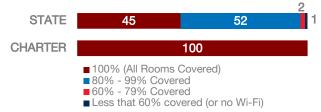
Area Population N/A Enrollment 230 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

WI-FI NETWORKS

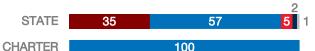
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

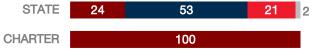


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

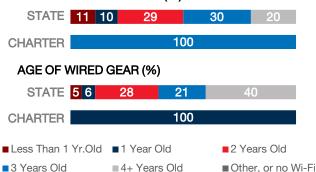
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



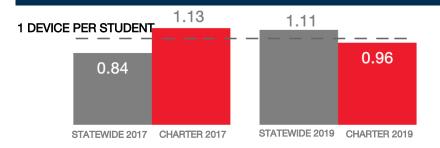
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	20	5	-5	-17%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	20	0	0%
Chromebooks Google	200	3	-47	-19%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

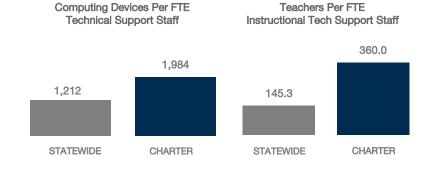
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







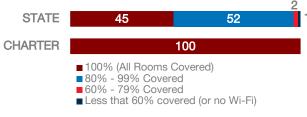
Utah Military Academy

CHARTER FACTS

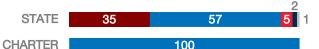
Area Population	N/A
Enrollment	1,058
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

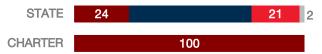


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

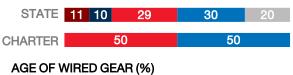
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED

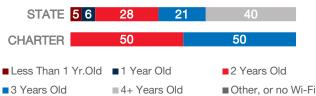


- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)





COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

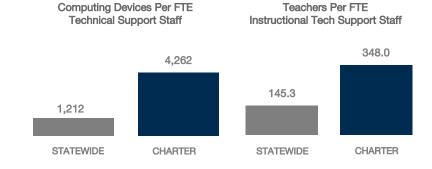
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	90	10	11	12%
Laptops Windows OS	30	82	24	27%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	960	0	720	300%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







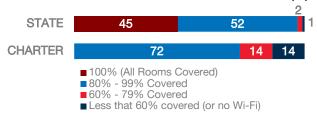
Utah School for the Deaf and the Blind

CHARTER FACTS

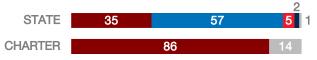
Area Population N/A
Enrollment 297
Number of Schools 7
Urban or Rural Urban
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

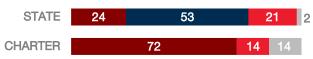


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

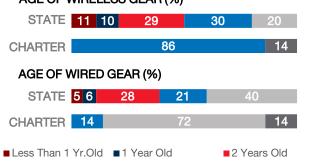
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	147	95	-8	-3%
Laptops Windows OS	54	150	39	24%
Desktops Mac	5	16	5	31%
Laptops Mac	0	114	37	48%
Chromebooks Google	71	9	30	60%
Tablets Windows	0	0	-4	-100%
Tablets Android	5	0	-5	-50%
Tablets IOS	226	213	-115	-21%

MOBILE DEPLOYMENT

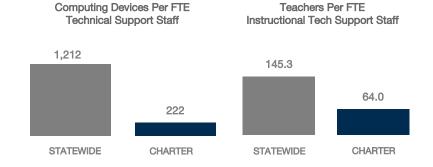
WIRELESS DEVICE POLICIES AT SCHOOLS (%)



■1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old

N/A

446





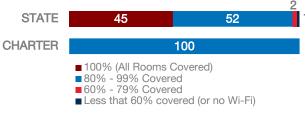
Valley Academy

Area Population Enrollment Number of Schools

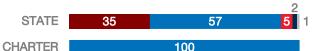
Urban or Rural Rural
Median Household Income N/A
Poverty Rate N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

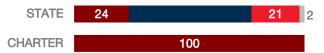


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

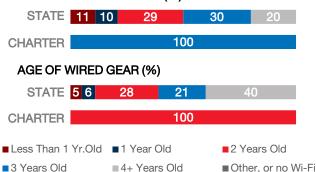
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	35	30	600%
Laptops Windows OS	5	10	15	N/A
Desktops Mac	0	0	-23	-100%
Laptops Mac	0	4	4	N/A
Chromebooks Google	0	0	-192	-100%
Tablets Windows	23	160	183	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	15	0	-145	-91%

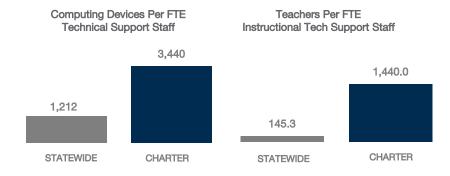
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







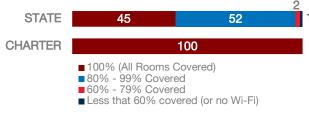
Vanguard Academy

CHARTER FACTS

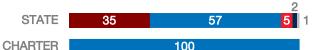
Area Population	N/A
Enrollment	468
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

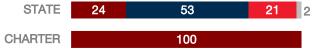


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

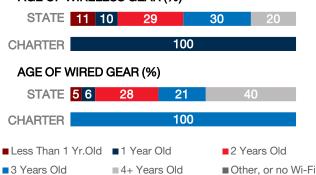
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

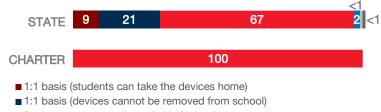


COMPUTING DEVICES USED IN SCHOOLS

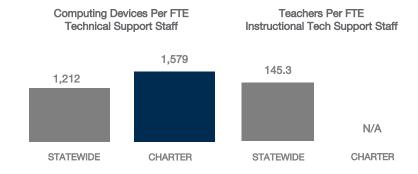
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	60	8	0	0%
Laptops Windows OS	94	42	68	100%
Desktops Mac	0	0	0	N/A
Laptops Mac	60	2	30	94%
Chromebooks Google	500	0	200	67%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	60	3	63	N/A

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







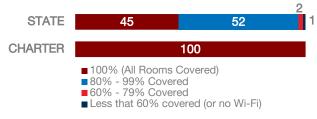
Venture Academy

CHARTER FACTS

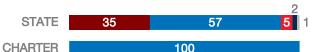
Area Population	N/A
Enrollment	792
Number of Schools	2
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

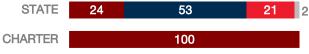


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

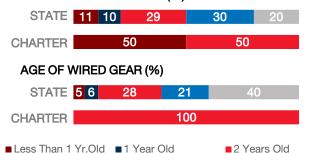
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

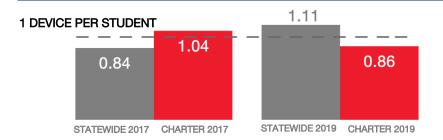
AGE OF WIRELESS GEAR (%)



■4+ Years Old

Other, or no Wi-Fi

COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	58	54	-63	-36%
Laptops Windows OS	0	3	-4	-57%
Desktops Mac	0	2	-16	-89%
Laptops Mac	0	1	1	N/A
Chromebooks Google	625	13	-67	-10%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	6	6	N/A

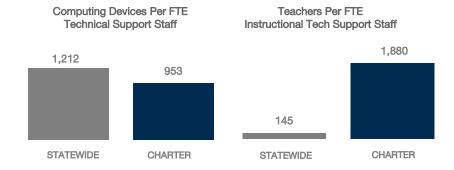
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage

FULL-TIME EQUIVALENT (FTE) TECHNICAL SUPPORT STAFF IN UTAH SCHOOLS



■3 Years Old





Vista At Entrada School of Performing Arts & Technology

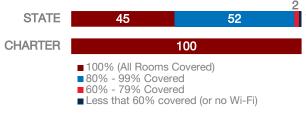
N/A

Area Population N/A Enrollment 935 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

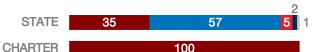
WI-FI NETWORKS

Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

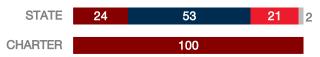


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

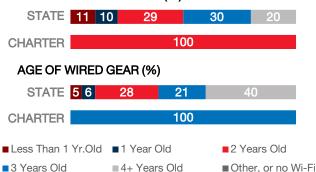
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



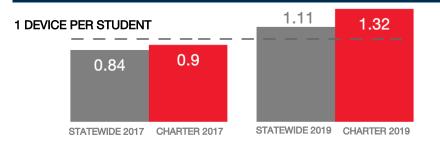
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

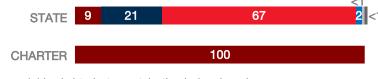


COMPUTING DEVICES USED IN SCHOOLS

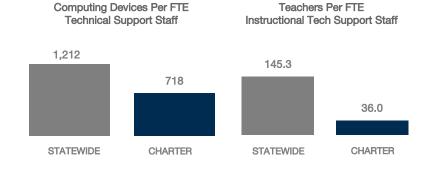
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	30	4	32	1600%
Laptops Windows OS	0	5	5	N/A
Desktops Mac	60	9	0	0%
Laptops Mac	30	75	6	6%
Chromebooks Google	1,028	10	400	63%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	86	10	7	8%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Voyage Academy

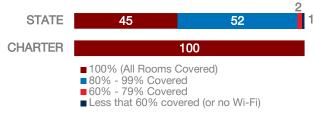
Area Population N/A Enrollment 532 Number of Schools 1 Urban or Rural Urban Median Household Income N/A

WI-FI NETWORKS

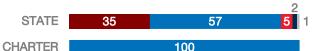
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

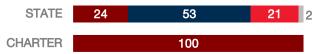


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



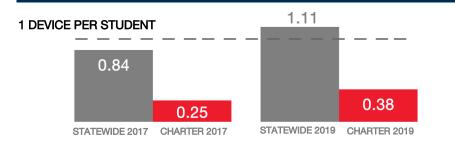
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



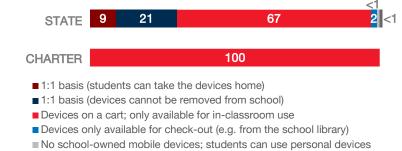
COMPUTING DEVICES USED IN SCHOOLS

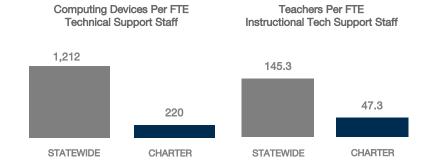
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	36	5	-9	-18%
Laptops Windows OS	90	40	50	63%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	30	0	15	100%
Tablets IOS	44	2	31	207%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









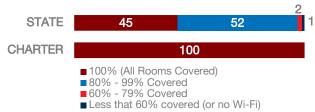
Walden School of Liberal Arts

CHARTER FACTS

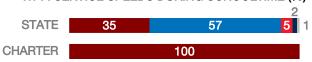
Area Population	N/A
Enrollment	448
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

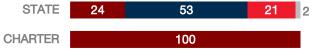


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

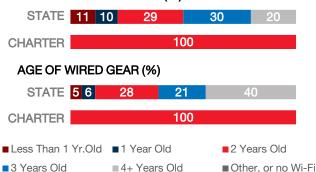
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

tudent Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
0	1	0	0%
0	3	1	50%
0	1	-14	-93%
0	30	0	0%
520	5	125	31%
0	0	0	N/A
0	0	-25	-100%
30	0	20	200%
	0 0 0 0 520 0	Use Admin Use 0 1 0 3 0 1 0 30 520 5 0 0 0 0	Use Admin Use of Devices Since 2017 0 1 0 0 3 1 0 1 -14 0 30 0 520 5 125 0 0 0 0 0 -25

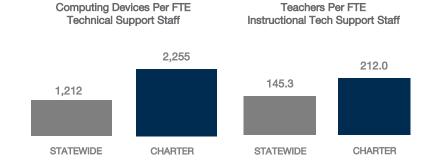
MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



CHARTER 100

- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







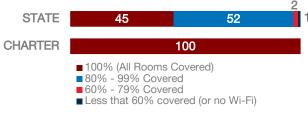
Wallace Stegner Academy

CHARTER FACTS

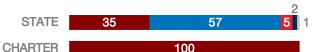
Area Population	N/A
Enrollment	700
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

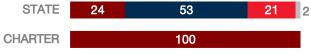


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

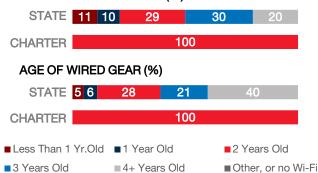
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



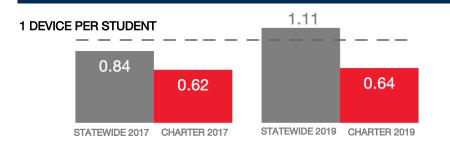
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

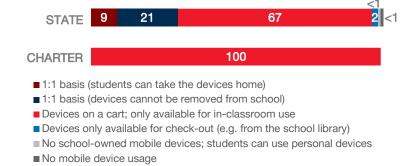


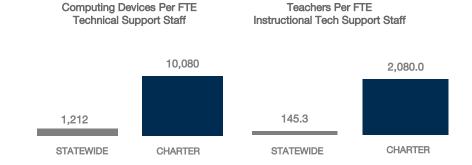
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	-2	-100%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	0	0	0	N/A
Laptops Mac	0	42	15	56%
Chromebooks Google	450	3	100	28%
Tablets Windows	0	3	3	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	6	2	50%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









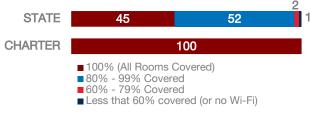
Wasatch Peak Academy

CHARTER FACTS

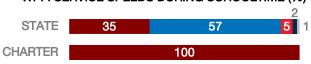
Area Population	N/A
Enrollment	428
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

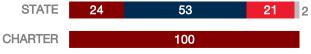


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

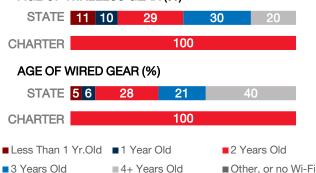
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



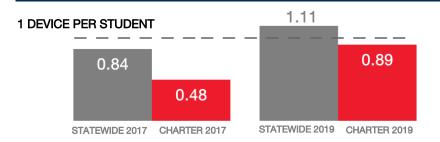
- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



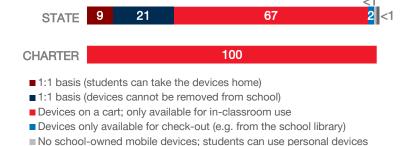
COMPUTING DEVICES USED IN SCHOOLS

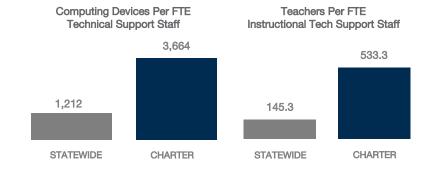
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	6	1	-23	-77%
Laptops Windows OS	0	45	-80	-64%
Desktops Mac	0	0	0	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	307	0	247	412%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	-4	-100%
Tablets IOS	70	29	75	313%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









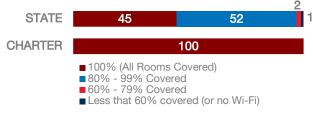
Wasatch Waldorf Charter School

CHARTER FACTS

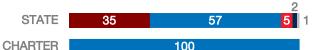
Area Population	N/A
Enrollment	652
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

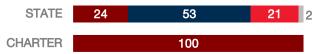


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



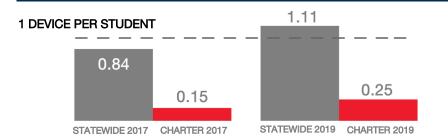
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



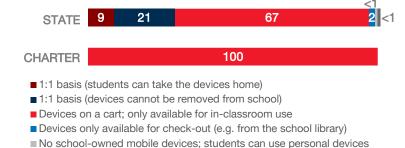
COMPUTING DEVICES USED IN SCHOOLS

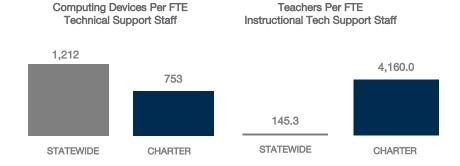
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	0	0	N/A
Laptops Windows OS	0	1	0	0%
Desktops Mac	0	3	0	0%
Laptops Mac	0	26	0	0%
Chromebooks Google	153	0	83	119%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	10	0	0	0%

MOBILE DEPLOYMENT

■ No mobile device usage

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









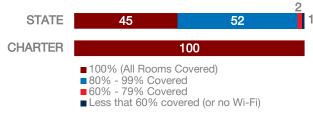
Weber State University Charter Academy

CHARTER FACTS

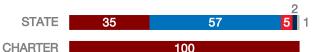
Area Population	N/A
Enrollment	33
Number of Schools	1
Urban or Rural	Urban
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

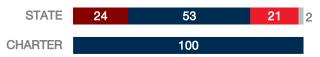


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

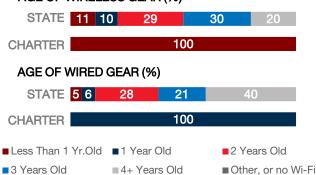
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

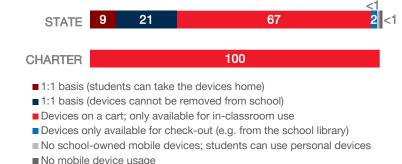


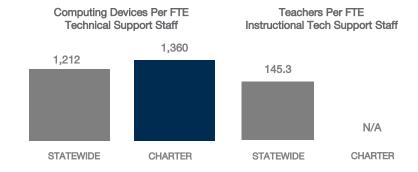
COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	1	N/A
Laptops Windows OS	0	0	0	N/A
Desktops Mac	1	2	1	50%
Laptops Mac	1	2	3	N/A
Chromebooks Google	0	0	0	N/A
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	26	1	7	35%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)









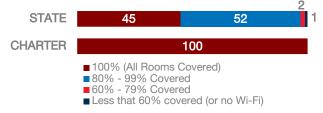
Weilenmann School of Discovery

CHARTER FACTS

Area Population	N/A
Enrollment	563
Number of Schools	1
Urban or Rural	Rural
Median Household Income	N/A
Poverty Rate	N/A

WI-FI NETWORKS

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

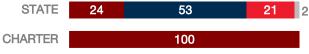


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

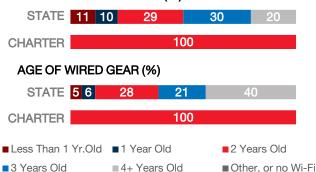
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



- Outside contractor conducted a professional Wi-Fi design
- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
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NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT

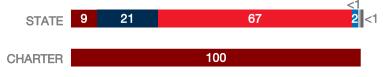


COMPUTING DEVICES USED IN SCHOOLS

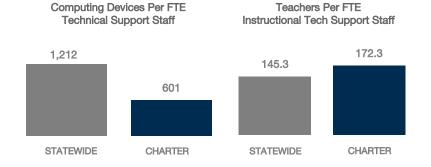
	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	1	0	0%
Laptops Windows OS	0	0	0	N/A
Desktops Mac	0	4	0	0%
Laptops Mac	0	0	0	N/A
Chromebooks Google	530	45	75	15%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	14	14	0	0%

MOBILE DEPLOYMENT

WIRELESS DEVICE POLICIES AT SCHOOLS (%)



- 1:1 basis (students can take the devices home)
- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







Winter Sports School

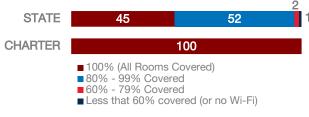
Area Population N/A Enrollment 114 Number of Schools 1 Urban or Rural Rural Median Household Income N/A

WI-FI NETWORKS

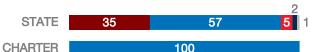
Poverty Rate

WI-FI COVERAGE REPORTED BY SCHOOLS (%)

N/A

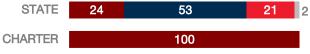


SCHOOLS EXPERIENCING DECLINES IN WI-FI SERVICE SPEEDS DURING SCHOOLTIME (%)



- No noticeable slowdowns
- Slowdowns occur less than 10% of the time
- Slowdowns occur 10% 20% of the time
- Slowdowns occur more than 20% of the time
- Other, or no Wi-Fi

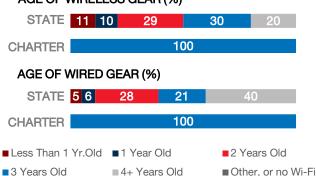
HOW SCHOOL WI-FI NETWORKS WERE DESIGNED



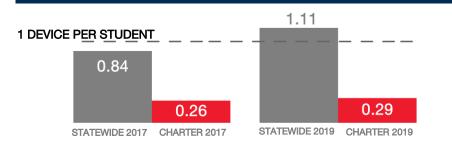
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- In-house expert conducted a professional Wi-Fi design
- Wi-Fi network was not professionally designed
- Other network design choice, or no Wi-Fi

NETWORK GEAR IN SCHOOLS

AGE OF WIRELESS GEAR (%)



COMPUTING DEVICES PER STUDENT



COMPUTING DEVICES USED IN SCHOOLS

	Student Use	Teacher/ Admin Use	Change in the # of Devices Since 2017	Percent Change Since 2017
Desktops Windows OS	0	3	1	50%
Laptops Windows OS	0	2	-3	-60%
Desktops Mac	0	1	1	N/A
Laptops Mac	0	0	0	N/A
Chromebooks Google	33	0	3	10%
Tablets Windows	0	0	0	N/A
Tablets Android	0	0	0	N/A
Tablets IOS	0	0	0	N/A

MOBILE DEPLOYMENT

CHARTER

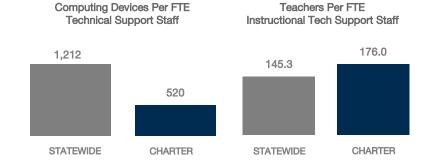
WIRELESS DEVICE POLICIES AT SCHOOLS (%)

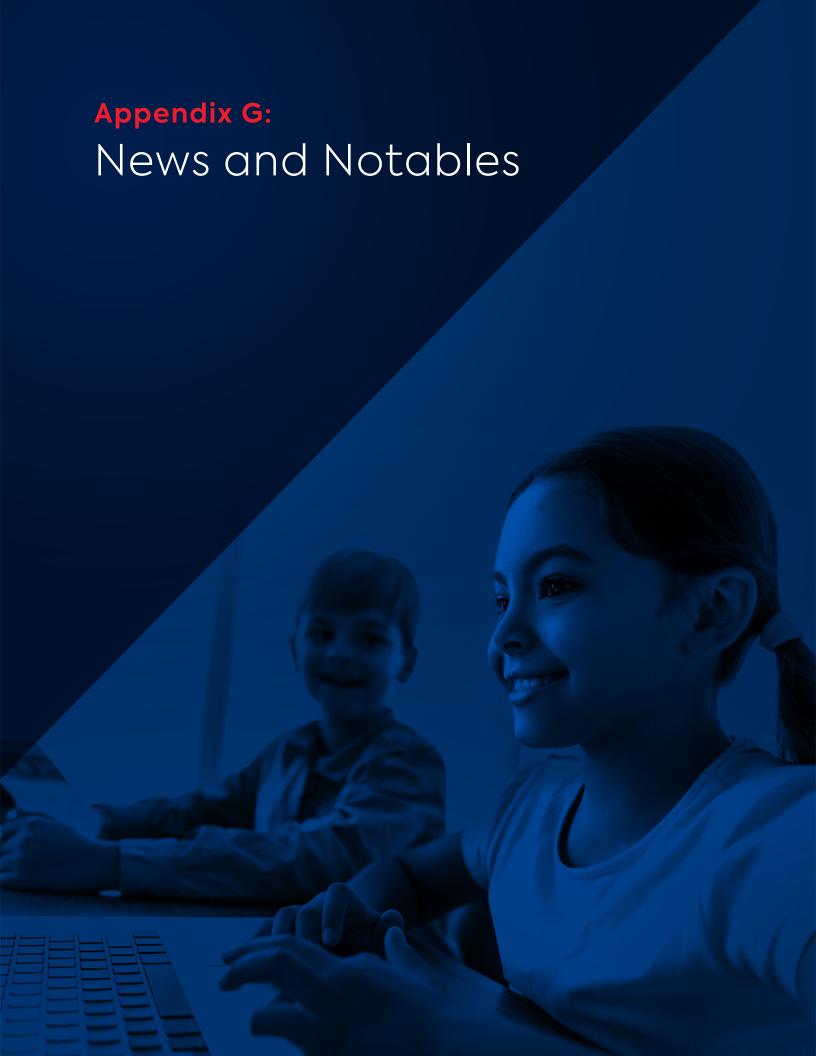


100

■ 1:1 basis (students can take the devices home)

- 1:1 basis (devices cannot be removed from school)
- Devices on a cart; only available for in-classroom use
- Devices only available for check-out (e.g. from the school library)
- No school-owned mobile devices; students can use personal devices
- No mobile device usage







(https://connectednation.org/)

THE CHANGING CLASSROOM IN UTAH: WHY DIGITAL TEACHING MATTERS

"I THINK LEARNING IS NOT JUST ON THE CAMPUS ANYMORE, BUT IT'S EVERYWHERE THE STUDENT GOES."

by Jessica Denson, Communications Director Connected Nation

Beaver, UT (November 5, 2019) – David Long, Superintendent of Beaver County Schools, remembers clearly the moment he realized just how powerful a tool technology could be for student learning.

"I was working at Logan County School District as the Director of Education and Technical Service, and it was the first day we gave out laptops to students," he said. "I was heading home late and stopped at



ELEMENTARY STUDENTS USE THEIR DEVICES DURING CLASSES IN BEAVER COUNTY SCHOOL DISTRICT

McDonald's to grab something to eat. There sat a Logan High student on break with his

dinner and his laptop out—and he was doing homework. He looked completely enthralled and engaged in learning. I knew then that if I did nothing else with my career, at least I helped this kid get the access he needed, and I call that a success."

He hasn't stopped there. Over his more than 20-year career, Superintendent Long has worked to bring technology to thousands of students. Beaver County School District recently went 1-to-1 with Chromebooks—meaning there is one device for every student.

"The access students now have to information is incredible. There are massive databases and information systems that are global in scale," he said. "Teachers are still the key to each student's success, but these devices empower instruction at an incredibly personal and individualized level."

Long has only been with Beaver County School District for about six months, but he's got big plans for expanding access.

From Traditional to Technological



STUDENTS ALSO LEARN HOW TO REPAIR TECHNOLOGY

Beaver County sits in the southwest corner of Utah. It's mostly rural and offers a combination of small-town life and industries that are agriculture- and alternative energy-centric. Smithfield Farms and Union Pacific Railroad are two of the area's largest employers. There are also some newly developed wind and solar farms and a geothermal plant.

Reagan Williams grew up in Beaver County and now calls some of his one-time teachers colleagues. He teaches third-grade math at Belknap Elementary School and says the schools are at the center of everything.

"Everybody goes to the football games, attends plays at the high school, and takes part in the dances. It's very much a small-town feel. It's a traditional feeling," Williams said. "I remember when I was in school, my teachers would stand at a chalkboard and all of us would have to copy everything down. Now, tech has changed things so much in the classroom, making it possible for students to be self-motivated and self-paced. I can also move among the students constantly rather than stand with my back to them."

Every year, he teaches around 75 to 80 students. Virtually all third graders finish math lessons before the school year ends, but 30 to 40 percent move on to also finish the fourth-grade math program—that's where Chromebooks can help.

"With these devices, I can move them onto fourth-grade studies; others go even further," Williams said. "At the same time, it allows me to immediately see who is struggling and give them the extra support they need—so every student is truly learning at his or her own level."

The technology is being applied to every subject taught within Beaver County Schools right now—even those that may not be in the typical classroom setting. Milford High School teacher Ryan Fisher teaches Career and Technical Education (CTE) Classes such as welding and woodshop. His students use the Chromebooks to learn new techniques and watch tutorials they can then mimic.

Fisher also teaches social studies and says the technology makes it possible for students to easily annotate documents, do research, create digital timelines, and go on virtual fieldtrips around the world.

"One of the biggest challenges for every teacher is how to help advanced learners, because there are not enough resources available for them," Fisher said.

"Technology has made it possible to go deeper with their education and access programs and resources to allow them to continue learning. On the other end of the spectrum, you can intervene with a



student struggling faster than ever before. We use Canvas, and I can look at the grades as they pop up and help a student immediately understand what went wrong and adjust my instruction."

Without the technology, Williams says, students in Beaver County would simply be left behind.

"If we didn't have the access, we wouldn't meet our goals," he said. "But because we do have access, our school is outperforming the state average for students."

Both Williams and Fisher attribute the success the district is seeing to the training offered to each teacher. Every instructor takes lessons and can take ongoing education on how to more effectively use the technology in the classroom. Part of that includes striking the right balance between hands-on instruction and computer-based learning.

"We're constantly looking ahead and asking 'how can we make better use of the technology," said Williams. "But little kids aren't robots. The teacher will always need to take part in facilitating and instructing and guiding his or her students."

Taking Stock of School Technology

The Utah Education and Telehealth Network (UETN), in partnership with the nonprofit Connected Nation, is in the midst of doing an inventory of technology within Utah's public and charter schools.

"UETN has really been the backbone for helping expand technology in the schools, including the actual infrastructure in a lot of our districts," Fisher said. "It's a big deal to have their support and really track how each school and district is doing. That way they can help schools or areas that might be behind and help them catch up."



In 2015, UETN began tracking how technology is used in the classroom and the access teachers and students have to digital materials, devices, and platforms. Data from another inventory was released in 2018.

"Last year, following our second statewide inventory, we learned the number of classrooms connected through digital teaching and learning had risen thanks to increased distribution of computer devices and newer wireless gear," said Ray Timothy, CEO, UETN. "However, we also found that more work was needed to connect every student to key technologies that will prepare them for an increasingly digital world."

This inventory can help districts identify gaps and point to areas that are seeing improvement. It's providing opportunities to follow successful models and to explore new ideas—and understand how the world of education may be changing.

"I think learning is not just on the campus anymore, but it's everywhere the student goes. So, I've been very interested in projects that will allow support for off-campus use of these devices," said Superintendent Long. "That includes working with the Federal Communications Commission to change some rules. The No. 1 thing myself and other administrators can do right now is petition for Erate funds to be used for more than getting bandwidth to the classroom. We need to have funding that supports mobile learning."

He points to current trends of students opting out of traditional K-12 education, choosing instead to home school or use other avenues.



"We haven't seen the Amazon or Uber model of education yet, but if we don't change and adjust so people can access education in new ways—such as mobile or self-paced learning—we're going to slowly go out of business or maybe not slowly at some point," said Long.

He adds that school districts must look beyond local resources and start trying to connect education globally—because that's how the students of today are and will continue to be connected when it comes to everything from jobs to friends.

"We need to meet students where they are and not

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It's something the district's teachers also understand.

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"We live in the 21st century. We live in a digital environment," Fisher added. "We're trying to give the students real-world skills, and if we couldn't give them the skill of technology, it would hamper their progress."

Next week we continue our month-long series "The Changing Classroom in Utah" with a look at how one 6th grader and her teacher are leveraging technology in Weber County—a district that's gone from chalkboards to Chromebooks in just a few years' time.

You can follow the entire series on the UEN website by clicking here (https://www.uen.org/schooltech/).



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Wednesday, November 6, 2019 • Issue # 601

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Wed Nov 6	Partly Cloudy	64°/27°
Thurs Nov 7	Sunny	63°/28°
Fri Nov 8	Sunny	65°/28°
Sat Nov 9	Sunny	66°/29°

	3446		0 %
MIN	IERSV	ILLE WE	ATHER
Wed Nov 6	0	Partly Cloudy	66°/24°
Thurs Nov 7		Sunny	64°/25°
Fri Nov 8		Sunny	67°/25°
Sat Nov 9	٥	Sunny	66°/28°

MILFORD WEATHER

Wed Nov 6		Mostly Sunny	66°/23°
Thurs Nov 7		Sunny	66°/25°
Fri Nov 8	0	Sunny	65°/27°

Sunny

64°/27°

The Changing Classroom in Utah: WHY DIGITAL TEACHING MATTERS

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"One of the biggest challenges for every teacher Continued to pg. 6





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rights of man. The general spread of the light of science has already laid open to every view the palpable truth, that the mass of mankind has not been born with saddles on their backs, nor a favored few booted and spurred, ready to ride legitimately, by the grace of God.

> -Thomas Jefferson, letter to Roger C. Weight June 24, 1826

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Continued from Front Page... BCSD TECHNOLOGY





2019 Beaver School Board

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Auction report for October 29, 2019

This is a computer g	Head count: 1842	
CLASS	AVG. PRICE	PRICE RANGE
COWS	48.93	38.50 - 62.00
HEIFERETTES	81.77	65.75 - 96.00
CUTTING BULLS700 - 1050 lb	s. 86.59	74.00 - 97.00
SLAUGHTER BULLS	65.99	60.00 - 70.75
CHOICE STRS 300-400#	187.87	175.00 - 230.00
CHOICE STRS 400-500#	164.99	147.50 - 200.00
CHOICE STRS 500-600#	147.35	135.00 - 158.00
CHOICE STRS 600-700#	143.61	130.00 - 151.00
CHOICE STRS 700-800#	143.30	128.00 - 147.25
CHOICE STRS 800-900#	139.05	126.00 - 146.00
CHOICE STRS 900-1000	139.79	133.00 - 144.00
CHOICE STRS 1000#	126.17	114.00 - 135.00
CHOICE HFRS 200-300#	165.64	155.00 - 180.00
CHOICE HFRS 300-400#	157.86	133.00 - 181.00
CHOICE HFRS 400-500#	144.34	125.00 - 166.00
CHOICE HFRS 500-600#	134.93	120.00 - 155.00
CHOICE HFRS 600-700#	125.10	112.50 - 140.00
CHOICE HFRS 700-800#	134.36	118.00 - 143.00
CHOICE HFRS 800-900#	135.91	117.50 - 138.50
CHOICE HFR 900 - 1300	97.36	76.75 - 103.00

* This report is a computer generated report *

BEAVER COUNTY SHERIFF'S BOOKING/ARREST REPORT

the Beaver County Sheriff's Department with no Editor corrections or deletions innocence, only the name and charges of those booked during that time period.

The following persons were pooked into the Beaver County Jail between 10-24-19 and 10-30-19 on the charges of: JOHN CODIE BRADSHAW of

BEAVER, UT. Warrant -Of Arrest, Warrant -Of Arrest, Warrant -Of Ar-

ELLAN JEANETTE WORLEY of BEAVER, UT. Threat of Violence, Disorderly Conduct after warning

The following calls were received 10-24-19 and 10-30-19 by the Beaver County Sheriff's office

1 calls for Agency Assist 3 calls for Animal Problem 1 calls for Back Pain

2 calls for Citizen Assist 1 calls for Citizen Dispute 1 calls for Domestic Violen 1 calls for Drugs 1 calls for Fire

1 calls for Forger 2 calls for Found Property 1 calls for Harassment 1 calls for Illegal Burning

1 calls for Juvenile Prob 3 calls for Keep the Peace 1 calls for Mental Problem

2 calls for PD Acciden 1 calls for PI Accident 1 calls for Suspicious

calls for Theft 1 calls for Traffic Hazard

1 calls for Transfer 1 calls for Trespassing

1 calls for Utility Problem

2 calls for VIN Inspection 1 calls for Warrant 2 calls for Welfare Check

There are currently 357 inmates housed at the Beaver County jail.



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(https://connectednation.org/)

THE CHANGING CLASSROOM IN UTAH: TECHNOLOGY IN WEBER SCHOOL DISTRICT – FROM CHALKBOARDS TO CHROMEBOOKS

Ogden, UT (November 12, 2019)– Alyssa Boydston is your typical sixth-grader. She attends Lomond View Elementary School located in Pleasant View and is really into sports. Boydston wants to be either a soccer player or engineer when she grows up, and she's super excited about the upcoming sixth-grade dance—a 1950s-themed event.

Boydston also has never known school without technology in the classroom.

"It's always been there, but this year we each got our own Chromebooks, so that's a new

thing," she said. "Before, we'd only get them once or twice a week and only for a certain period of time and had to share them with others."

Boydston is one of Alan Rhees' star students. He teaches sixth grade at the very school he attended as a child.

"That was 34 years ago, when we did everything with paper and a pencil, and our teachers used chalk and chalkboards," Rhees said. "Now, we don't even have chalkboards in our classrooms at Lomond View."



The school uses smart boards that are already being phased out to make way for smart monitors—essentially touch-screen televisions with no projectors—and the entire district is moving to what's called 1-to-1 with Chromebooks. That simply means every student would have their own dedicated device.

Lynn Raymond is Weber County School District's Director of Technology. The district offices are located in Ogden, where Raymond oversees efforts to move schools into this new territory.

"When I came into the district, the computers were basically centered around the teacher having the tech and then using that technology to engage students in terms of PowerPoints, presentations, those types of things," he said. "That's now changed dramatically. The tech is now integrated within student learning. Students are also able to use it to individualize their instruction. They can work from home and access resources to continue their education even after school hours."

Raymond taught human physiology and anatomy before moving into administrative roles. His experience has helped him understand how to integrate new tech into the classroom setting.



"We also looked at other districts that were having success or failure," he said. "We quickly learned that you can't just give the students Chromebooks, but you have to also provide teachers support. So, six months before we started distributing Chromebooks, tech services worked with the curriculum department to prepare and train teachers."

The Utah Education and Telehealth Network (UETN), in partnership with the nonprofit Connected Nation, is in the midst of doing an inventory of technology within all of Utah's public and charter schools—including Weber County.

"UETN has been phenomenal in working with us on getting our schools prepared so every student has a device that's monitored by our system, even when they are off campus," Raymond said. "Essentially, our partnership with UETN has helped us work through the

challenges and opportunities of expanding technology. At the same time, the UETN inventory gives us an important snapshot of our district and how it compares to others—which is especially important for parents. They'll be able to see what the classroom looks like and what type of learning their children will be involved in here."

In 2015, UETN began tracking how technology is used in the classroom and the access teachers and students have to digital materials, devices and platforms. Data from another inventory was released in 2018.

"Last year, following our second statewide inventory, we learned the number of classrooms connected through digital teaching and learning had risen thanks to increased distribution of computer devices and newer wireless gear," said Ray Timothy, CEO of UETN. "However, we also found that more work was needed to connect every student to key technologies that will prepare them for an increasingly digital world."

That's made it possible for students and teachers to explore learning in new and even more effective ways.

"Tomorrow, we get to actually go inside Alcatraz on a VR [virtual reality] field trip," said Rhees. "We're also exploring new methods of learning using images and group reviews. One of the best things about the devices is that I know instantly how a student is doing on

an assignment or test and can provide immediate feedback. It makes learning more interactive and effective."

Lomond View Elementary students typically spend about a third of the school day using the devices. They'll complete digital modules in math or language arts or other subjects. They also work on improving their keyboarding skills and doing group lessons.

"It feels like we're a team, but rather than a race to win, it's a race to get the best answer," said sixth-



grader Boydston. "I think it's really fun having your own Chromebook because it's more tech in the classroom and stuff, and it's easier than writing everything down on paper. Plus, if we have spare time, we get to go to Nearpod. I like to work on new math problems."

Nearpod is a student-engagement platform that schools can leverage. It provides ready-to-run, interactive lessons for grades K-12. They include multiple-choice questions and problems that can be solved by drawing out or diagramming an answer.

It's just one of many ways technology is transforming instruction in classrooms across Utah.

"I think tech is going to change even more than we realize," Rhees said. "Right now, we still have some limitations on access or how we can use the devices. I think augmented reality—where students can actually see a place through headsets—are going to enter our classrooms more and more. We'll still have textbooks and interact with students one-on-one because it will always be important to engage in that way, but there will eventually be a new balance between technology and traditional teaching."



Raymond agrees. As he and his staff look toward the future, they already see a horizon that's limitless.

"We're already working with 3D printers and have elementary students actually designing and working it," he said. "Drones, artificial intelligence, augmented reality—there's so much ahead of us. Now, we're working on writing a new program with Google to track technology in a different way than ever before so we can see how tech is being used by teachers and students and look to what's next."

Next week we continue our month-long series "The Changing Classroom in Utah." We'll sit down with Alpine School District's Administrator of Technology Services who explains how the schools of today must be vastly different than even just 10 years ago and what that means for teachers and students.

Meanwhile, check out last week's story from <u>Beaver County</u> (https://connectednation.org/blog/2019/11/04/the-changing-classroom-in-utah-why-digital-teaching-matters/)

Why School Technology Inventory Matters (https://www.uen.org/schooltech/)



(https://connectednation.org/)

THE CHANGING CLASSROOM IN UTAH: TECHNOLOGY'S ROLE IN ALPINE SCHOOL DISTRICT

by Jessica Denson, Communications Director Connected Nation

American Fork, UT (November 19, 2019) -

According to Blaine Edman, we're living in a vastly different world than just 10 or 20 years ago—and it's impacting how Utah school districts approach education.

"Technology now plays such a vital and important role in the world, so we need to teach students how to use tech while being



STUDENTS WORK ON COMPUTERS IN CLASS

aware that education is about more than just tech," said Edman, Administrator of Technology Services, Alpine School District. "We're teaching students what they should expect as they enter society and the workplace—helping them create, collaborate, communicate, and think critically while leveraging technology."

The Utah Education and Telehealth Network (UETN), in partnership with the nonprofit Connected Nation, is in the midst of doing an inventory of technology within Utah's public and charter schools. Alpine School District is taking part in that inventory. Edman calls it "critically important" for administrators to understand the digital landscape of the district.



BLAINE EDMAN, ADMINISTRATOR OF TECHNOLOGY SERVICES, ALPINE SCHOOL DISTRICT

"We do see there are big differences between kids who have access to technology and those who don't," he said. "But it's even more complex than that. It's not just a question of do they have internet and devices at home, but also what kind of environment are they in and what are they doing with the technology. All of these are things we can track and monitor."

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Matt Johnson is the Director of Technology Infrastructure for the Alpine School District. He oversees the district's networks within the schools and keeps track of network traffic, resources and security.

"In my role, I work with staff to provide the schools with connectivity to the UETN network," Johnson said. "They provide access and connectivity to the internet resources for the school district. They also have the capacity and resources to support educational entities at a larger scale."

Johnson is also responsible for maintaining technology infrastructure across the district.

"So, essentially, as I look at the inventory process, we are identifying the number of devices in each of the schools, what the network bandwidth is in each of the schools, and where wireless access points may need to be added or augmented to ensure that we have connectivity throughout the schools," Johnson explained.

Every district sets up how it approaches technology differently. Alpine Schools has developed another department called "Innovative Learning." This department focuses on how to best use the technology in the classroom. The district also provides training and ongoing coaching for teachers so they're up to speed on the latest advancements.

In the last four years, the district has also gone from about 30,000 to 90,000 internetenabled devices. That means there is a device for every student. But, Edman again emphasizes that it's not just having enough computers or laptops that matters—it's leveraging the tools in smart ways to help students as best they can.

"I really want parents and the community to understand that there is a great potential for how we can have students use technology to prepare them for their future," Edman added. "But we also know there are risks and difficulties and problems that sometimes arrive. I think in all schools there are a ton of dedicated people there trying to provide the right tools for kids while keeping them safe, healthy, and happy in the process."

Next week we continue our month-long series "The Changing Classroom in Utah" with a look inside Juab School District—a district that is doing something very different with technology through its one-of-kind Innovation Center.

Related Articles:

<u>Beaver County School District – Why Digital Teaching Matters</u>
(https://connectednation.org/blog/2019/11/04/the-changing-classroom-in-utah-why-digital-teaching-matters/</u>)

<u>Technology in Weber School District – From Chalkboard to Chromebooks</u>
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THE CHANGING CLASSROOM IN UTAH: INNOVATING TECHNOLOGY IN JUAB SCHOOL DISTRICT

by Jessica Denson, Communications Director Connected Nation

Nephi, UT (November 26, 2019) – Technology is not just part of the classroom in Juab School District. It's integrated into every aspect of learning.

"We're giving each student a voice and choice in their own learning," said Ken Rowley, Principal, Juab Junior High School. "Each student sets his or her own personal goals at the start of the year. Because of that approach, they're incredibly engaged as they try to reach their goals. When we do that, it becomes personal and they own it."

STUDENTS USE DEVICES FOR LESSONS

Rowley attended school about an hour away in the

Nebo School District, graduating in 1985. He later taught at Juab High School for 11 years and 13 years ago became principal for the junior high. Rowley says it struck him that the classrooms didn't look much different than when he was a student.

"Kids would come into the classroom, turn off their devices, and sit there like it was 20 years ago," he said. "But as soon as they'd leave, they'd power back up, so in a way, it was like learning just stopped once they went to class. So we started to look at integrating the technology to *what* students enjoyed learning and *how* they enjoyed learning."

The Future is Now

In 2019, the entire district is now one-to-one on iPads for 5th-12th grades—meaning every student has a device they can take home to do homework and other school projects. There are also 100s of Chromebooks available for elementary students, and most classrooms have smart boards or Apple TVs and sound systems to assist teachers with instruction.



TECHNOLOGY DIRECTOR, JUAB SCHOOL DISTRICT

"We provide all the items to teachers and take time to train them on the technology so they can be even more effective in the classroom," said Tony Sperry, Technology Director, Juab School District. "This technology can be life-changing for our students. Imagine if they did not have access to it? It impacts everything from applying for colleges to being able to find work. Kids need to develop their technology and computer skills just to take part and compete."

Sperry also grew up in the area, which he calls a mix of a farming and bedroom community. Located about 45 minutes

from Provo, the state's third largest city, he says many people commute so they can enjoy the quiet, rural life. He graduated from Juab High School and 37 years ago began teaching for the district.

"I think it was the early 90's that we got computers for all of our teachers. Then shortly after we added our first electronic grade book," said Sperry. "Then, as things progressed, the internet started to come into play, and we started networking everything. Because I was excited about the future of technology in the classroom, I just sort of fell into the role of Technology Director about 25 years ago and now we just keep looking at ways to innovate for our students and teachers."

He credits the support of the superintendent and school board for making it possible to do more in the classrooms. That includes developing "The Innovation Center," which just opened.



STUDENTS THROUGHOUT ALPINE SCHOOL DISTRICT USE
THEIR DEVICES BOTH INSIDE AND OUTSIDE THE
CLASSROOM FOR THEIR LESSONS

"We remodeled a school to include the center," he explained. "It has big open classrooms and all the latest technology that we can get our hands on. We're just starting to figure out how to bring students from elementary and junior high to do some high-tech projects like robotics and 3D printing. It's important for us to bring new things so kids can explore and learn and discover."

The district also plans to look at how high school students can start utilizing The Innovation Center. It's that kind of forward-thinking that Principal Rowley says is a must for not only the district but all of Utah's schools.

"Would I send someone out to build a house without the right tools?" he said. "We must give students what they need to do well. They don't want to be lectured to all day along. They want—and need—learning to be interactive with and even from their peers. I think technology helps us personalize the learning that goes on in each one of our student's lives. It means we can meet their needs a whole lot easier and more personally than we've ever been able to do before."

It's why taking inventory of technology in the Juab School District is so important. Right now, the Utah Education and Telehealth Network (UETN), in partnership with the nonprofit Connected Nation, is in the midst of doing a tech inventory within all of Utah's public and charter schools.

In 2015, UETN began tracking how technology is used in the classroom and the access teachers and students have to digital materials, devices, and platforms. Data from another inventory was released in 2018.

"Last year, following our second statewide inventory, we learned the number of classrooms connected through digital teaching and learning had risen thanks to increased distribution of computer devices and newer wireless gear," said Ray Timothy, CEO, UETN. "However, we also found that more work was needed to connect every student to key technologies that will prepare them for an increasingly digital world."

The inventory can help districts identify gaps and point to areas that are seeing improvement.

"It's so important to know where you are," said Sperry. "You've also got to know where you're going. For instance, if you're dealing with an old computer lab, the inventory helps you identify when it's time to refresh it or replace the digital tools with newer tools."



KEN ROWLEY, PRINCIPAL, JUAB JUNIOR HIGH SCHOOL HELPS STUDENTS WITH THEIR MATH ASSIGNMENT

The data gathered during the inventory is also providing opportunities to follow successful models and to explore new ideas—and understand how the world of education may be changing.



STUDENTS USE THEIR DEVICES FOR LESSONS

The Challenges and Opportunities Ahead

As we move into the next decade, both Sperry and Rowley see technology as something that will present challenges and opportunities for Juab School District.

"Our district works pretty hard for computer science curriculum," said Sperry. "So in the last few years, we started doing things a little differently and started doing some training and offering specialized classes. That includes basic computer programming lessons at even the elementary level. There's even more offered at the junior and high school levels,

and we need to keep improving this every year."

One challenge is the lack of internet access once students take devices home. According to Rowley, about a third of his students don't have access to the internet once they leave school.

"It would be nice if we could find more ways to get Wi-Fi into all homes," he said. "Right now, I see a lot of students in the Wendy's parking lot just to get access."

The principal also points out the importance of parents being educated on how to use the devices students take home—and the dangers that the internet can sometimes pose.

Rowley says everyone working with students must remember that none of the above can be "one-size-fits-all."

"Tech is changing so fast, so I'm not married to one device. Different kids may learn better with different devices," he said. "I think it should be internet-based rather than simply device-based, but no matter what we as educators do, I'd never send a student to go learn without technology involved—to do so limits and hinders their progress."

Next week we wrap up our month-long series "The Changing Classroom in Utah" with a comprehensive look at the four school districts profiled in the series.

Related Articles:

Technology's Role in Alpine District

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<u>Beaver County School District - Why Digital Teaching Matters</u>

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(https://connectednation.org/)

THE CHANGING CLASSROOM IN UTAH: THE IMPORTANCE OF TRACKING TECHNOLOGY IN OUR SCHOOLS

by Jessica Denson, Communications Director

Salt Lake City, UT (December 3, 2019) – For the last two months, Utah school administrators, technology directors, teachers, and other key staff members have been taking part in an effort to inventory technology in both charter and public schools across the state.

It may sound like a routine part of what school districts must do, but the data gleaned from this work can impact teaching and learning in classrooms for years to come.

"Last year, following our second statewide inventory, we learned the number of classrooms connected



STUDENTS WORK ON THEIR COMPUTER DEVICES IN CLASS AT LOMOND VIEW ELEMENTARY SCHOOL

through digital teaching and learning had risen thanks to increased distribution of computer devices and newer wireless gear," said Ray Timothy, CEO, Utah Education and Telehealth Network (UETN). "However, we also found that more work was needed to connect every student to key technologies that will prepare them for an increasingly digital world. This inventory can help us identify gaps and point to areas where we're seeing improvements—providing opportunities to learn from our successes."

UETN, in partnership with Connected Nation (CN), is overseeing the technology inventory. The first—completed in 2015—provided initial details on how technology is used in Utah classrooms and the access teachers and students have to digital materials, devices, and platforms.

"Technology now plays such a vital and important role in the world, so we need to teach students how to use tech while being aware that education is about more than just tech," said Blaine Edman, Administrator of Technology Services, Alpine School District. "We do see there are big differences between kids who have access to technology and those who don't. But it's even more complex than that. It's not just a question of do they have internet and devices at home, but also what kind of environment are they in and what are they doing with the technology? All of these are things we can now track and monitor."

The process to do so is only getting better. In 2018, UETN and CN were able to capture data from more than 1,000 schools that serve more than 665,000 students across the state during the inventory.

The resulting data set contained more than 100,000 new points of data on the use of technology in Utah K-12 schools—including digital curricula materials, platforms used, and the number and nature of devices used in classrooms. School districts can leverage that information to make impactful changes in the classroom.

The Digital Classroom



A STUDENT-ATHLETE IN BEAVER COUNTY SCHOOL DISTRICT WORKS ON HOMEWORK BEFORE PRACTICE

Lynn Raymond is Weber County School District's
Director of Technology. The district offices are
located in Ogden, where Raymond oversees work to
expand technology in the schools—and the approach
for how it's used.

"When I came into the district, the computers were basically centered around the teacher having the tech and then using that technology to engage students in terms of PowerPoints, presentations, those types of things," he said. "That's now changed dramatically. The tech is now integrated within

student learning. Students are also able to use it to individualize their instruction. They can work from home and access resources to continue their education even after school hours."

Raymond says there can be a learning curve as technology is integrated into classrooms and new technology emerges—knowing what has worked elsewhere can help.

"We have looked at other districts that were having success or failure," he said. "We quickly learned that you can't just give the students Chromebooks, but you have to also provide teachers support. So six months before we started distributing Chromebooks, tech services worked with the curriculum department to prepare and train teachers."

Alyssa Boydston is a sixth-grader at Lomond View Elementary School in Weber County School District where Raymond works. She has never known school without technology in the classroom.

"It's always been there, but this year we each got our own Chromebooks, so that's a new thing," she said. "It's easier than writing everything down on paper. We can also learn in different ways, multiple choice, short answer, or even draw out different problems and work them out together as a class. Usually we're just trying to get the best answer and excel at a subject rather than it being like a race to win. We work together and, if we have spare time, we get to go to Nearpod. I like to work on new math problems."



ALYSSA BOYDSTON, A 6TH GRADER AT LOMOND VIEW ELEMENTARY SCHOOL, AND HER TEACHER ALAN RHEES

Nearpod is a student-engagement platform that schools can leverage. It provides ready-to-run, interactive lessons for grades K-12. Compare this experience to that of her teacher, Alan Rhees, and it's clear Utah's schools must stay ahead of technology.

"I attended the same school 34 years ago, when we did everything with paper and a pencil, and our teachers used chalk and chalkboards," said Rhees. "Now, we don't

even have chalkboards in our classrooms at Lomond View. We use smart boards or smart monitors and my class is even able to take VR [virtual reality] field trips. It all makes learning more interactive and more effective."

Reagan Williams agrees. The third-grade math teacher at Belknap Elementary School in Beaver County teaches around 75 to 80 students every year. Virtually all third-graders finish math lessons before the school year ends, and another 30 to 40 percent are able to move on to even more complicated math programs—that's where Chromebooks can help.

"With these devices, I can move them onto fourth-grade studies; others go even further," Williams said. "At the same time, it allows me to immediately, in real time, see who is struggling and give them the extra support they need—so every student is truly learning at his or her own level."

Ryan Fisher teaches both social studies and Career and Technical Education (CTE) Classes, such as welding and woodshop, at Milford High School in Beaver County. He says leveraging the internet and computers makes it possible for teachers to better meet the needs of all students.

"One of the biggest challenges for every teacher is how to help advanced learners, because there are not enough resources available for them," Fisher said.

"Technology has made it possible to go deeper with their education and access programs and resources to allow them to continue learning. On the other end of the spectrum, you can intervene with a student struggling faster than ever before. We use Canvas, and I can look at the



KEN ROWLEY, PRINCIPAL, JUAB JUNIOR HIGH SCHOOL HELPS STUDENTS WITH THEIR MATH ASSIGNMENT

grades as they pop up and help a student immediately understand what went wrong and adjust my instruction."

That ability for personalization is something teachers and administrators emphasize in the Juab School District.

"We're giving each student a voice and choice in their own learning," said Ken Rowley, Principal, Juab Junior High School. "Each student sets his or her own personal goals at the start of the year. Because of that approach, they're incredibly engaged as they try to reach their goals. When we do that it becomes personal and they own it."

Juab School District recently went one-to-one on iPads for fifth through 12th grades—meaning every student has a device they can take home to do homework and other school projects. There are also hundreds of Chromebooks available for elementary students, and most classrooms have smart boards or Apple TVs and sound systems to assist teachers with instruction.

"We provide all the items to teachers and take time to train them on the technology so they can be even more effective in the classroom," said Tony Sperry, Technology Director, Juab School District. "This technology can be life-changing for our students. Imagine if they did not have access to it. It impacts everything from applying for colleges to being able to find work. Kids need to develop their technology and computer skills just to take part and compete."

So what's next for technology in Utah's schools? That depends on how school districts address some of the challenges teachers and administrators say they're seeing.

We're Only Limited by Our Imagination....and Student Access



STUDENTS ALSO LEARN HOW TO REPAIR TECHNOLOGY IN BEAVER COUNTY SCHOOL DISTRICT

A big challenge is lack of internet access once students take devices home. According to Rowley, the Juab Junior High School Principal, about onethird of his students don't have access to the internet once they leave school.

"It would be nice if we could find more ways to get Wi-Fi into all homes," he said. "Right now, I see a lot of students in the Wendy's parking lot just to get access."

Connecting all people to broadband (high-speed internet) is part of Connected Nation's mission and why the nonprofit continues to partner with UETN to

help track technology in Utah's schools.

"As a nonprofit, we have worked for nearly two decades to find and implement innovative solutions to expand access to broadband and its related technologies to more families and communities," said Tom Ferree, Chairman and CEO, CN. "Connecting our schools and, ultimately, more students is a critical part of our mission. Children must have the opportunity to learn how to leverage technology for careers, education, healthcare, and more."

The technology inventory is a proactive step to identify ways to help students and teachers.

"We understand it's important to continue to track our progress," said Ray Timothy of UETN. "Connected Nation has shown us it can help facilitate this research and support our teachers and administrators. We have had 100 percent participation in the past two statewide technology inventories—proving that Utah's school leaders understand how important it is for us to identify where we are doing well and what we must do to better serve our students."

David Long, Superintendent for the Beaver County School District, agrees the inventory is critical and adds that school districts must look beyond local resources and start trying to connect education globally.

"I think learning is not just on the campus anymore, but it's everywhere the student goes. So I've been very interested in projects that will allow support for off-campus use of these devices," said Long. "That includes working with the Federal Communications

Commission to change some rules. The No. 1 thing myself and other administrators can do right now is petition for Erate funds to be used for more than getting bandwidth to the classroom. We need to have funding that supports mobile learning."

Rowley says he would also like to see a shift in how technology is viewed when it comes to student learning.

"Tech is changing so fast, so I'm not married to one device. Different kids may learn better with different devices," he said. "I think it should be internet-based rather than simply device-based, but no matter what we as educators do, I'd never send a student to go learn without technology involved—to do so limits and hinders their progress."

It's a statement that teachers across Utah are echoing: Without technology, our students will fall behind.

"I think tech is going to change even more than we realize," said Rhees. "Right now, we still have some limitations on access or how we can use the devices. I think augmented reality—where students can actually see a place through headsets—are going to enter our classrooms more and more. We'll still have textbooks and interact with students one-on-one because it will always be important to engage in that way, but there will eventually be a new balance between technology and traditional teaching."

"If we didn't have the ability to offer them tech, their opportunities would be much more limited, especially in rural areas," said Williams. "You know,



STUDENTS USE DEVICES FOR LESSONS IN ALPINE SCHOOL DISTRICT

we don't have AP classes, but we can offer it through colleges using the technology."

"We live in the 21st century. We live in a digital environment," Fisher added. "We're trying to give the students real-world skills, and if we couldn't give them the skill of technology, it would hamper their progress."

The technology inventory is scheduled to be completed on Friday, Nov. 22. A public report is set to be issued in late December 2019.

You can read each article in our November series on technology in Utah classrooms called "The Changing Classroom in Utah" by clicking on the links below.

Related Articles:

<u>Innovating Technology in Juab School District</u>

(https://connectednation.org/blog/2019/11/26/the-changing-classroom-in-utah-innovating-technology-in-juab-school-district/)

Technology's Role in Alpine District

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