



 **CONNECTED
NATION.**

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Utah Education and Telehealth Network

UTAH SCHOOL TECHNOLOGY INVENTORY

January 2016

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EXECUTIVE SUMMARY



I. Executive Summary

Understanding that technology can bring world-class learning opportunities to students, regardless of income, location, or demographics, the state of Utah committed to fund \$4 million through Senate Bill 222 (Appendix A) to develop a digital teaching and learning program proposal, a portion of which was dedicated to funding the vital Utah School Technology Inventory project outlined in this report.

With the lofty goal of obtaining a detailed inventory of every Utah public schools' assets and requirements prior to the upcoming 2016 legislative session, and under the direction of UETN, **Connected Nation successfully gathered data from 100% of Utah public schools, including charter schools, accounting for 989 schools serving nearly 627,000 students across the state.** Connected Nation used a myriad of data collection, assessment and communications techniques to gather the information and complete a robust data analysis. This collection process and subsequent findings are outlined in this report. Armed with in-depth data, as well as meaningful assessments from local points of contact, the state of Utah will be able to promote digital teaching and learning from an informed, data-driven perspective.

Beginning in October 2015, the project team first developed a list of individual points of contact for each school district and charter school in the state, followed by the development of an online data collection portal and pre-formatted spreadsheet to facilitate the collection of data. Once complete, the login-based portal was provided to local points of contact and an instructional webinar was hosted to train users on its functionality. At that point, the data collection process officially began. By early December, Connected Nation presented a preliminary report of findings to UETN, while three regional data collection managers were deployed on a multi-week, statewide tour to assist schools with their data submissions. These aggressive efforts resulted in a comprehensive collection of data, and on January 15, 2016, Connected Nation and UETN concluded the Utah School Technology Inventory.

The findings below highlight some key points and showcase specific technology needs among the state's K-12 educational institutions, helping Utah leaders understand digital learning in the state more fully.

Key Results and Findings:

- 100% of Utah's public and charter schools participated in the project;
- More than 380,600 computing devices are available to Utah's nearly 627,000 students, which equates to approximately 0.61 devices per student;
- 246,400 (39%) students still need computers;
- 11% of schools deploy devices on a 1:1 basis to their students;
- Only 5% of schools deploy devices on a 1:1 basis where students are allowed to take their devices home;
- Wi-Fi infrastructure is lacking; 79% of schools have fewer than one wireless access point (AP) per classroom or instructional space;
- To achieve 1 AP per classroom or instructional space, schools would require the installation of an average of 16.8 cable drops and the acquisition of one 24-port switch (15.5 ports required);
- 47% of district and charter school respondents feel that adequate professional development and training resources are not available to help teachers effectively integrate mobile devices into their classrooms; and

- Utah's wired and wireless infrastructure is aging; 64% and 61% of schools report that their wired networking hardware and wireless hardware, respectively, is at least three years old.

INVENTORY RESULTS



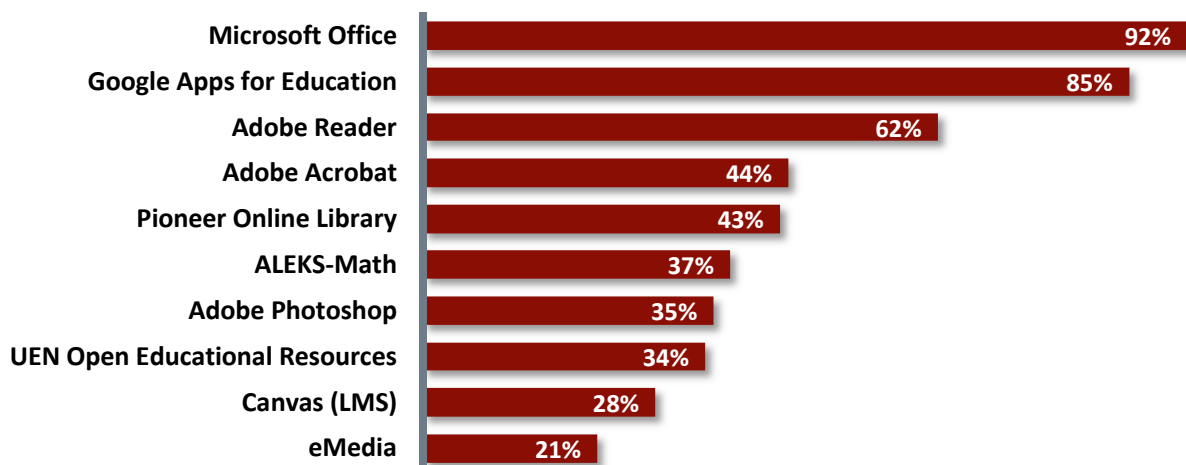
II. Inventory Results

The Utah School Technology Inventory included approximately 45 questions about infrastructure, access, and use of digital learning resources, in addition to perceived needs for the future (Appendix B). The resulting dataset contains over 100,000 points of data on the use of technology in Utah K-12 schools, including digital curricula materials, platforms used, the number and nature of devices in the classrooms, and more. All of these data points were collected, compiled, and validated by Connected Nation (Appendix C). A comprehensive dataset of the findings was provided to UETN on January 15, 2016. With 100% of the state’s schools reporting, Connected Nation found meaningful key points by analyzing the state as a whole, followed by individual school-type analyses (district schools versus charter schools).

a. Statewide Overview

Across Utah, school districts and charter schools¹ integrate a variety of software tools into their curricula (Figure 1).

Figure 1.
Statewide Uses of Each Application



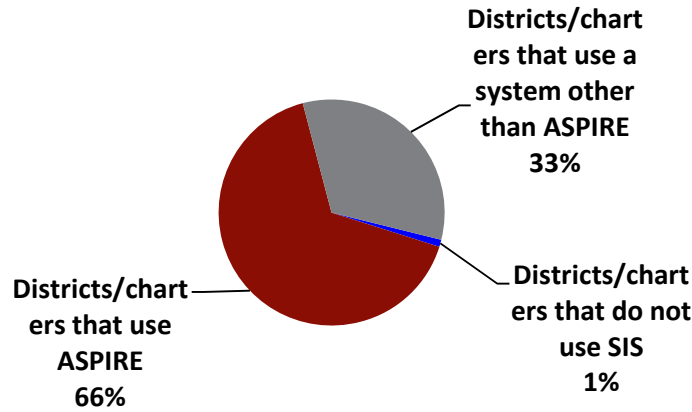
More than nine out of ten Utah school districts and charter schools use Microsoft Office Suite of software tools, with Google Apps for Education following close behind. Adobe tools, such as Reader, Acrobat, and Photoshop are also popular.

Additionally, Utah school districts and charter schools use computing tools to support the educational process. Two out of three districts and charter schools use ASPIRE, Utah’s Student

¹ In this report, “charter schools” refers to public schools created by groups of parents, teachers, or community leaders in the state of Utah. The charter schools surveyed for this analysis have had applications approved by the State Charter School Board or the board of a school district, and do not include home schools or schools where applications may be pending or have not yet been approved.

Information System (SIS), to help with tasks such as tracking student grades, attendance, and to ensure that students are on track academically (Figure 2).

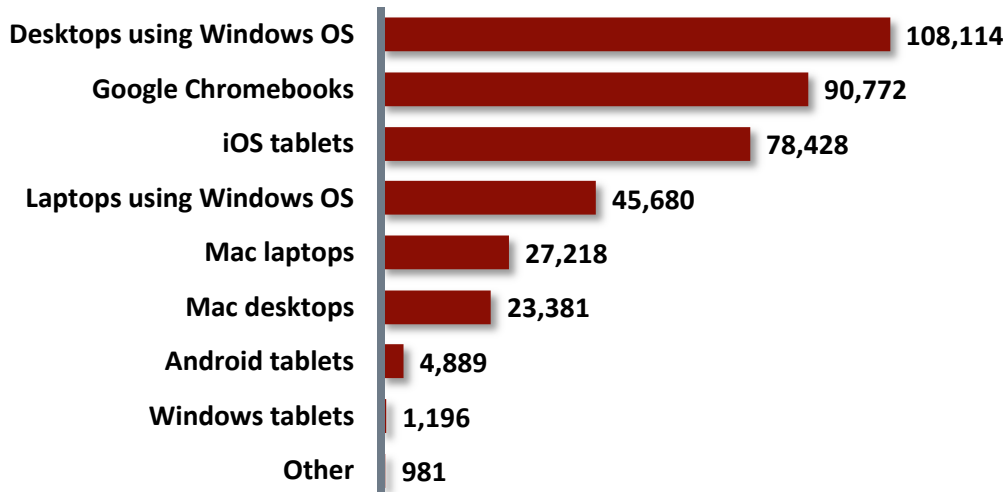
Figure 2.
Utah School Districts and Charters Using Student Information Systems



One in three school districts and charter schools (33%) uses a SIS other than ASPIRE. The remaining 1% of schools does not use a SIS at all. In addition, to better organize student and teacher data, seven out of ten Utah school districts and public charter schools (70%) use the Microsoft Active Directory tool. Nearly every school district and charter school in Utah (99%) uses SAGE, the state’s online assessment tool.

Utah students and administrators are benefiting from access to technology. Statewide, districts and charter schools report that more than 380,600 computing devices are available to students in Utah schools; this translates into 0.61 devices per student. These computing devices run on a variety of platforms (Figure 3).

Figure 3.
Computing Devices Available for Student Use in Utah Schools



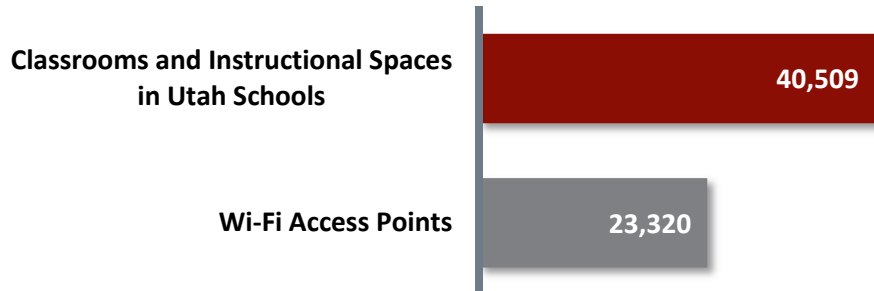
Desktop computers running Windows operating systems are the most widely used computing choice, followed by Google Chromebooks, and tablet computers running Apple’s iOS operating system (such as iPads).

The largest share of Utah schools relies on Cisco Systems for their wireless gear (40%) and wired networking gear (48%), though HP is a close second in terms of wired gear, supplying 46% of Utah schools with such equipment. The majority of Utah schools (61%) still rely on Category 5e cable as their predominant wiring technology, though more than one in four (26%) have upgraded to Category 6, and an additional 1% uses Category 6a as their predominant wiring technology.

Utah schools have integrated mobile computing into multiple facets of Utah’s educational system. Almost every Utah school (97%) has Wi-Fi service available for students to use. Most Utah schools share their wireless controllers with other schools in their district and 802.11n is the most popular wireless standard for Wireless Local Area Networks (WLANs), used by 91% of Utah schools.

Currently, however, Wi-Fi infrastructure generally isn’t sufficient to support wide-scale deployment of mobile computing devices in Utah schools (Figure 4).

Figure 4.
Wi-Fi Access Points Compared to Classrooms and Instructional Spaces



On average, Utah schools report having 0.58 APs per classroom or instructional space (or excluding districts that do not offer Wi-Fi access, 0.65 on average). Statewide, 79% of Wi-Fi-connected schools have fewer than one access point per classroom or instructional space. To achieve 1 AP per classroom or instructional space, schools would require, on average, the installation of 16.8 new cable drops and the acquisition of one 24-port switch (15.5 ports required). Altogether, this translates into more than 17,000 classrooms and instructional spaces without Wi-Fi access points.

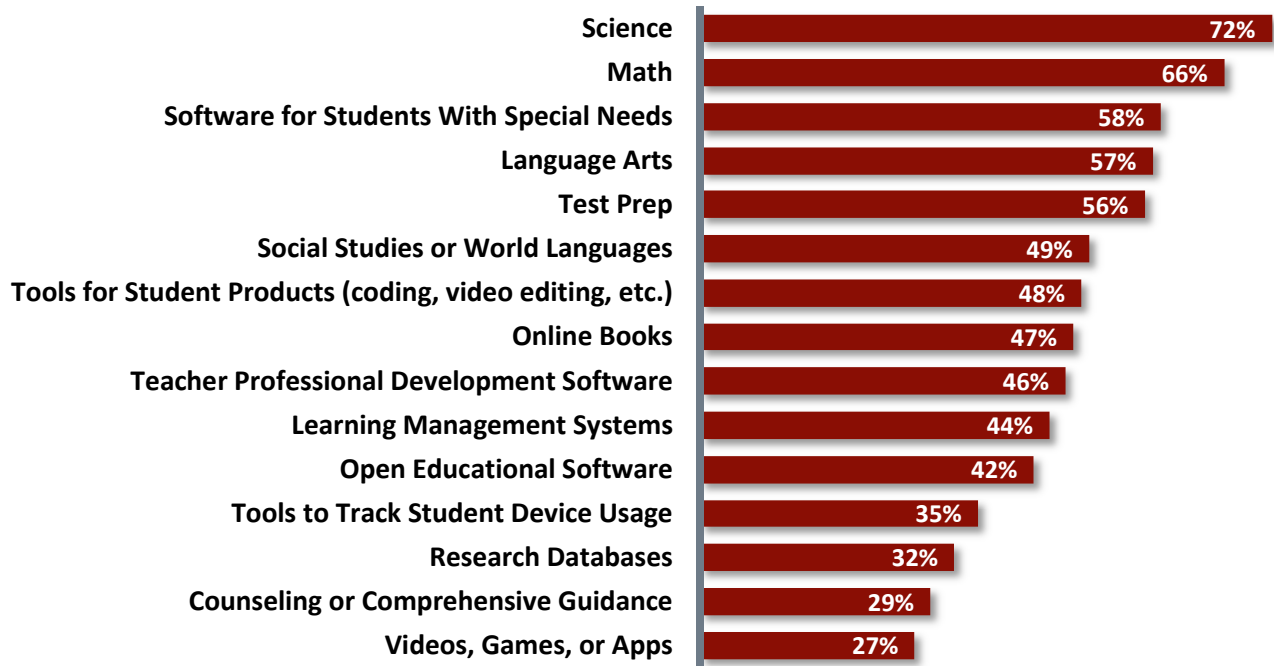
Additionally, only 5% of Utah school districts and charter schools offer 1:1 programs for a portion of their students where those students may take their devices home, while 30% of schools do not have a mobile device management (MDM) solution currently in place.

For many Utah schools, digital textbooks provide opportunities for interactive learning experiences for their students. Nearly two-thirds (64%) of school districts and charter schools report having digital licenses for some of their textbooks, while 28% do not have any digital

licenses. A small number of schools (2%) have currently reported having digital licenses for all textbooks.

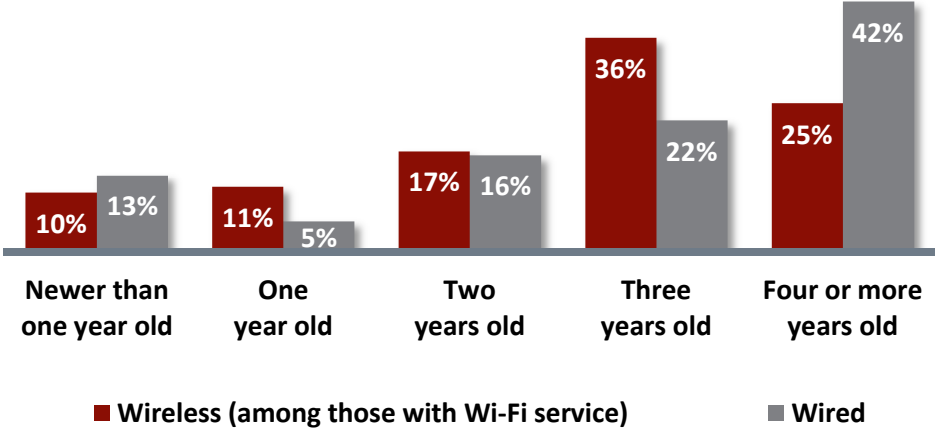
Despite these numbers, Utah school districts and charter schools still recognize a need to stay abreast of educational technology trends or risk falling behind. Nearly one-half of school districts and charter schools (47%) feel that adequate professional development and training resources are not available in their budgets to help teachers effectively integrate mobile devices into their classrooms. School districts and charter schools also identified a variety of instructional software and tools that would benefit them and their students (Figure 5).

Figure 5.
Tools and Software Needs Reported by School Districts and Charter Schools



One hurdle that is crucial for Utah schools to overcome is its aging wireless and wireline hardware (Figure 6).

Figure 6.
Average Age of Hardware in Utah Schools

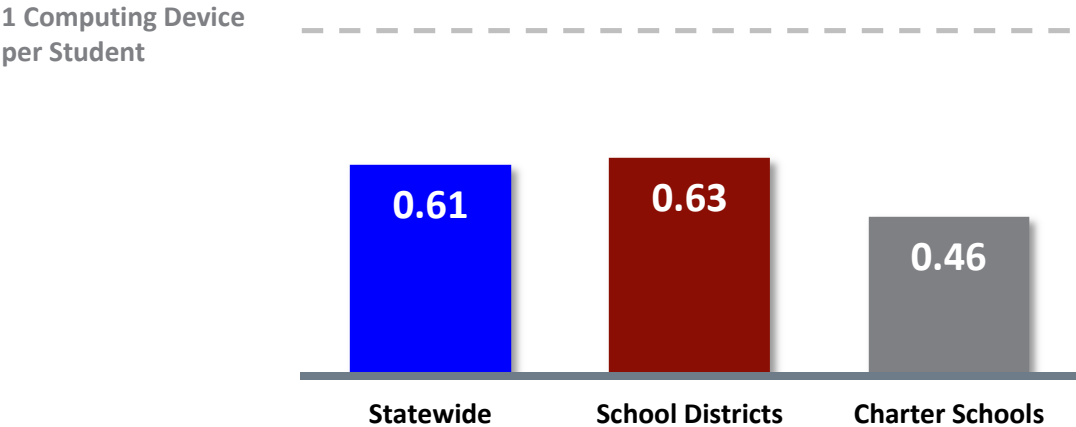


More than three out of five Utah schools (64%) report that their wireline hardware is at least three years old, while a similar percentage of Wi-Fi connected schools (61%) say that their wireless hardware is at least three years old.

b. Devices per Student

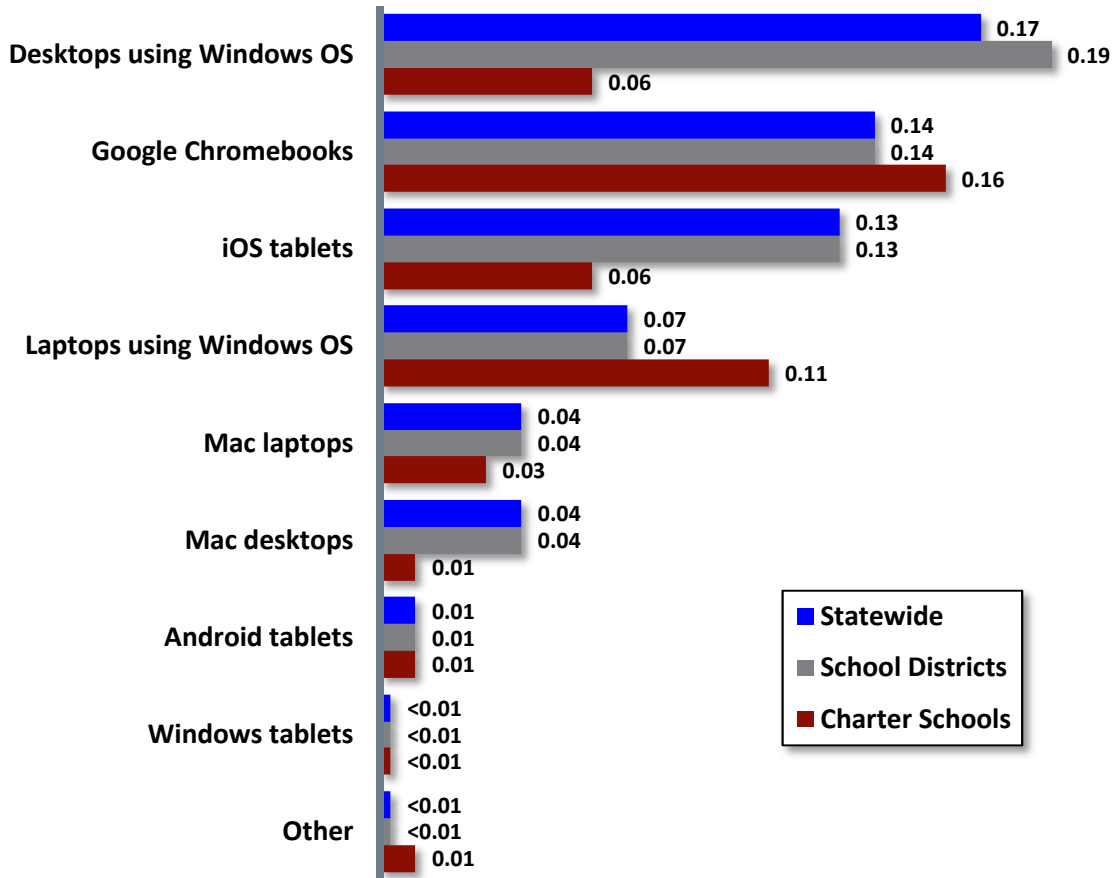
When looking at the data submitted on student devices, the number and use of those devices are notable comparisons. Based on the inventory results, public school districts in Utah have a better overall computer-to-student ratio than charter schools (Figure 7).

Figure 7.
Computing Devices per Student in Utah Schools



While charter school students are more likely to have access to Google Chromebooks and laptops using Windows Operating Systems, Utah school districts have higher computer-to-student ratios for every other type of device (Figure 8).

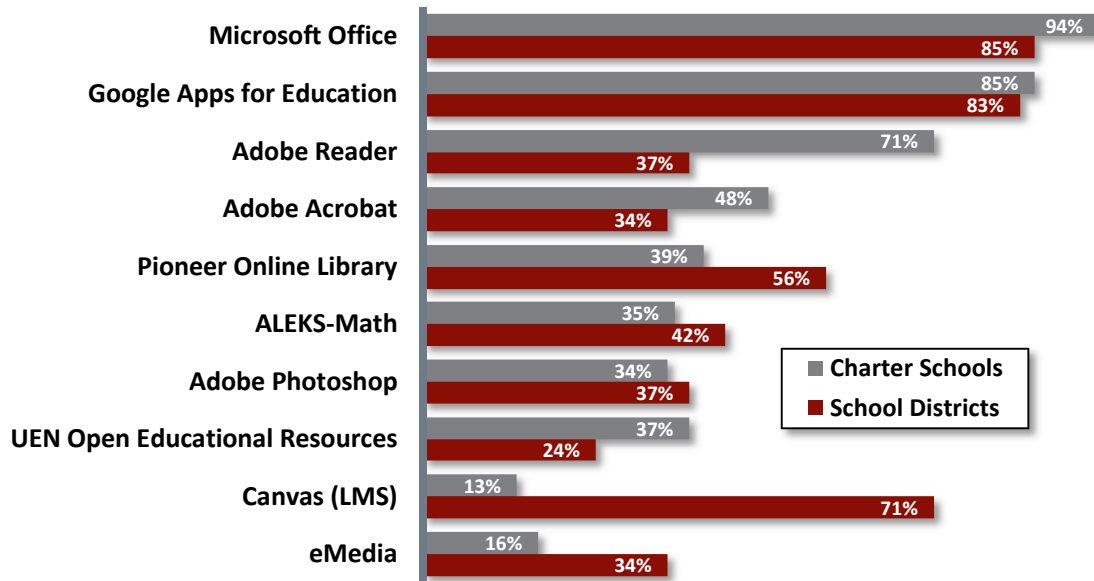
Figure 8.
Types of Computing Device per Student



c. Variances Between Charter Schools and District Schools

Charter schools and public school districts in Utah use a variety of technology applications, but they often use those tools at varying rates and for different purposes (Figure 9).

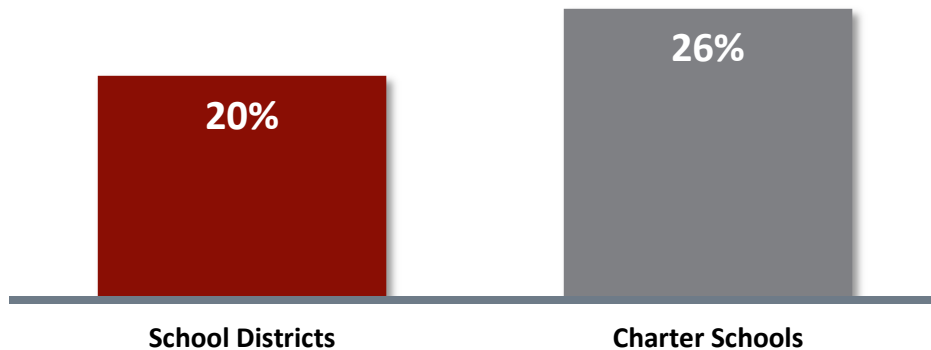
Figure 9.
Utah School Districts and Charters Using Each Application



While charter schools are much more likely to use Microsoft Office Suite and Adobe tools such as Acrobat and Reader, public school districts tend to use other applications as much, if not more than, charter schools. Charter schools are also more likely than public school districts to use ASPIRE for their SIS needs – 72% of charter schools use ASPIRE, compared to only 49% of public school districts. On the other hand, public school districts are much more likely to use Microsoft Active Directory; while 81% of public school districts use this technology, only 66% of charter schools do so.

Charter schools and public school districts overwhelmingly offer Wi-Fi access (provided by 97% of public school districts and 100% of charter schools). However, charter schools are more likely to have one wireless AP per classroom or instructional space (Figure 10).

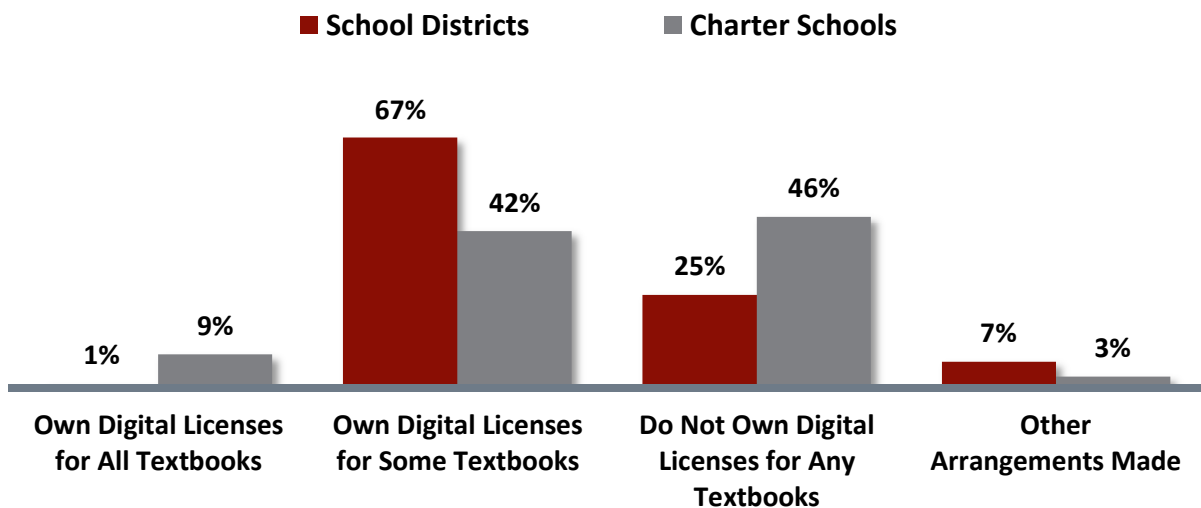
Figure 10.
Percent of School Districts and Charter Schools
With at Least One Wireless Access Point per Classroom or Instructional Space



Among the schools that have fewer than one wireless AP per classroom, charter schools have slightly further to go—charter schools that do not have at least one AP per classroom report that they would need an average of 17.2 new cable drops and 16.8 switch ports, compared to 16.7 cable drops and 15.4 switch ports on average for school districts.

Charter schools and Utah school districts tend to vary in the way that they purchase digital licenses for textbooks, with charter schools more likely to purchase digital licenses for all of their textbooks. Whereas, Utah school districts are overall more likely to own licenses for at least some of their textbooks (Figure 11).

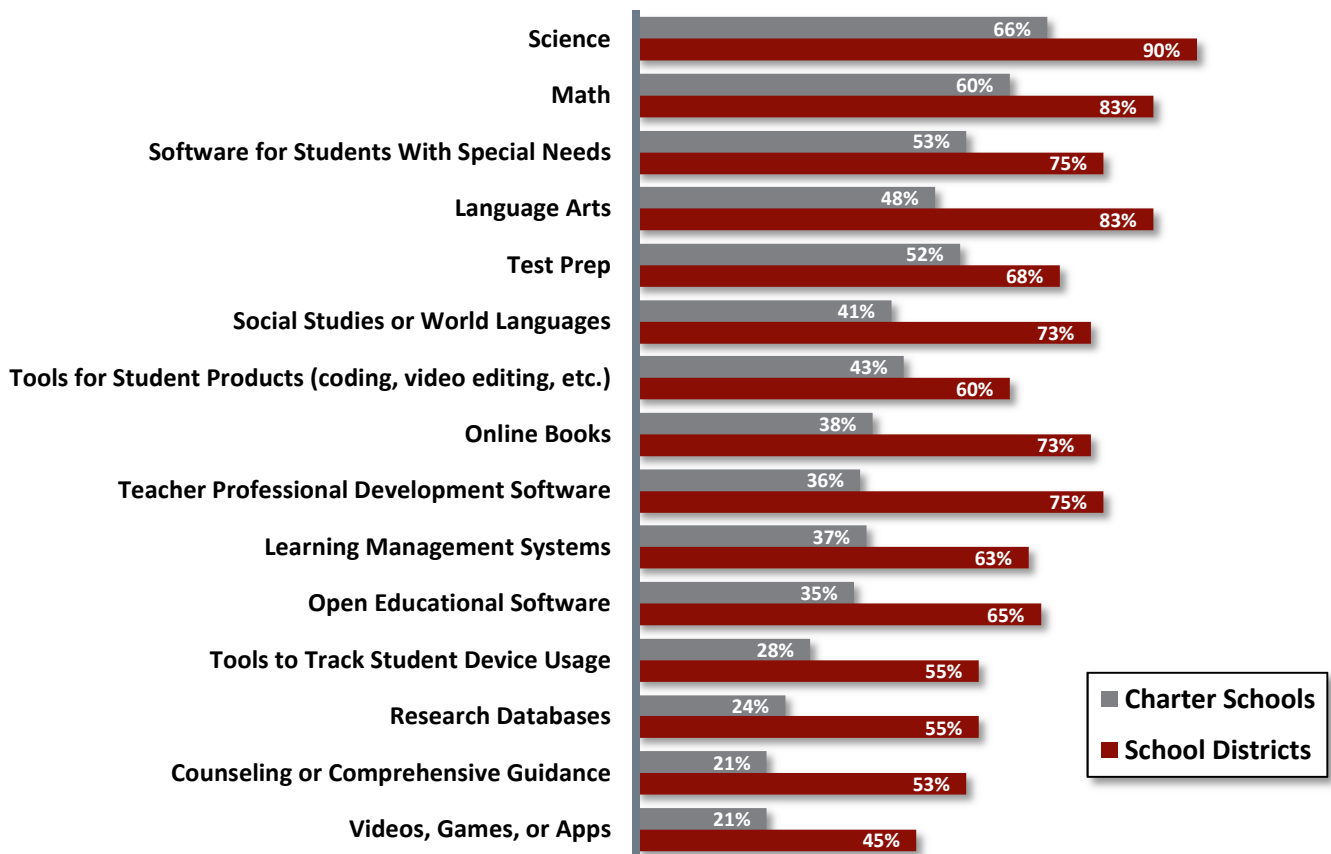
Figure 11.
Digital Content License Agreements in Utah Schools



The difference in digital licensing may influence the 1:1 mobile device policies that schools tend to adopt, yet both charter schools and public school districts allow their students to take devices home via 1:1 programs at similar rates (5% of public school districts, compared to 7% of charter schools).

Although both public school districts and charter schools see the benefits from incorporating technology into the classroom, charter schools are much less likely to report that they have additional instructional software needs (Figure 12).

Figure 12.
Tools and Software Needed by School Districts and Charter Schools



In fact, one in five charter schools (20%) reported that they did not need **any** software or instructional tools for the computer, a claim made by fewer than 1% of school districts. In addition, nearly two-thirds of charter schools (66%) indicated that they had adequate professional development and training resources in their budget to help teachers effectively integrate mobile devices in instruction, compared to only 15% of school districts reporting as such.

This disparity can also be seen in the ages of the wireless and wired devices used in charter schools compared to school districts. More than one in five Wi-Fi connected charter schools (22%) report that their wireless gear is less than one year old on average, compared to only 8% of school districts that can make that claim. In contrast, 44% of school districts stated the wired gear installed in their schools is more than four years old, compared to less than one-quarter (23%) of charter schools revealing the same. However, the wiring technology used in those district schools tends to be more up-to-date, with more districts reporting Category 5e, 6, and 6a wired technology than charter schools (88% of district schools use these wired technologies, compared to 82% of charter schools).

Summary findings for each of the 41 public school districts have been included in this report by way of Appendix D. Findings from the charter schools have been compiled into a single summary document, which is also included in this report (Appendix E).

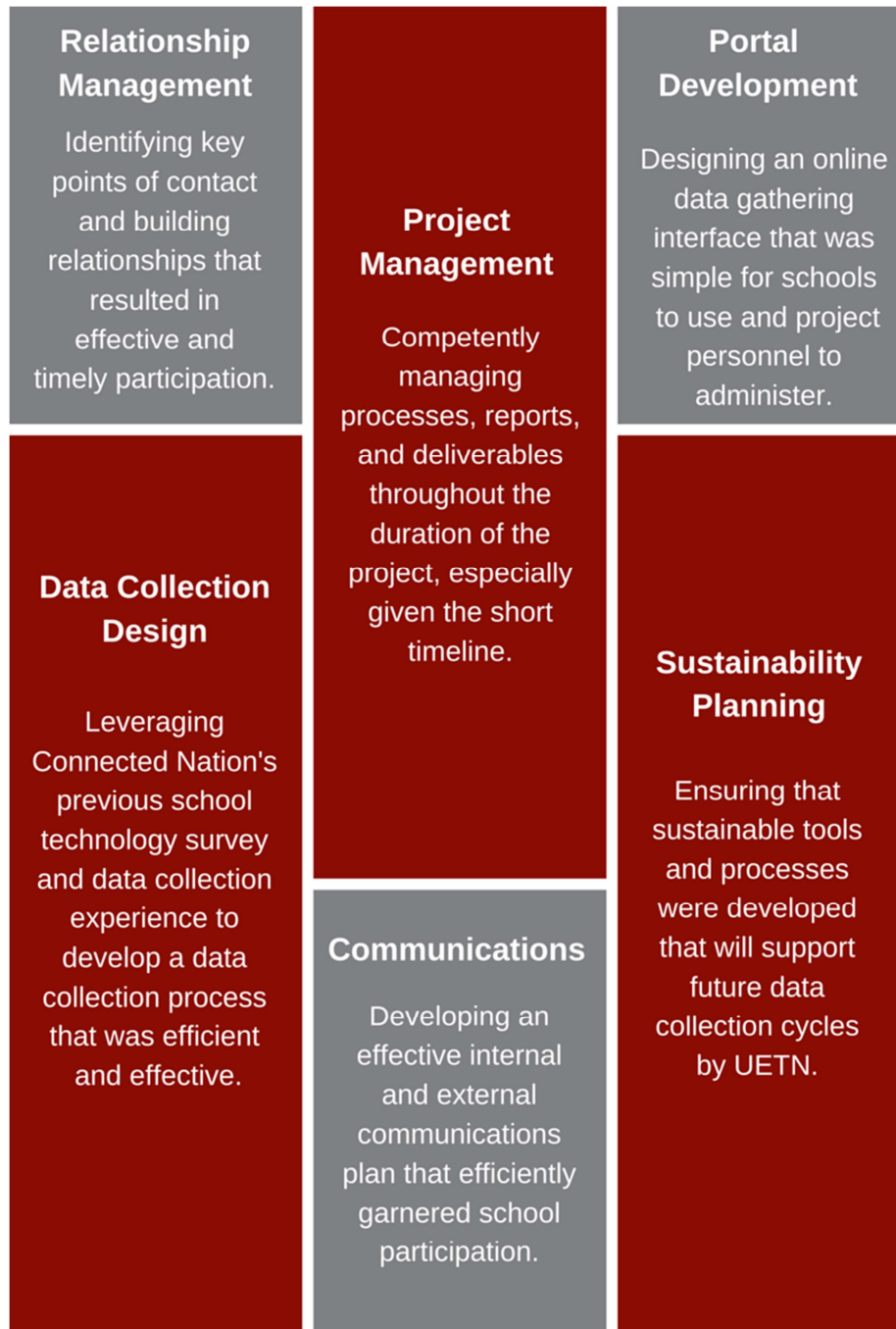
Overall, the findings demonstrate a need among Utah public schools for updated equipment, a greater number of devices and access points, more training for teachers, and additional instructional software.

INVENTORY OVERVIEW AND METHODOLOGY

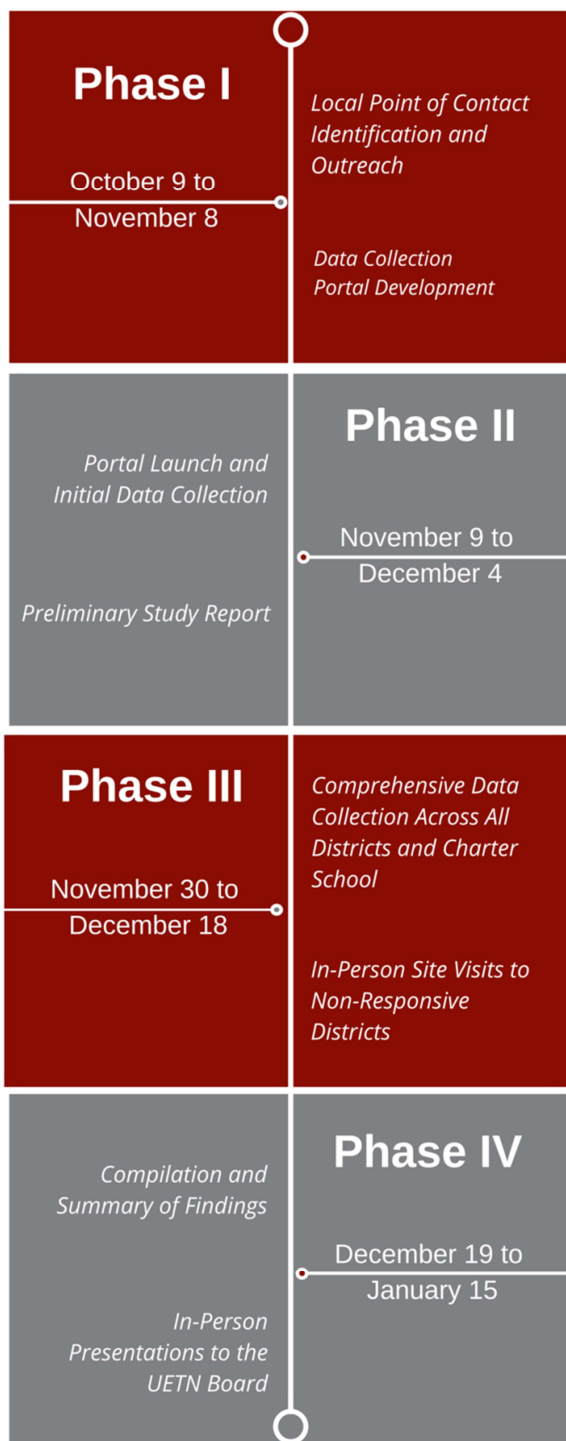


III. Inventory Overview and Methodology

The Utah School Technology Inventory reveals the wide diversity of educational technology tools being used to teach K-12 students in Utah. Connected Nation assembled and validated this diverse set of data by focusing on several key priorities:



With these priorities in mind, the project plan commenced to include four distinct phases from identifying initial points of contact to compiling results from **989 schools serving nearly 627,000** students. With initial team meetings beginning in October, the project was accomplished over an aggressive 14 week timeline.



In addition to this final report and completed dataset, during the project, Connected Nation successfully presented several key deliverables to UETN including a survey instrument, a data collection portal, a pre-formatted spreadsheet, a regional map, and communications and outreach plans, as well as a preliminary report of initial findings.

a. Survey Design and Portal Development

As a vital component of the Utah School Technology Inventory project, Connected Nation developed a web-based data collection portal that effectively allowed for the streamlined collection of all required information at the school level. The portal, which is login-based, provided assigned credentials to each local point of contact. The data collection portal is built with custom design elements and project-specific coding, providing schools time-saving features such as a save-and-return-later functionality.

Because educational technology is rapidly changing, Connected Nation designed the data collection portal with future data collections in mind. As a result, UETN will be able to use the portal to request school points of contact to update or confirm information on changes in the nature and use of technology in the classroom. Each point of contact's login credentials will not expire, and the portal will allow for automated password management/reset. In addition, UETN personnel will have the capability to provision additional user accounts and deactivate existing users in the future. Data from the portal are exportable in a variety of formats.

Because the portal needed to accommodate both large school districts with dozens of schools to single-school charters, Connected Nation designed the portal to provide a variety of response options. Charter schools or districts were asked to fill out a single profile for the district (or equivalent) that included contact information, number of schools administered by the local education agency, aggregated enrollment and staff data, and applications and assessment solutions in use. For tracking purposes, each point of contact listed his or her district's or charter school's identification number assigned by the U.S. Department of Education's National Center for Education Statistics (NCES).

Once the district profile was created, the district or school was asked to create school-level profiles for each school administered. School profiles were divided into two sections: (1) principal contact information, enrollment data, and statistics on the number of active classrooms and employed teachers, and (2) technology inventory questions regarding wireless technology, devices, and other digital learning tools.

In future years, should the data collection/inventory process be repeated, UETN can allow local points of contact to log back in to the system, access their previously submitted responses, and make changes as necessary—without the need to re-enter information from scratch. This will allow UETN personnel and contracted vendors to track and analyze technology deployment trends over time.

b. Preformatted Spreadsheet

While all districts were encouraged to submit information through the online portal, providing individualized information for each school represented a time-consuming task for larger districts that represented many schools. To address this issue, and make the data collection as

easy as possible for all districts, Connected Nation developed a pre-formatted Excel spreadsheet that was supplied to districts on an as-needed basis. Nine school districts chose to submit information in this manner including: Alpine School District, Canyons School District, Iron County School District, Juab School District, Nebo School District, Open Classroom, Salt Lake City School District, Salt Lake Center for Science Education, and Washington School District.

To ensure this information is captured and made readily available to UETN for future uses, the nine district spreadsheets received were uploaded into the online data collection portal alongside the remaining districts and charter schools.

c. Outreach

Much of the success of the Utah School Technology Inventory project is thanks to the rapid response to data requests by dozens of school and district points of contact. Many of these responses occurred during testing periods and busy school periods preceding the winter break. Mobilizing these responses was the result of outreach efforts of UETN and Connected Nation. From on-site visits by regional data collection managers to personal outreach and social media postings by UETN, districts and charter schools across Utah were made fully aware of the importance of the data collection efforts and were provided hands-on guidance to help ensure that their school or district information was appropriately represented.

i. Regional Data Collection Managers

On November 30, 2015, Connected Nation deployed three regional data collection managers to Utah to begin outreach to unresponsive points of contact. By traveling to schools and districts across Utah, the data collection managers were able to assist smaller charter schools with very limited resources available for completing the inventory, as well as extremely sizable districts with a large amount of data to report. By providing a one-on-one support system for points of contact, the remaining data were collected for a comprehensive and all-inclusive analysis of schools' digital learning needs.

ii. Communications Efforts

In addition to word-of-mouth communications and on-site visits, UETN partnered with Connected Nation to develop a communications plan which would further supplement the ongoing data collection efforts. Through effective outreach strategies to build awareness and increased participation, communications efforts aided the project in accomplishing its goal of one hundred percent participation. Strategies employed included:

Conference Calls

Through frequent internal touch points between Connected Nation and UETN, from the project's earliest stages until its conclusion, communication remained a priority. In addition, Connected Nation and UETN hosted a demonstration webinar for the online survey portal tool that allowed school and district points of contact the opportunity to

learn how to use the application, as well as ask questions regarding the information to be 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 mass e-mail outreach through UETN listservs.

d. Regional Map

To guide the regional data collection managers, the state's schools were divided into three zones, or regions. These zones determined the data collection manager assigned to each school or district. To provide visualization to the project logistics, a regional map was created by Connected Nation and distributed to internal staff and UETN (Appendix F).

CONCLUSION



IV. Conclusion

With 100% of public schools in Utah responding to the inventory, Connected Nation and UETN learned a significant amount about the current state of digital learning among districts and charter schools. The success of the Utah School Technology Inventory was undoubtedly due to the committed efforts of school staff who understood the express need to share their technology inventory with the state of Utah. By creating an easily accessible data collection portal and pre-formatted spreadsheet that can be used in the future by Utah's education community and through dedicated outreach efforts, Connected Nation and UETN sought to develop a sustainable path for keeping Utah informed and up-to-date on the needs of digital learning in the state.

While it is clear from the results of the survey that Utah educators are using technology in an important and dedicated manner, the needs of schools across the state are still great. With only eleven percent of schools offering 1:1 initiatives and 0.61 devices per student statewide, students in Utah could benefit significantly by effective 1:1 initiative rollouts. Additionally, there is a need for more access points per classroom, as well as greater opportunities among teachers for professional development and training resources. Lastly, not only are more devices recommended in Utah schools, but newer wireless and wired equipment is also an apparent need. With the data presented in this report and in the corresponding comprehensive dataset, the State of Utah is one step closer to closing the digital divide among Utah's students as educators remain committed to providing the best and most efficient means for learning possible for their students.

APPENDIX



Appendix A: Senate Bill 222

DIGITAL TEACHING AND LEARNING PROGRAM PROPOSAL

2015 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Howard A. Stephenson

House Sponsor: Francis D. Gibson

LONG TITLE

General Description:

This bill requires the State Board of Education and UETN to develop a digital teaching and learning program proposal and provide technical support to LEAs.

Highlighted Provisions:

This bill:

- ▶ requires the State Board of Education to establish a digital teaching and learning task force to develop a funding proposal for digital teaching and learning in elementary and secondary schools;
- ▶ requires the State Board of Education to develop a master plan for a statewide digital teaching and learning program;
- ▶ requires the Utah Education and Telehealth Network:
 - to conduct an inventory of the public education system's current technology resources;
 - to perform an engineering study to determine the technology infrastructure needs of the public education system to implement a digital teaching and learning program; and
 - as funding allows, to provide infrastructure and technology support for school districts and charter schools; and
- ▶ requires the State Board of Education and the Utah Education and Telehealth Network to report to the Education Interim Committee and the Executive Appropriations Committee.

Money Appropriated in this Bill:

- 30 This bill appropriates in fiscal year 2016:
- 31 ▶ to the Utah Education and Telehealth Network as a one-time appropriation:
- 32 • from the Education Fund, \$4,000,000; and
- 33 ▶ to the State Board of Education - Utah State Office of Education - Initiative
- 34 Programs as a one-time appropriation:
- 35 • from the Education Fund, \$1,000,000.

36 **Other Special Clauses:**

37 This bill provides a special effective date.

38 This bill provides a coordination clause.

39 **Utah Code Sections Affected:**

40 ENACTS:

41 **53A-1-710**, Utah Code Annotated 1953



43 *Be it enacted by the Legislature of the state of Utah:*

44 Section 1. Section **53A-1-710** is enacted to read:

45 **53A-1-710. Digital teaching and learning program task force -- Funding proposal**

46 **for a program -- Master plan -- Reporting requirements.**

47 (1) As used in this section:

48 (a) "Board" means the State Board of Education.

49 (b) "Core subject areas" means the following subject areas:

50 (i) English language arts;

51 (ii) mathematics;

52 (iii) science; and

53 (iv) social studies.

54 (c) "High quality professional learning" means the professional learning standards

55 described in Section [53A-3-701](#).

56 (d) "LEA plan" means an LEA's plan to implement a digital teaching and learning

57 program that meets requirements set by the board.

58 (e) "Local education agency" or "LEA" means:

59 (i) a school district;

60 (ii) a charter school; or

61 (iii) the Utah Schools for the Deaf and the Blind.

62 (f) "Statewide assessment" means a test of student achievement in English language
63 arts, mathematics, or science, including a test administered in a computer adaptive format,
64 which is administered statewide under Part 6, Achievement Tests.

65 (g) "Utah Education and Telehealth Network" or "UETN" means the Utah Education
66 and Telehealth Network created in Section [53B-17-105](#).

67 (2) (a) The board shall establish a digital teaching and learning task force to develop a
68 funding proposal to present to the Legislature for digital teaching and learning in elementary
69 and secondary schools.

70 (b) The digital teaching and learning task force shall include representatives of:

71 (i) the board;

72 (ii) UETN;

73 (iii) LEAs; and

74 (iv) the Governor's Education Excellence Commission.

75 (3) (a) The board, in consultation with the digital teaching and learning task force
76 created in Subsection (2), shall create a funding proposal for a statewide digital teaching and
77 learning program designed to:

78 (i) improve student outcomes through the use of digital teaching and learning
79 technology; and

80 (ii) provide high quality professional learning for educators to improve student
81 outcomes through the use of digital teaching and learning technology.

82 (b) The board shall:

83 (i) identify outcome based metrics to measure student achievement related to a digital
84 teaching and learning program; and

85 (ii) develop minimum benchmark standards for student achievement and school level

86 outcomes to measure successful implementation of a digital teaching and learning program.

87 (4) As funding allows, the board shall develop a master plan for a statewide digital
88 teaching and learning program, including the following:

89 (a) a statement of purpose that describes the objectives or goals the board will
90 accomplish by implementing a digital teaching and learning program;

91 (b) a forecast for fundamental components needed to implement a digital teaching and
92 learning program, including a forecast for:

93 (i) student and teacher devices;

94 (ii) Wi-Fi and wireless compatible technology;

95 (iii) curriculum software;

96 (iv) assessment solutions;

97 (v) technical support;

98 (vi) change management of LEAs;

99 (vii) high quality professional learning;

100 (viii) Internet delivery and capacity; and

101 (ix) security and privacy of users;

102 (c) a determination of the requirements for:

103 (i) statewide technology infrastructure; and

104 (ii) local LEA technology infrastructure;

105 (d) standards for high quality professional learning related to implementing and
106 maintaining a digital teaching and learning program;

107 (e) a statewide technical support plan that will guide the implementation and
108 maintenance of a digital teaching and learning program, including standards and competency
109 requirements for technical support personnel;

110 (f) (i) a grant program for LEAs; or

111 (ii) a distribution formula to fund LEA digital teaching and learning programs;

112 (g) in consultation with UETN, an inventory of the state public education system's
113 current technology resources and other items and a plan to integrate those resources into a

114 digital teaching and learning program;

115 (h) an ongoing evaluation process that is overseen by the board;

116 (i) proposed rules that incorporate the principles of the master plan into the state's
117 public education system as a whole; and

118 (j) a plan to ensure long-term sustainability that:

119 (i) accounts for the financial impacts of a digital teaching and learning program; and

120 (ii) facilitates the redirection of LEA savings that arise from implementing a digital
121 teaching and learning program.

122 (5) UETN shall:

123 (a) in consultation with the board, conduct an inventory of the state public education
124 system's current technology resources and other items as determined by UETN, including
125 software;

126 (b) perform an engineering study to determine the technology infrastructure needs of
127 the public education system to implement a digital teaching and learning program, including
128 the infrastructure needed for the board, UETN, and LEAs; and

129 (c) as funding allows, provide infrastructure and technology support for school districts
130 and charter schools.

131 (6) On or before December 1, 2015, the board and UETN shall present the funding
132 proposal for a statewide digital teaching and learning program described in Subsection (3) to
133 the Education Interim Committee and the Executive Appropriations Committee, including:

134 (a) the board's progress on the development of a master plan described in Subsection
135 (4); and

136 (b) the progress of UETN on the inventory and study described in Subsection (5).

137 **Section 2. Appropriation.**

138 Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for
139 the fiscal year beginning July 1, 2015, and ending June 30, 2016, the following sums of money
140 are appropriated from resources not otherwise appropriated, or reduced from amounts
141 previously appropriated, out of the funds or accounts indicated. These sums of money are in

142 addition to any amounts previously appropriated for fiscal year 2016.

143 To State Board of Education - Utah State Office of Education

144 From Education Fund, one-time \$1,000,000

145 Schedule of Programs:

146 Board and Administration \$1,000,000

147 To the Utah Education and Telehealth Network

148 From Education Fund, one-time \$4,000,000

149 Schedule of Programs:

150 Technical Services \$4,000,000

151 The Legislature intends that:

152 (1) the State Board of Education use the \$1,000,000 appropriation to the State Board of
153 Education under this section to establish a task force and prepare a funding proposal for a
154 statewide digital teaching and learning program as described in Section 53A-1-710; and

155 (2) the Utah Education and Telehealth Network use the \$4,000,000 appropriation to the
156 Utah Education and Telehealth Network:

157 (a) to conduct an inventory of the state public education system's current technology
158 resources as required in Section 53A-1-710;

159 (b) to perform an engineering study as required in Section 53A-1-710; and

160 (c) for infrastructure and technology support for school districts and charter schools.

161 **Section 3. Effective date.**

162 (1) Except as provided in Subsection (2), this bill takes effect on May 12, 2015.

163 (2) Uncodified Section 2, Appropriation, takes effect on July 1, 2015.

164 **Section 4. Coordinating H.B. 222 with H.B. 2 -- Substantive and technical**
165 **amendments.**

166 If this S.B. 222 and H.B. 2, Public Education Budget Amendments, both pass and
167 become law, the Legislature intends that the following intent language applies to H.B. 2

168 Uncodified Section 3, Operating and capital budgets, "The Legislature intends that the State
169 Board of Education may use the appropriation for K-12 Digital Literacy for purposes of

170 creating a digital teaching and learning task force and funding proposal as described in Section
171 [53A-1-710.](#)"

Appendix B: Survey Questionnaire

SB222 Digital Teaching & Learning Inventory Project

in cooperation with Connected Nation, Inc.
Questions marked with a red asterisk (*) are required.

District Primary Point of Contact Details

2. School District or Local Education Agency (LEA) Name *

3. NCES District ID Number *

If you do not know your ID number, please use the [NCES database search](#) to find it.

4. Primary Point of Contact Details

First Name *

Last Name *

Title *

Street Address *

Apt/Suite/Office

City *

State *



ZIP *

County *

Office Number *

Extension (if applicable)

Mobile Number *

Email Address *

District Technology Profile

5. Across all schools within your district/local education agency (LEA), how many full-time equivalent staff members in total (employees and contractors) are available to provide tech support at the school level? *

Number of Employees

Number of Contracted Staff

6. Across all schools within your district/local education agency (LEA), how many full-time equivalent staff members in total (employees and contractors) are available to provide instructional technology support at the school level?

*

Number of Employees

Number of Contracted Staff

7. What are the top 10 software applications that are being used to support teaching and learning in your district? *

- Microsoft Office
- Google Apps for Education
- Adobe Acrobat
- Adobe Acrobat Reader
- Adobe Photoshop
- Canvas (LMS)
- Pioneer Online Library
- eMedia
- UEN Open Educational Resources
- ALEKS-Math
- LMS (Other) - Insert Name
- Literacy Software (Other) - Insert Name
- Math Software (Other) - Insert Name
- Other - Insert Name

Other - Insert Name

Other - Insert Name

Other - Insert Name

Other - Insert Name

Other - Insert Name

Other - Insert Name

8. What are the top assessment solutions that are currently in use in your district? *

SAGE

Other - Insert Name

Other - Insert Name

Other - Insert Name

Other - Insert Name

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

No

Yes - ASPIRE

Yes - Other

*

10. Does your district utilize Microsoft Active Directory (AD) for student and teacher accounts? *

Yes

No

11. 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

12. 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

School Technology Profile

13. School Name *

14. NCES School ID Number *

If you do not know your ID number, please use the [NCES database search](#) to find it.

15. School Physical Address

Street Address *

Apt/Suite/Office

City *

State *



ZIP *

County *

16. What type of school is this? *

- District School
- Charter School

17. School Category *

- Elementary School
- Middle School
- High School
- Combined School (e.g., K-12 or 7-12)

18. 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)

19. Number of Students Enrolled (as of October 1) *

20. Number of Classroom Teachers, including full-time, part-time, and contractors (as of November 1) *

21. How many active instructional spaces (e.g., classrooms, libraries, gymnasiums, cafeterias, labs, and other separate spaces) does the school contain in total? *

22. Does this school currently have a Wi-Fi network in place? *

Yes

No

23. How many wireless access points (APs) are currently deployed school-wide (including outdoor units)? *

24. Does this school have, on average, at least 1 AP installed per classroom/instructional space?

Yes

No

25. How many new network cable drops and switch ports would be needed to install an AP in every classroom?

New Cable Drops

New Switch Ports

26. 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

27. What is the dominant vendor of your **wireless** networking gear?

- Aerohive
- Aruba
- Cisco
- HP
- Meraki
- Ruckus
- Xirrus
- Other (Insert Name)

*

28. 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

29. 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

30. Do teachers and administrators connect to a Wi-Fi SSID that is separate from the one that students use? *

- Yes
- No

31. What is the dominant vendor of your **wired** networking gear?

- Aerohive
- Aruba
- Cisco
- HP
- Meraki
- Ruckus
- Xirrus
- Other (Insert Name)

*

32. What is the predominant switch vendor for equipment installed in this school?

33. What is the total number of switches installed in this school?

34. 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

35. What is the predominate wiring technology in this school?

- Cat 4
- Cat 5
- Cat 5e
- Cat 6
- Cat 6a

36. What type of firewall is employed at this school?

37. What type of content filter is in place at this school?

38. Is the filtering solution hardware-based (i.e., in the network) or software-based (i.e., installed on the device)? *

- Hardware-Based
- Software-Based

39. 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
- None, but students are allowed to use their own personal mobile devices in school under a BYOD (“Bring Your Own Device”) policy
- Other

40. How many devices are currently **deployed** and **in active use** in the school? *

	Student Use	Teacher/Administrator Use
Windows Desktop	<input type="text"/>	<input type="text"/>
Windows Laptop	<input type="text"/>	<input type="text"/>
Mac Desktop	<input type="text"/>	<input type="text"/>
Mac Laptop	<input type="text"/>	<input type="text"/>
Google Chromebook	<input type="text"/>	<input type="text"/>
Windows Tablet	<input type="text"/>	<input type="text"/>
Android Tablet	<input type="text"/>	<input type="text"/>
Apple iOS Tablet (iPad Pro, iPad, or iPad Mini)	<input type="text"/>	<input type="text"/>
Other	<input type="text"/>	<input type="text"/>

41. Does the school have a Mobile Device Management (MDM) solution in place to manage school-owned devices? If yes, please name the solution(s). *

No

Yes, a single solution

*

Yes, multiple solutions

*

42. Does the school already own digital content licenses for its textbooks? *

All textbooks

Some textbooks, but not all

None

Other (Please Explain)

*

District Future Needs Questions

43. 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? *

44. 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 PD 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 Databases (like Pioneer)
- Tools to Track Student Use
- Books, Online Books

Other

*

Other

*

45. 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 (Please Explain)

Disclaimer and Acknowledgements

46. Please affirm *

- By checking this box and clicking "Submit" below, I affirm that the information submitted via this portal is true and accurate to the best of my knowledge. I understand and acknowledge that the information I am submitting is being collected for the purpose of performing an inventory of the Utah state public education system's current technology resources. I agree that my responses may be used by the University of Utah, the Utah Education and Telehealth Network (UETN), or their agents, contractors, affiliates, or assigns for the purpose of completing such survey, or for similar or related future uses. I also understand and acknowledge that the information I submit may become a public record under applicable law. To the extent required by law, I grant the University of Utah, UETN, and their agents, contractors, affiliates, or assigns, the a non-exclusive license to use any information I submit for the purpose of completing the survey, or for similar or related future uses. I waive any claim I have or may have in the future arising from or related to such use.

Appendix C: About Connected Nation



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 20 states 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.

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 also 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.

Recently, Connected Nation’s Connect Alaska program undertook a project called the Alaska School Broadband Audit, where Connected Nation assessed school connectivity in every school across all 53 of Alaska’s public school districts. Connect Alaska conducted a series of rigorous data collection projects including telephonic and online surveys and participation requests sent via e-mail to capture the current state and future broadband needs of K-12 public school districts in Alaska. The data was then validated through direct, on-site visits to the districts. This type of data collection and on-the-ground presence allowed Connected Nation staff members to better understand the needs of the school districts, their unique individual schools, and the needs of students and teachers in the state.

For more information on Connected Nation, please visit www.connectednation.org.

Appendix D: Statewide Summary Pages



Utah Public Schools

Computing Devices per Student



Utah district and charter schools average

0.61

computing devices per student.

Computing Devices Used in Schools

Statewide Total for Student Use

Statewide Total for Teacher or Administrator Use

Computing Devices Used in Schools	Statewide Total for Student Use	Statewide Total for Teacher or Administrator Use
Desktops Using Windows OS	108,114	28,238
Laptops Using Windows OS	45,680	9,587
Mac Desktops	23,381	3,826
Mac Laptops	27,218	11,640
Google Chromebooks	90,772	1,508
Windows Tablets	1,196	257
Android Tablets	4,889	213
iOS Tablets	78,428	18,122

Utah schools average

0.58

Wi-Fi access points per classroom or instructional space.

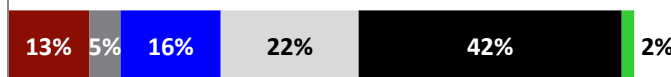


Participant Summary

Students Represented	628,500
Schools Represented	989
School Districts Represented	41
Charter Schools Represented	121

Networking Gear in Schools

Age of Wired Gear Statewide



Age of Wireless Gear Statewide

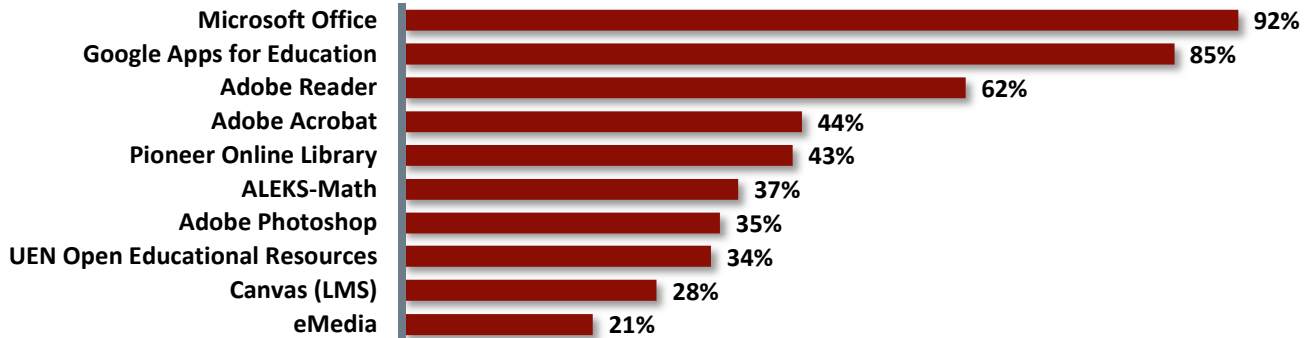


- Less than 1 year old
- 1 year old
- 2 years old
- 3 years old
- 4+ years old
- Unknown

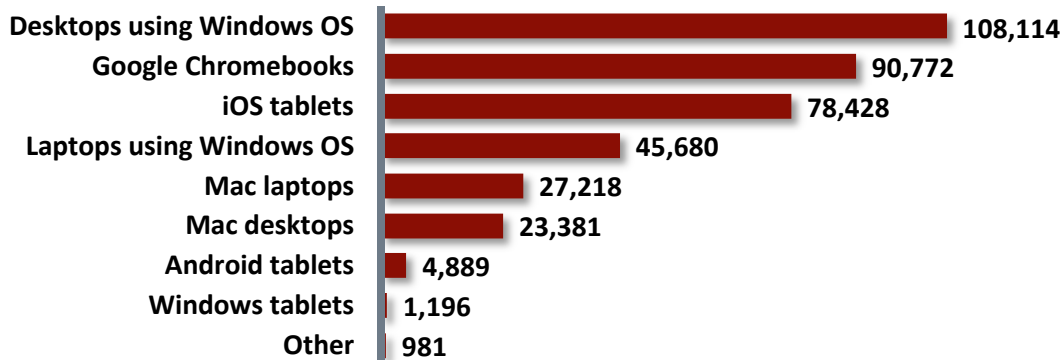


Summary of Results

Software Applications Used by Utah Public Schools



Computing Devices Available to Utah Public School Students



Utah Schools Using Student Information Systems



- Schools that do not use student information systems
- Schools that use ASPIRE
- Schools that use a system other than ASPIRE

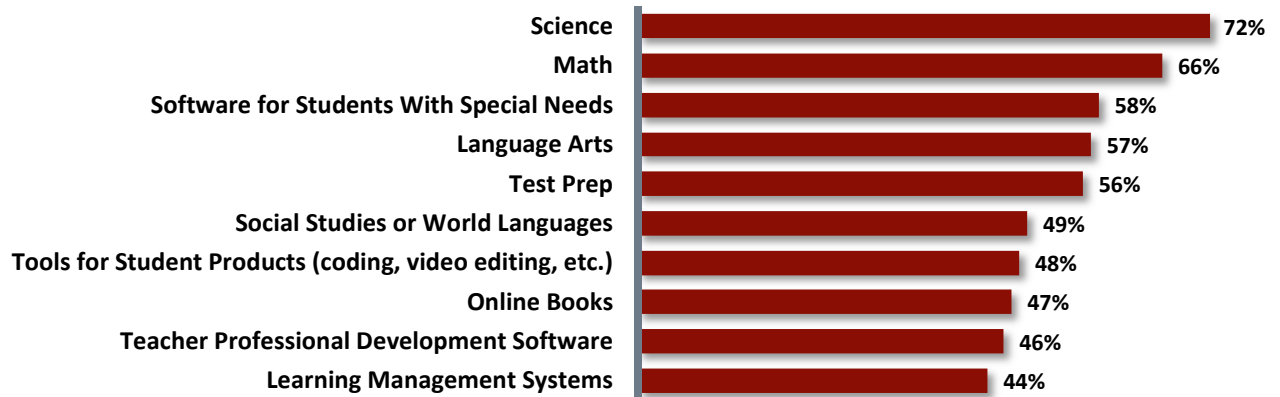


UTAH

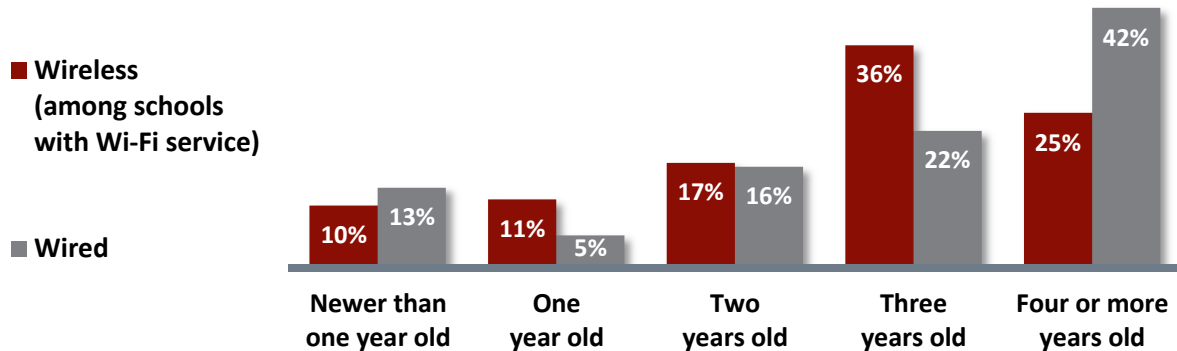
School Technology Inventory



Top 10 Tool and Software Needs Reported by Utah Public Schools



Average Age of Hardware in Utah Public Schools



Wi-Fi Access Points per Classroom or Instructional Space

Classrooms and Instructional Spaces in Utah Schools

40,509

Wi-Fi Access Points

23,320

For more information, visit www.uen.org/digital-learning

Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.

Appendix E: School District Summary Pages



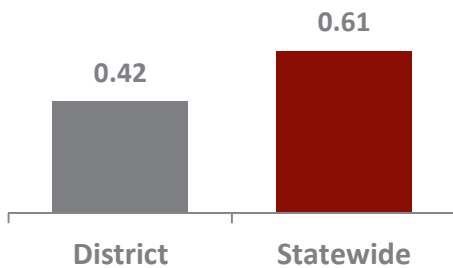
UTAH

School Technology Inventory

Alpine School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	4,844	1,263
Laptops Using Windows OS	2,155	1,441
Mac Desktops	5,921	696
Mac Laptops	2,679	3,556
Google Chromebooks	7,935	70
Windows Tablets	49	2
Android Tablets	2,706	11
iOS Tablets	5,231	1,545

0.82 Wi-Fi Access Points

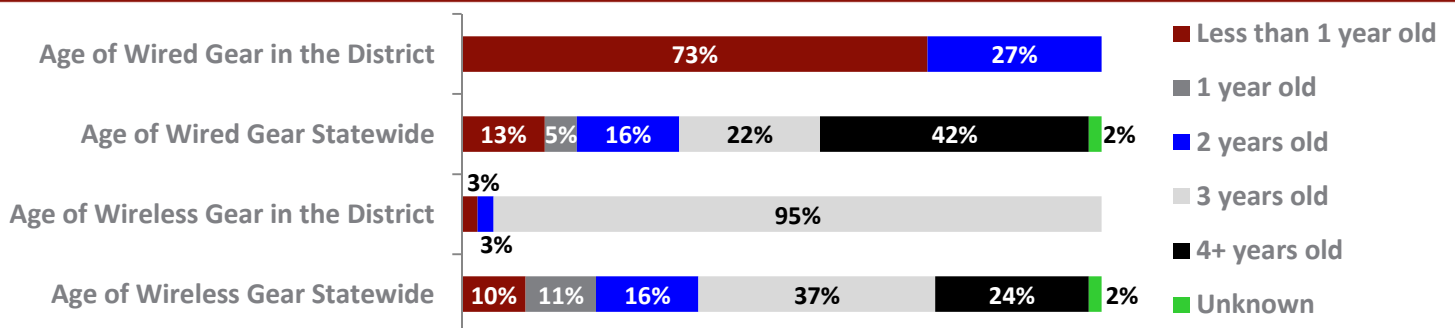
Per Classroom Compared to

0.58 Statewide

District Facts

Population	301,887
Student Body Size	74,432
Number of Schools	81
Urban/Rural	Urban
Median Household Income	\$67,073
Poverty Rate	10.2%
Free/Reduced Lunch Eligible	26.4%

Networking Gear in Schools

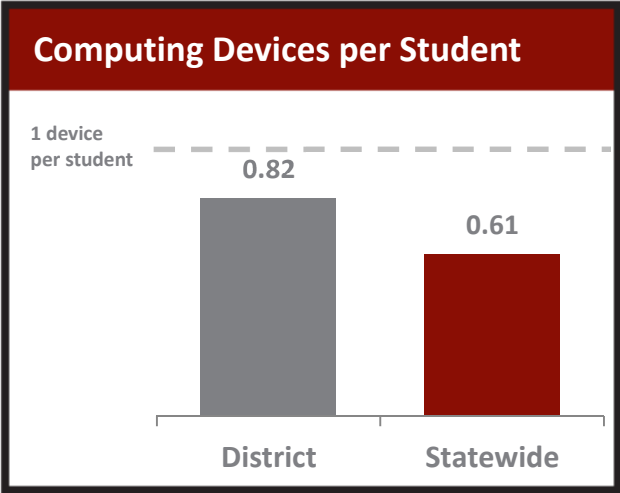


For more information, visit www.uen.org/digital-learning

Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Beaver County School District



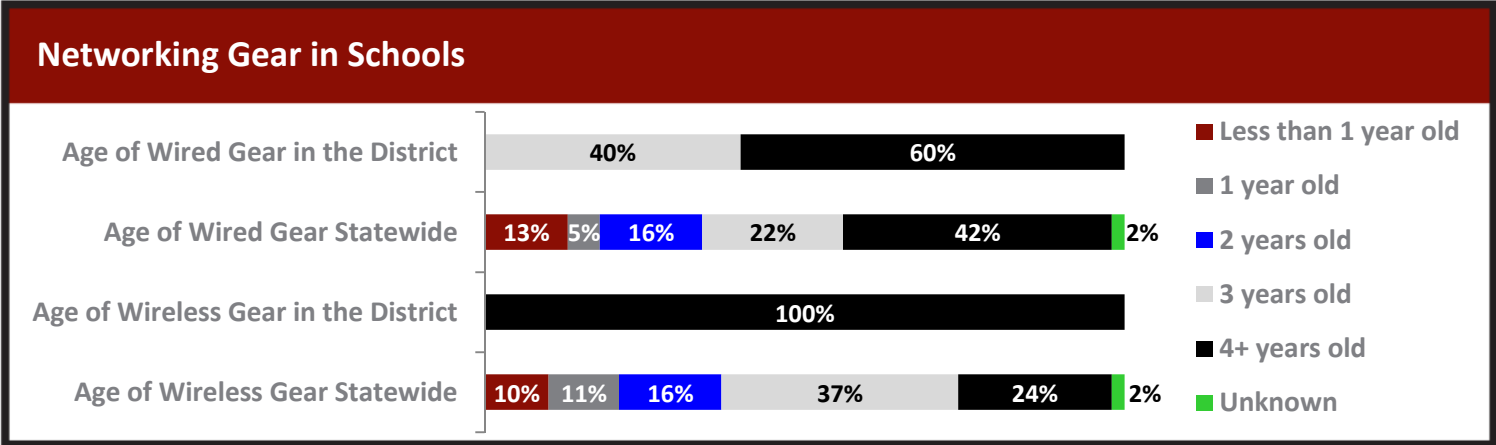
Computing Devices Used in Schools

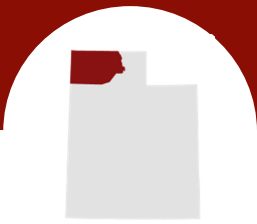
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	121	108
Laptops Using Windows OS	30	25
Mac Desktops	40	5
Mac Laptops	0	8
Google Chromebooks	1,074	85
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	6	90

0.54 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

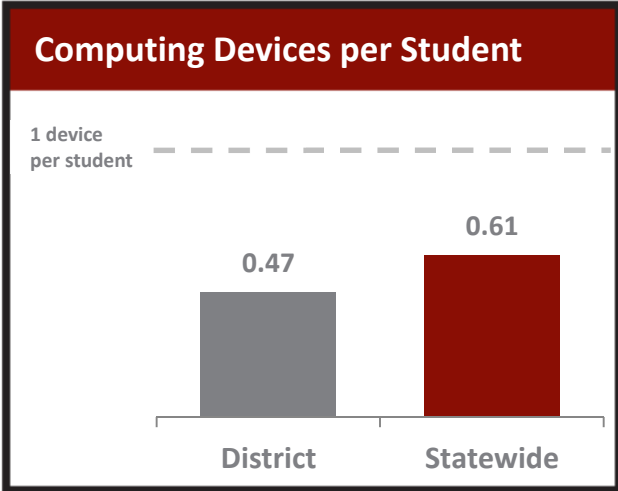
District Facts

Population	6,514
Student Body Size	1,542
Number of Schools	5
Urban/Rural	Rural
Median Household Income	\$46,660
Poverty Rate	14.1%
Free/Reduced Lunch Eligible	42.1%





Box Elder School District



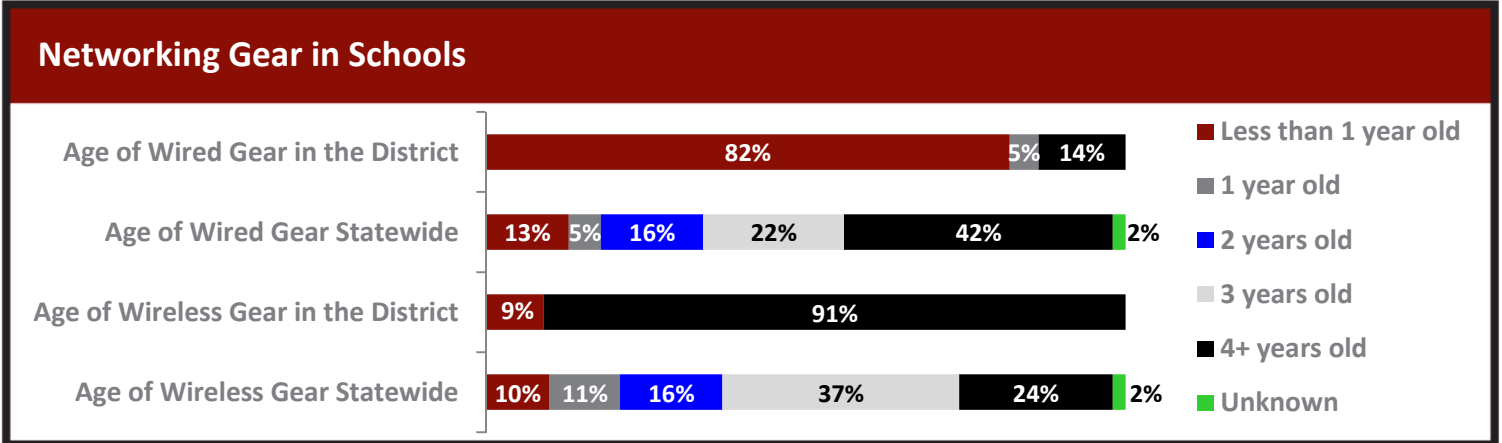
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	2,188	867
Laptops Using Windows OS	495	99
Mac Desktops	2	1
Mac Laptops	0	10
Google Chromebooks	1,928	18
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	829	158

0.80 Wi-Fi Access Points
 Per Classroom
 Compared to
0.58 Statewide

District Facts

Population	50,613
Student Body Size	11,585
Number of Schools	22
Urban/Rural	Urban
Median Household Income	\$57,292
Poverty Rate	8.8%
Free/Reduced Lunch Eligible	37.3%

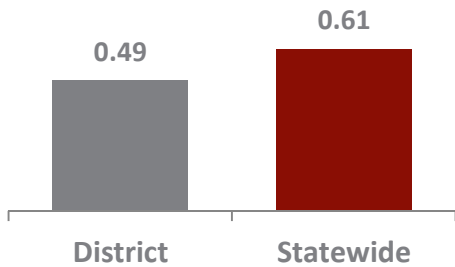




Cache County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	3,696	783
Laptops Using Windows OS	93	6
Mac Desktops	106	0
Mac Laptops	0	0
Google Chromebooks	3,480	0
Windows Tablets	30	0
Android Tablets	40	0
iOS Tablets	540	10

0.48 Wi-Fi Access Points

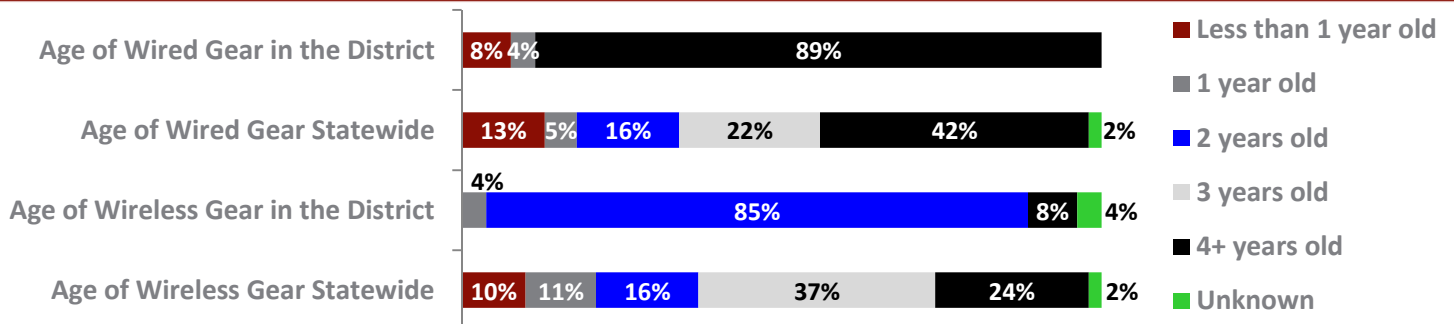
Per Classroom Compared to

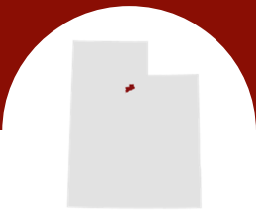
0.58 Statewide

District Facts

Population	67,021
Student Body Size	16,456
Number of Schools	26
Urban/Rural	Urban
Median Household Income	\$61,459
Poverty Rate	8.5%
Free/Reduced Lunch Eligible	29.9%

Networking Gear in Schools

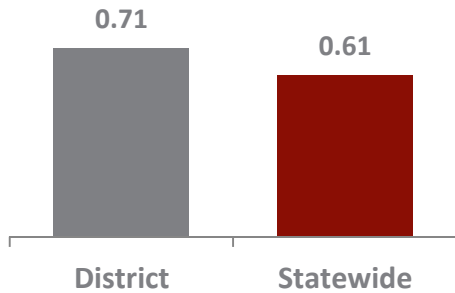




Canyons School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	3,856	494
Laptops Using Windows OS	804	447
Mac Desktops	2,501	406
Mac Laptops	4,269	1,908
Google Chromebooks	8,136	0
Windows Tablets	0	10
Android Tablets	42	1
iOS Tablets	4,980	1,686

0.62 Wi-Fi Access Points

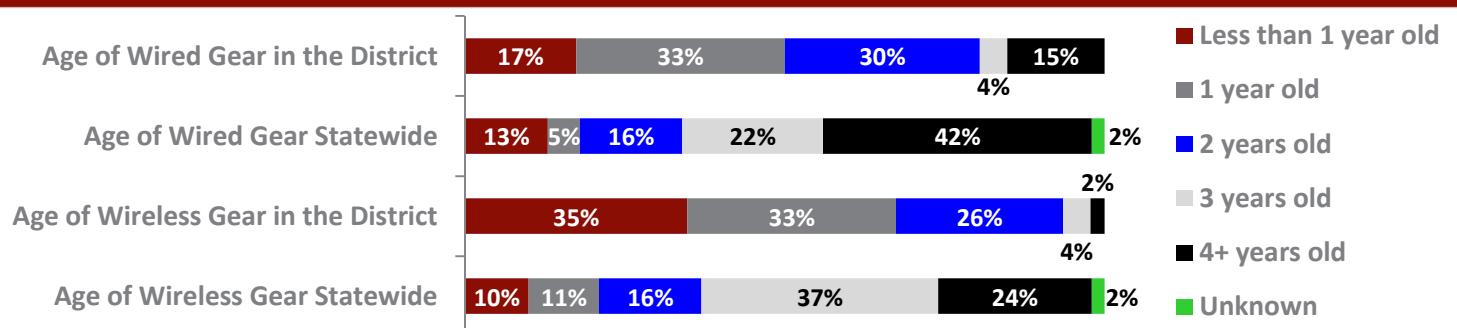
Per Classroom Compared to

0.58 Statewide

District Facts

Population	209,984
Student Body Size	34,620
Number of Schools	46
Urban/Rural	Urban
Median Household Income	\$71,266
Poverty Rate	8.3%
Free/Reduced Lunch Eligible	28.3%

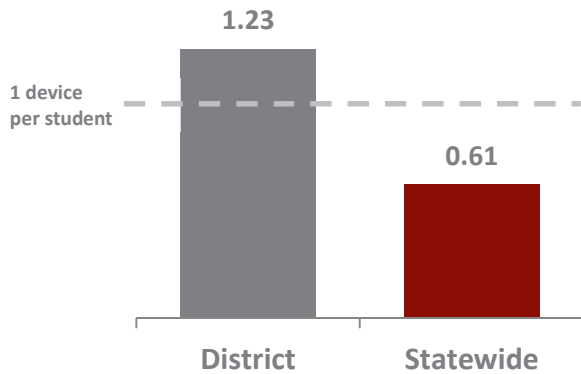
Networking Gear in Schools





Carbon School District

Computing Devices per Student



Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	949	353
Laptops Using Windows OS	304	38
Mac Desktops	0	0
Mac Laptops	0	0
Google Chromebooks	2,196	195
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	420	76

0.80 Wi-Fi Access Points

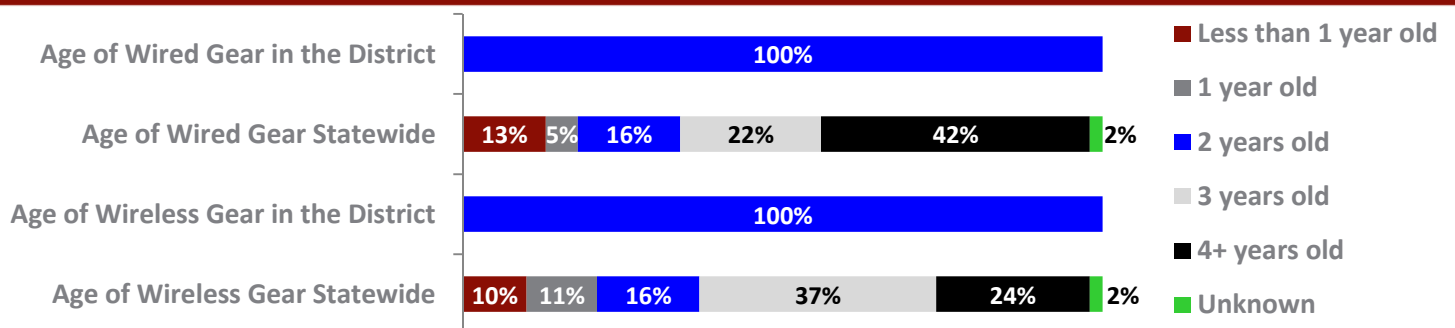
Per Classroom
Compared to

0.58 Statewide

District Facts

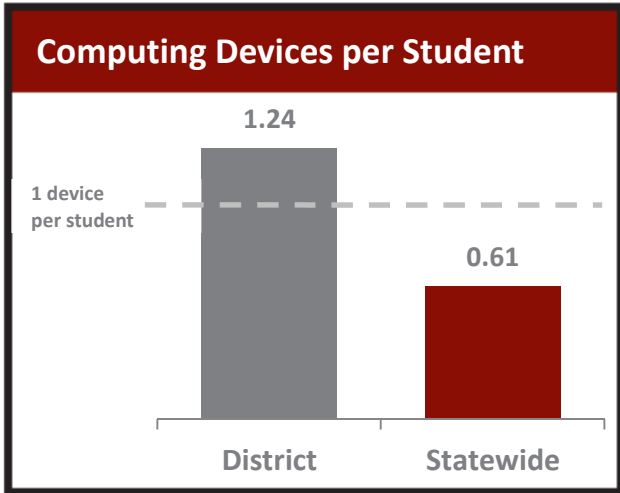
Population	21,118
Student Body Size	3,141
Number of Schools	10
Urban/Rural	Rural
Median Household Income	\$44,724
Poverty Rate	15.1%
Free/Reduced Lunch Eligible	42.6%

Networking Gear in Schools





Daggett School District



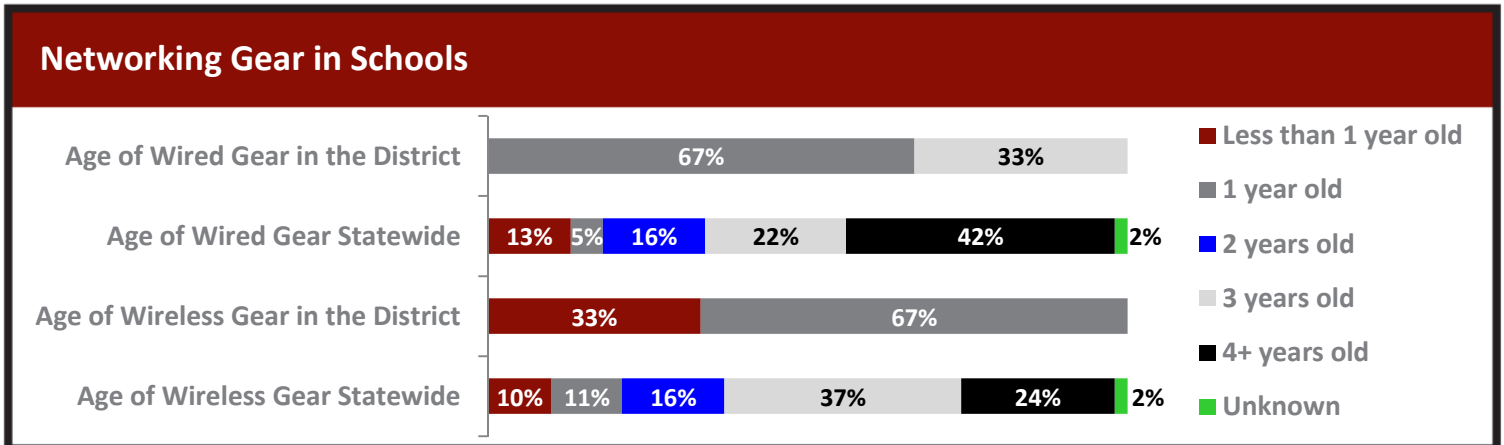
Computing Devices Used in Schools

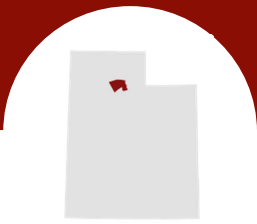
Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	0	2
Laptops Using Windows OS	0	0
Mac Desktops	90	15
Mac Laptops	105	10
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	61	19

0.42 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	714
Student Body Size	207
Number of Schools	3
Urban/Rural	Rural
Median Household Income	\$46,917
Poverty Rate	8.6%
Free/Reduced Lunch Eligible	27.5%





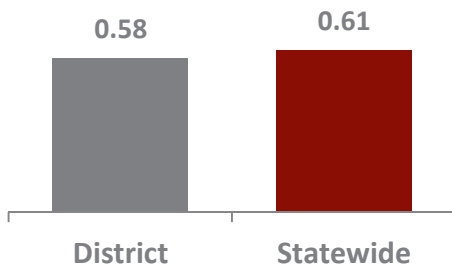
UTAH

School Technology Inventory

Davis School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	19,458	5,922
Laptops Using Windows OS	7,934	668
Mac Desktops	70	4
Mac Laptops	0	19
Google Chromebooks	13	0
Windows Tablets	878	48
Android Tablets	174	0
iOS Tablets	12,362	2,212

1.00 Wi-Fi Access Points

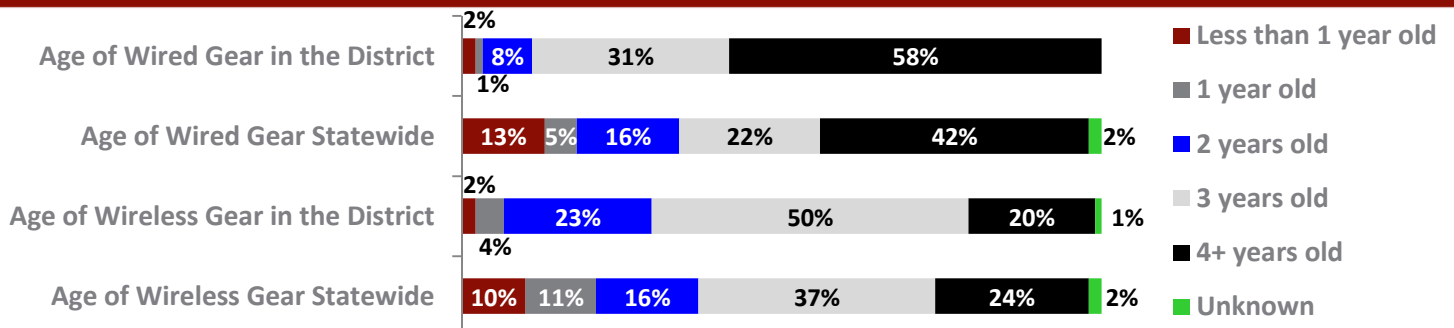
Per Classroom Compared to

0.58 Statewide

District Facts

Population	317,646
Student Body Size	70,166
Number of Schools	91
Urban/Rural	Urban
Median Household Income	\$69,707
Poverty Rate	7.9%
Free/Reduced Lunch Eligible	25.6%

Networking Gear in Schools



For more information, visit www.uen.org/digital-learning

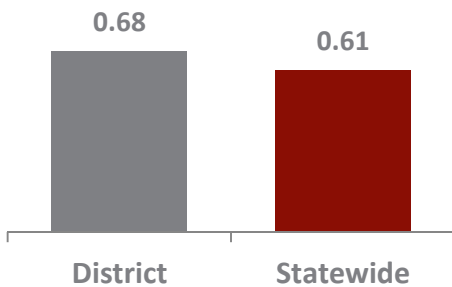
Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Duchesne County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	429	89
Laptops Using Windows OS	429	19
Mac Desktops	1,153	565
Mac Laptops	209	175
Google Chromebooks	260	10
Windows Tablets	1	0
Android Tablets	165	18
iOS Tablets	868	152

0.43 Wi-Fi Access Points

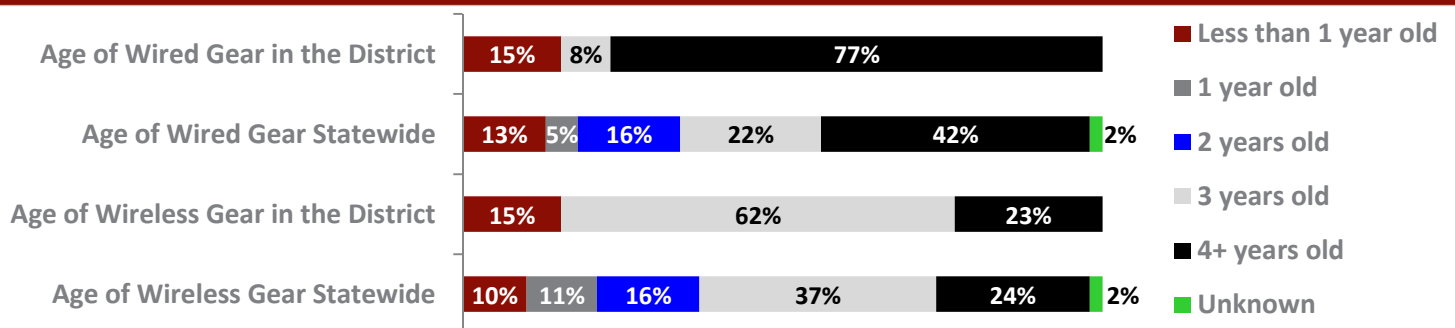
Per Classroom Compared to

0.58 Statewide

District Facts

Population	19,378
Student Body Size	5,151
Number of Schools	13
Urban/Rural	Rural
Median Household Income	\$57,683
Poverty Rate	8.9%
Free/Reduced Lunch Eligible	31.4%

Networking Gear in Schools

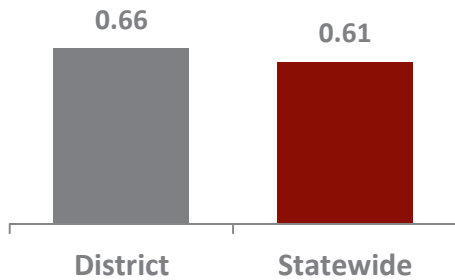




Emery County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	740	115
Laptops Using Windows OS	12	22
Mac Desktops	180	54
Mac Laptops	2	21
Google Chromebooks	114	1
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	448	98

0.43 Wi-Fi Access Points

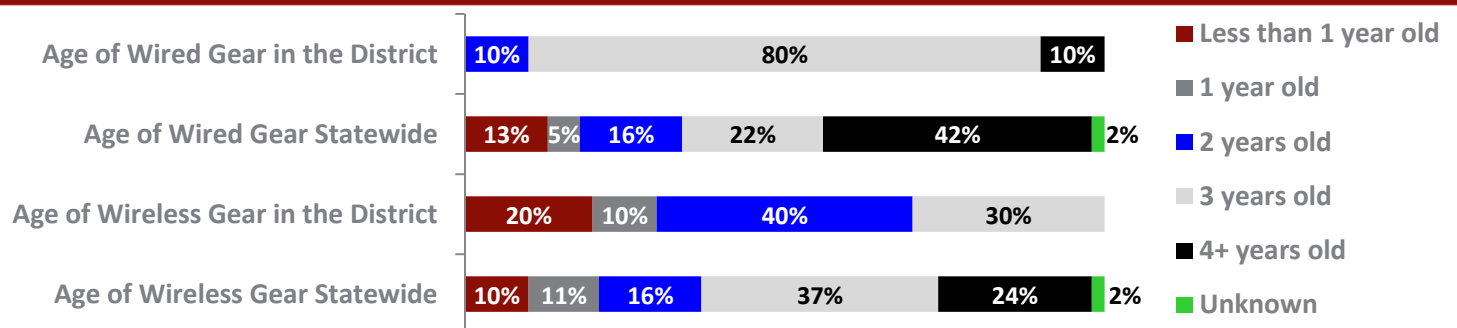
Per Classroom Compared to

0.58 Statewide

District Facts

Population	10,834
Student Body Size	2,280
Number of Schools	10
Urban/Rural	Rural
Median Household Income	\$52,763
Poverty Rate	10.0%
Free/Reduced Lunch Eligible	42.0%

Networking Gear in Schools

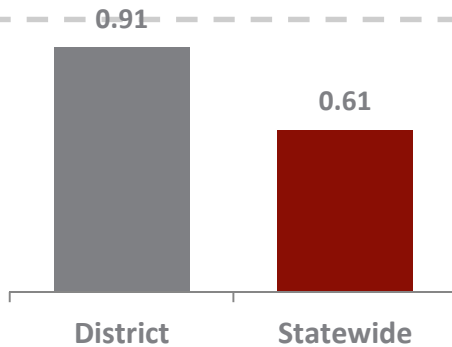




Garfield County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	222	122
Laptops Using Windows OS	35	26
Mac Desktops	1	6
Mac Laptops	2	0
Google Chromebooks	551	372
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	30	15

0.59 Wi-Fi Access Points

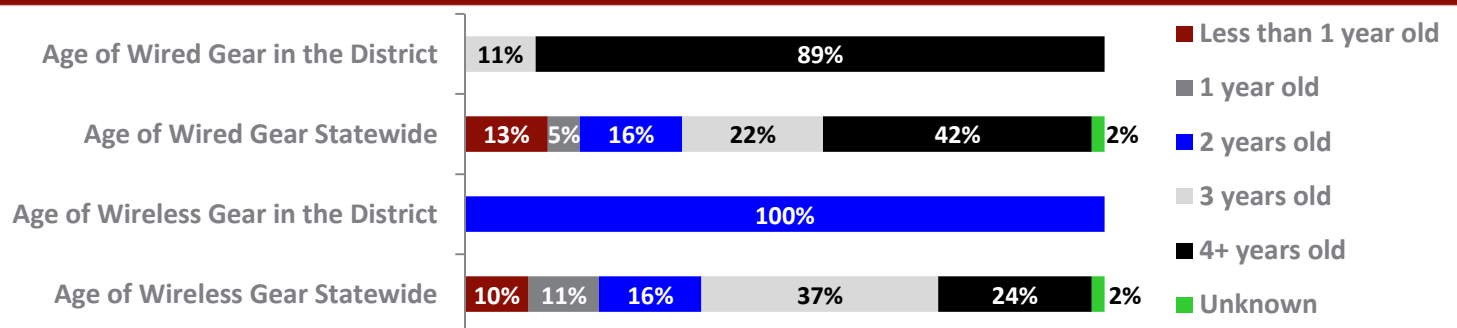
Per Classroom Compared to

0.58 Statewide

District Facts

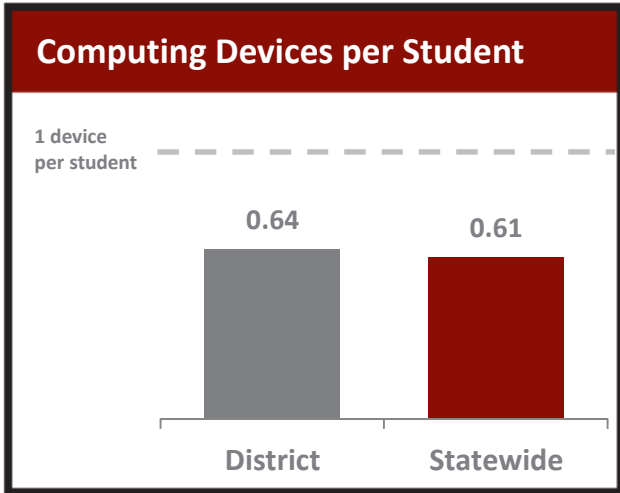
Population	5,105
Student Body Size	927
Number of Schools	9
Urban/Rural	Rural
Median Household Income	\$45,357
Poverty Rate	11.5%
Free/Reduced Lunch Eligible	35.6%

Networking Gear in Schools





Grand County School District



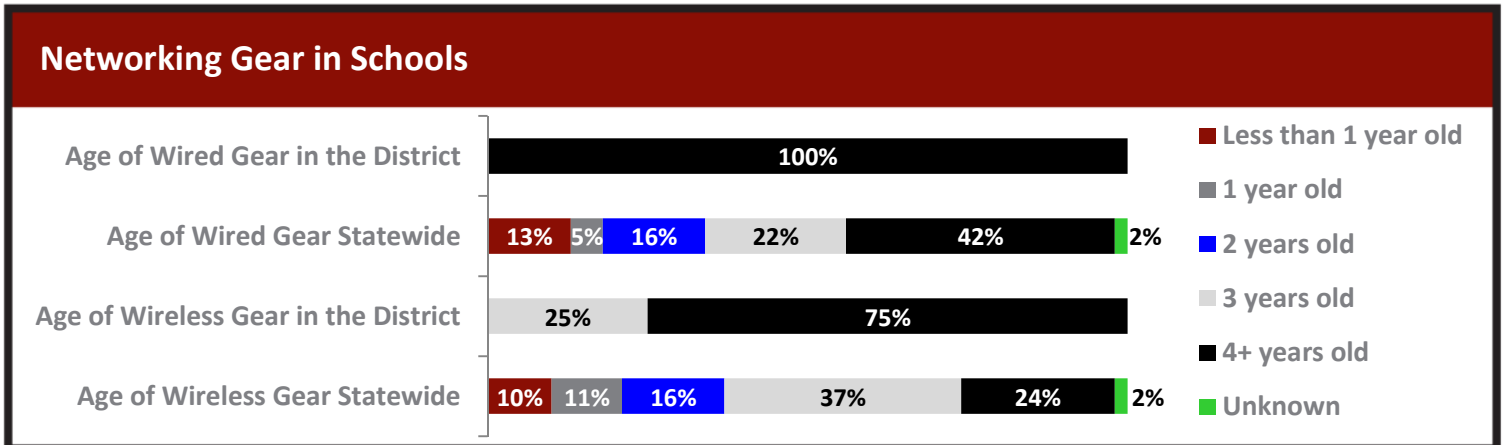
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	384	148
Laptops Using Windows OS	210	3
Mac Desktops	10	0
Mac Laptops	0	0
Google Chromebooks	335	4
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	19	0

0.23 Wi-Fi Access Points
Per Classroom Compared to
0.58 Statewide

District Facts

Population	9,656
Student Body Size	1,490
Number of Schools	4
Urban/Rural	Rural
Median Household Income	\$46,088
Poverty Rate	13.2%
Free/Reduced Lunch Eligible	47.5%

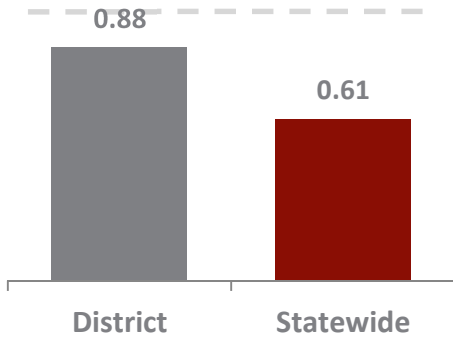




Granite School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	24,237	2,975
Laptops Using Windows OS	2,749	10
Mac Desktops	886	5
Mac Laptops	420	1
Google Chromebooks	12,204	207
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	19,214	823

0.23 Wi-Fi Access Points

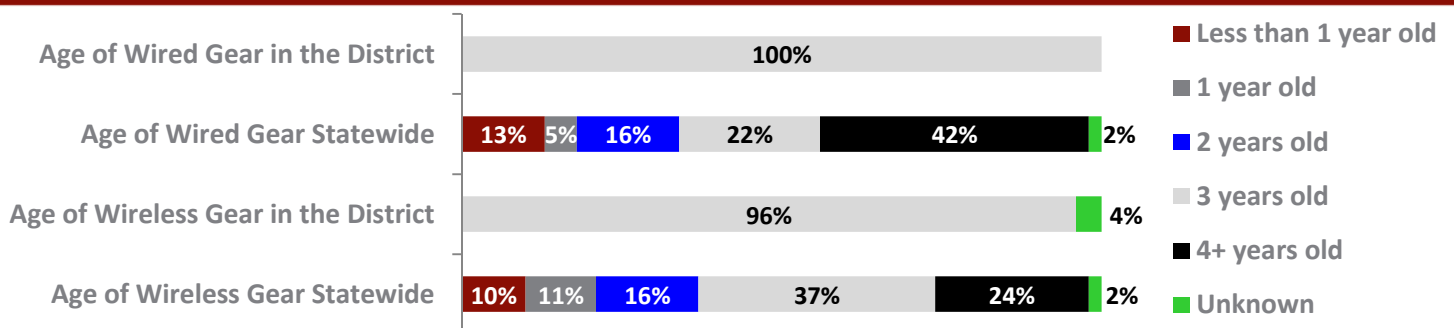
Per Classroom Compared to

0.58 Statewide

District Facts

Population	391,562
Student Body Size	67,519
Number of Schools	97
Urban/Rural	Urban
Median Household Income	\$54,794
Poverty Rate	15.1%
Free/Reduced Lunch Eligible	51.0%

Networking Gear in Schools

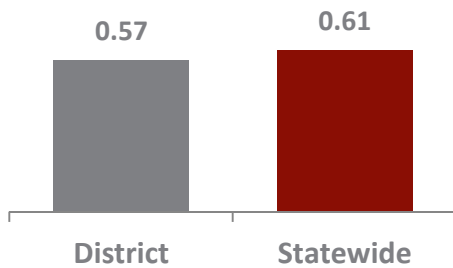




Iron County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use

Total for Teacher or Administrator Use

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	795	26
Laptops Using Windows OS	0	9
Mac Desktops	614	402
Mac Laptops	354	55
Google Chromebooks	2,945	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	285	90

0.34 Wi-Fi Access Points

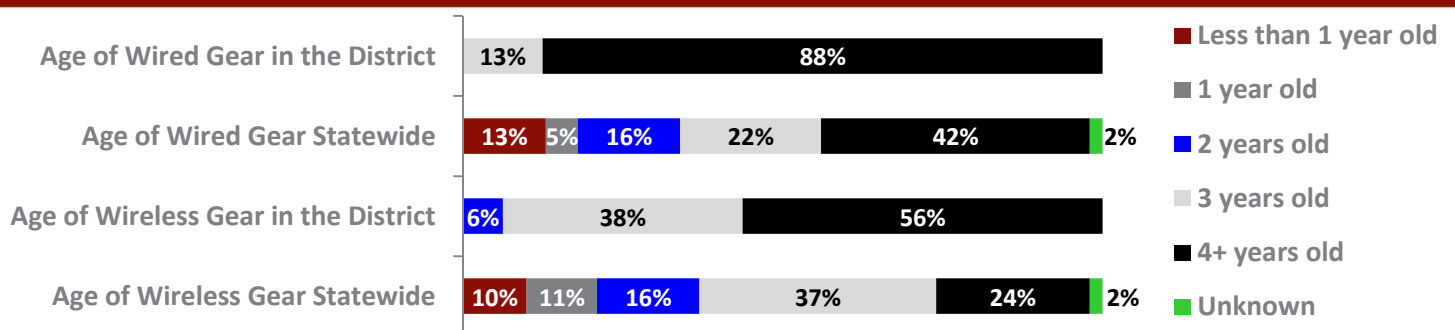
Per Classroom Compared to

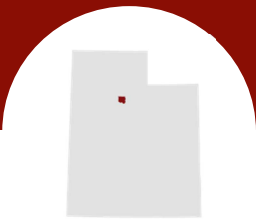
0.58 Statewide

District Facts

Population	46,725
Student Body Size	8,813
Number of Schools	16
Urban/Rural	Rural
Median Household Income	\$42,369
Poverty Rate	20.9%
Free/Reduced Lunch Eligible	48.0%

Networking Gear in Schools

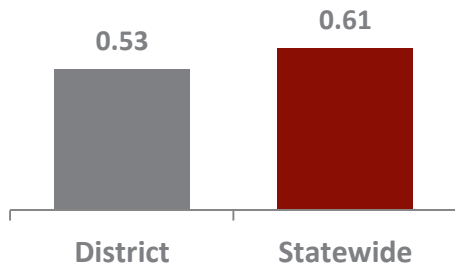




Jordan School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	5,283	715
Laptops Using Windows OS	3,753	704
Mac Desktops	3,038	381
Mac Laptops	5,329	2,000
Google Chromebooks	3,609	2
Windows Tablets	0	1
Android Tablets	10	3
iOS Tablets	6,207	2,837

0.74 Wi-Fi Access Points

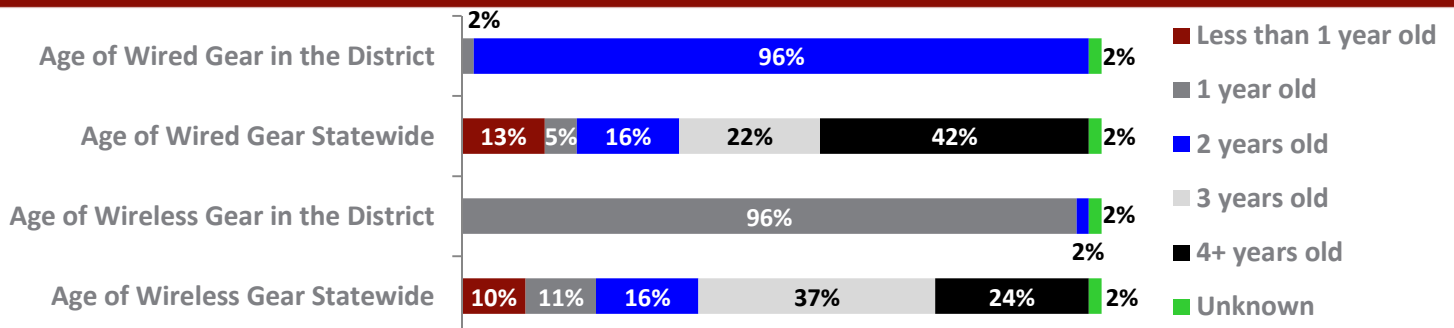
Per Classroom Compared to

0.58 Statewide

District Facts

Population	237,214
Student Body Size	51,738
Number of Schools	54
Urban/Rural	Urban
Median Household Income	\$76,243
Poverty Rate	6.6%
Free/Reduced Lunch Eligible	24.1%

Networking Gear in Schools





UTAH

School Technology Inventory

Juab School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use

Total for Teacher or Administrator Use

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	25	5
Laptops Using Windows OS	0	0
Mac Desktops	360	29
Mac Laptops	135	170
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	1,665	140

0.77 Wi-Fi Access Points

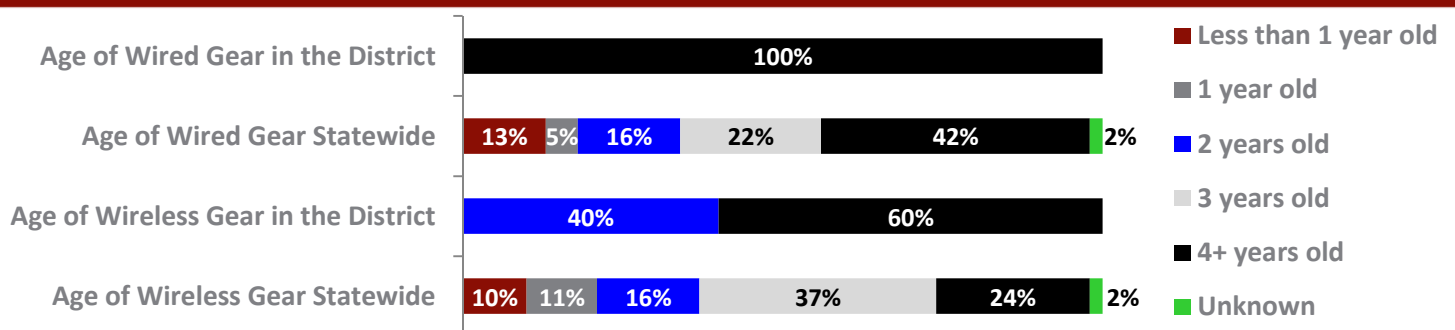
Per Classroom Compared to

0.58 Statewide

District Facts

Population	9,572
Student Body Size	2,385
Number of Schools	5
Urban/Rural	Rural
Median Household Income	\$55,787
Poverty Rate	14.7%
Free/Reduced Lunch Eligible	34.6%

Networking Gear in Schools

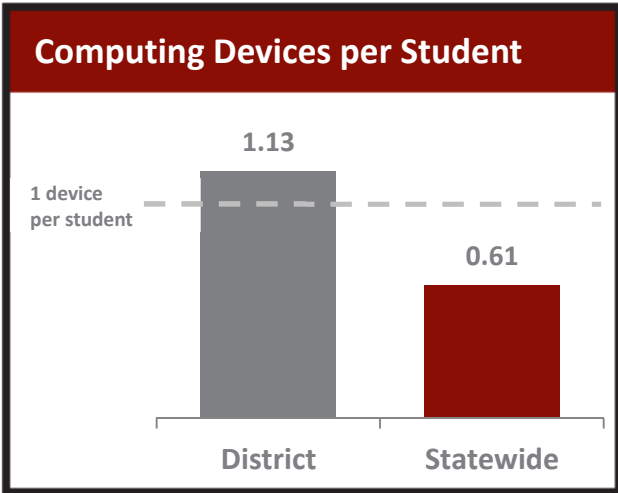


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Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Kane County School District



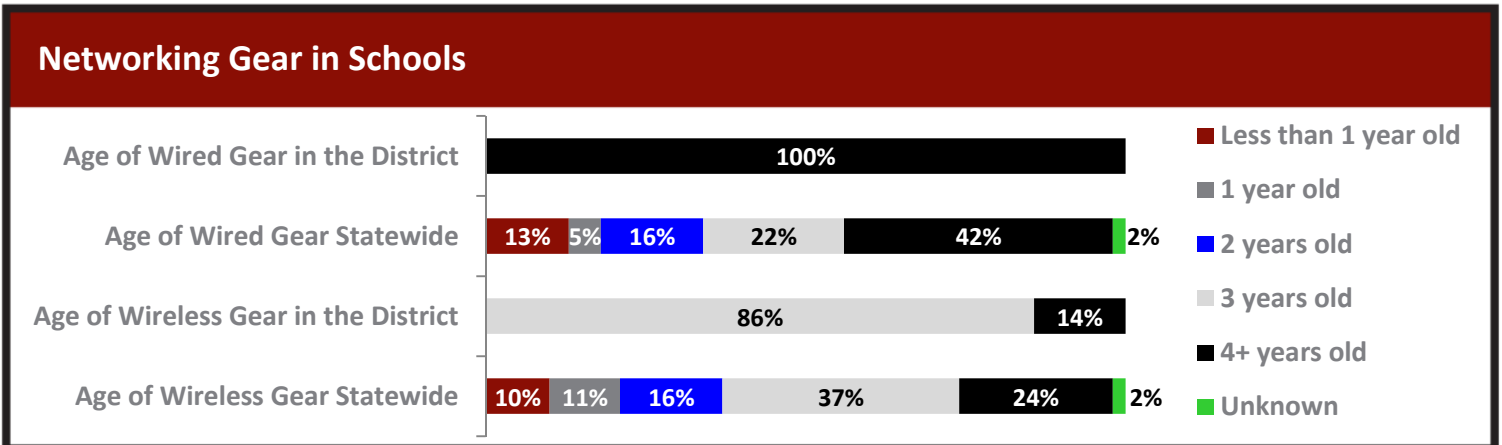
Computing Devices Used in Schools

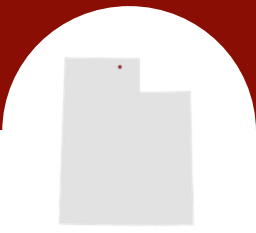
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	375	132
Laptops Using Windows OS	6	19
Mac Desktops	24	2
Mac Laptops	0	0
Google Chromebooks	902	21
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	11	52

0.45 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

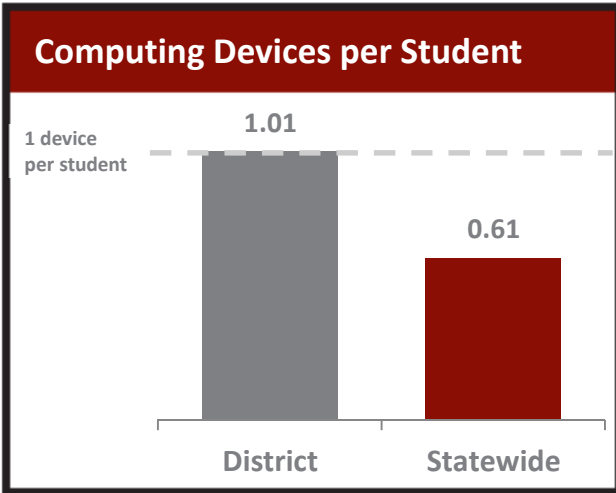
District Facts

Population	7,221
Student Body Size	1,192
Number of Schools	7
Urban/Rural	Rural
Median Household Income	\$48,540
Poverty Rate	7.8%
Free/Reduced Lunch Eligible	44.9%





Logan City School District



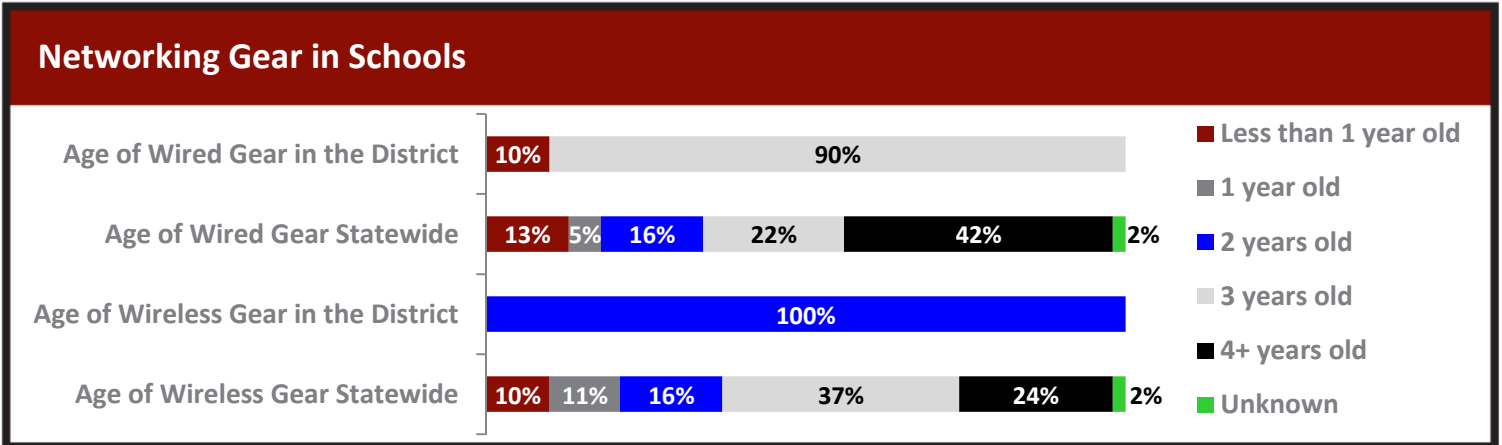
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	1,044	501
Laptops Using Windows OS	732	131
Mac Desktops	196	14
Mac Laptops	225	175
Google Chromebooks	1,481	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	557	307

0.42 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	48,933
Student Body Size	5,970
Number of Schools	10
Urban/Rural	Urban
Median Household Income	\$36,131
Poverty Rate	28.3%
Free/Reduced Lunch Eligible	57.9%

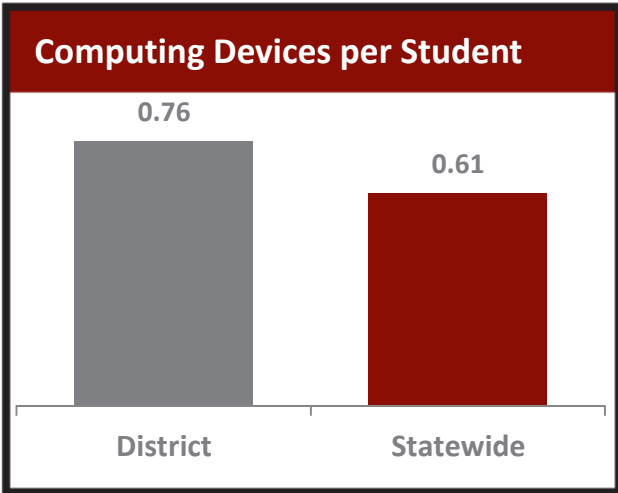




UTAH

School Technology Inventory

Millard School District



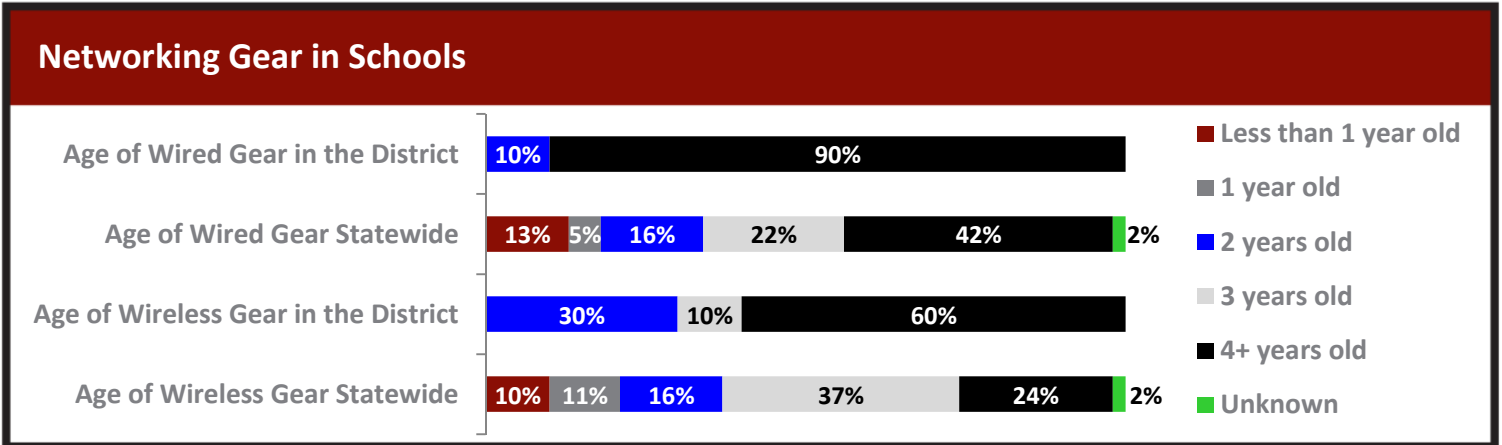
Computing Devices Used in Schools

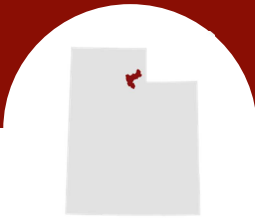
Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	977	274
Laptops Using Windows OS	203	182
Mac Desktops	0	0
Mac Laptops	0	4
Google Chromebooks	718	2
Windows Tablets	1	7
Android Tablets	1	3
iOS Tablets	227	108

0.54 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	12,582
Student Body Size	2,804
Number of Schools	10
Urban/Rural	Rural
Median Household Income	\$49,238
Poverty Rate	13.3%
Free/Reduced Lunch Eligible	52.5%

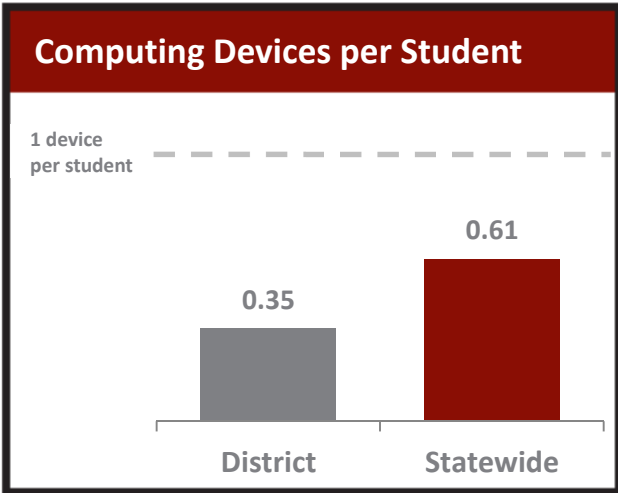




UTAH

School Technology Inventory

Morgan County School District



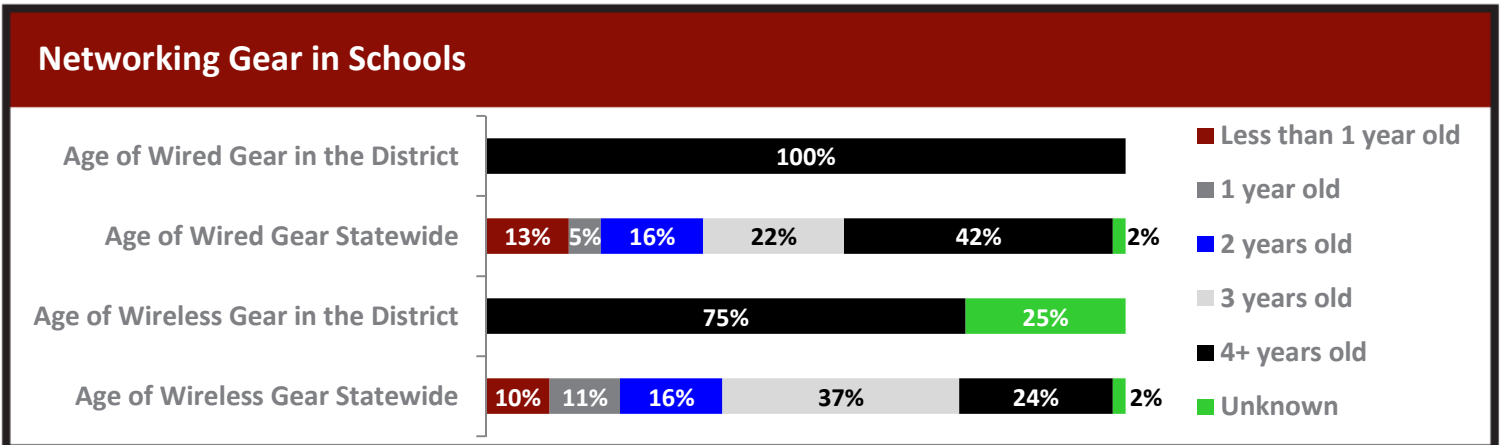
Computing Devices Used in Schools

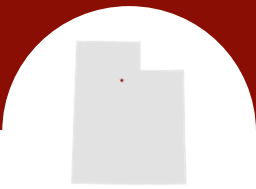
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	435	204
Laptops Using Windows OS	95	50
Mac Desktops	35	1
Mac Laptops	1	0
Google Chromebooks	330	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	60	220

0.67 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

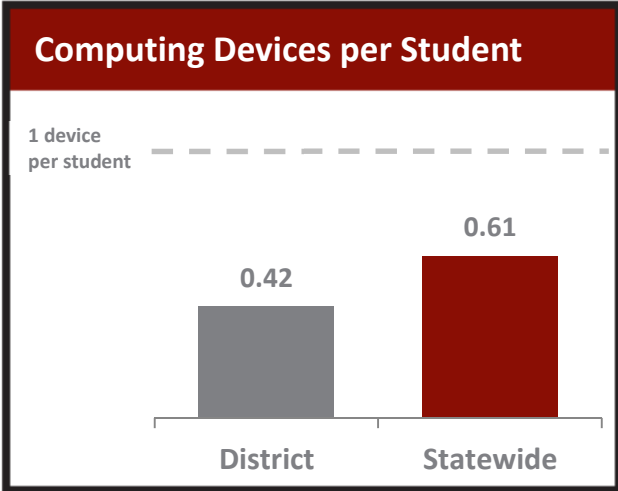
District Facts

Population	9,955
Student Body Size	2,766
Number of Schools	4
Urban/Rural	Rural
Median Household Income	\$80,337
Poverty Rate	4.0%
Free/Reduced Lunch Eligible	17.1%





Murray City School District



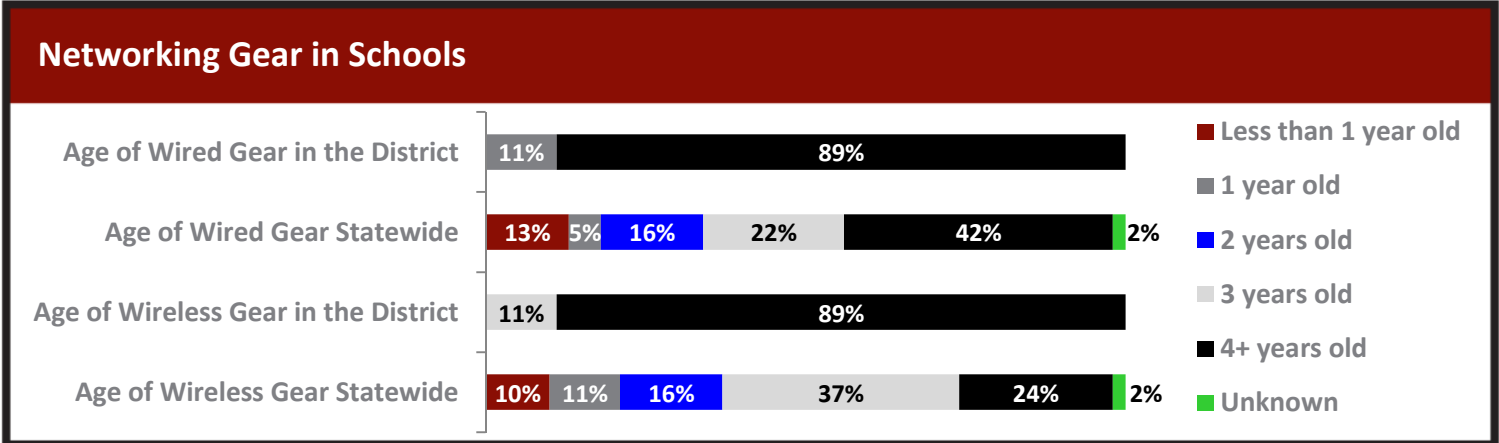
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	1,160	110
Laptops Using Windows OS	1,050	346
Mac Desktops	80	5
Mac Laptops	0	0
Google Chromebooks	100	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	135	220

0.42 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	35,643
Student Body Size	6,001
Number of Schools	9
Urban/Rural	Urban
Median Household Income	\$52,397
Poverty Rate	13.1%
Free/Reduced Lunch Eligible	33.2%





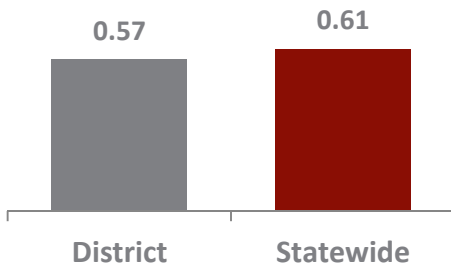
UTAH

School Technology Inventory

Nebo School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use

Total for Teacher or Administrator Use

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	4,770	1,898
Laptops Using Windows OS	0	213
Mac Desktops	196	0
Mac Laptops	0	40
Google Chromebooks	11,399	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	1,920	1,501

0.46 Wi-Fi Access Points

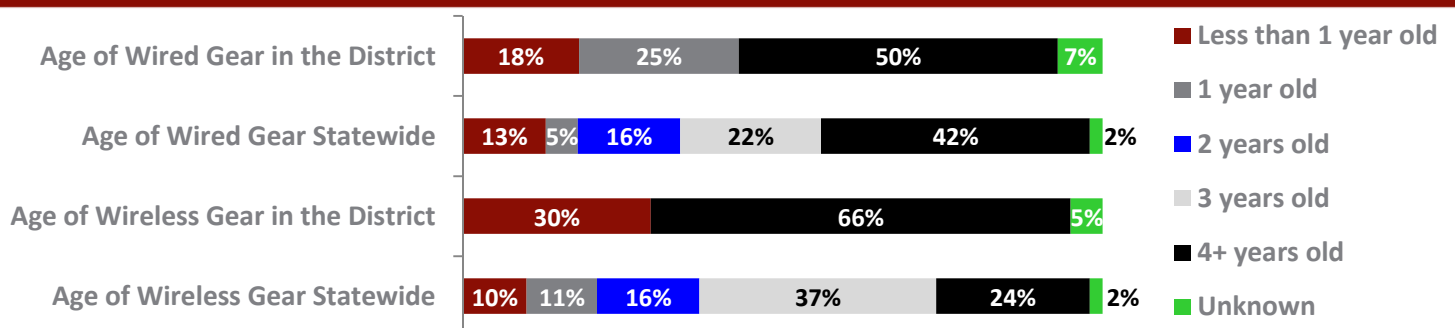
Per Classroom Compared to

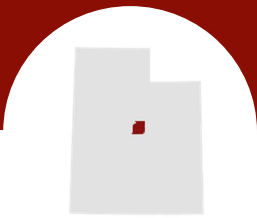
0.58 Statewide

District Facts

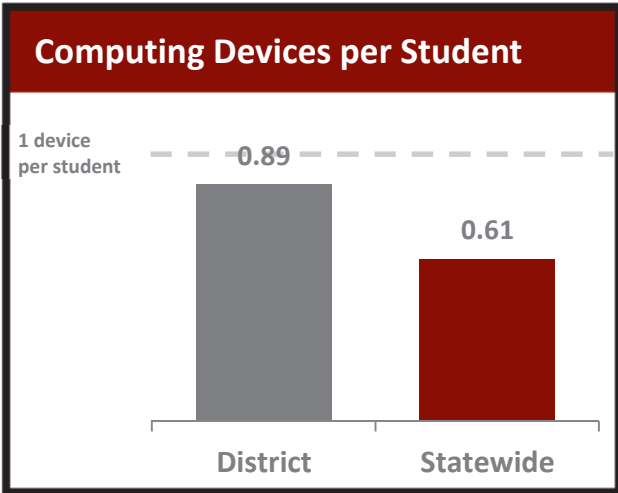
Population	124,097
Student Body Size	31,865
Number of Schools	44
Urban/Rural	Urban
Median Household Income	\$63,238
Poverty Rate	7.5%
Free/Reduced Lunch Eligible	35.0%

Networking Gear in Schools





North Sanpete School District



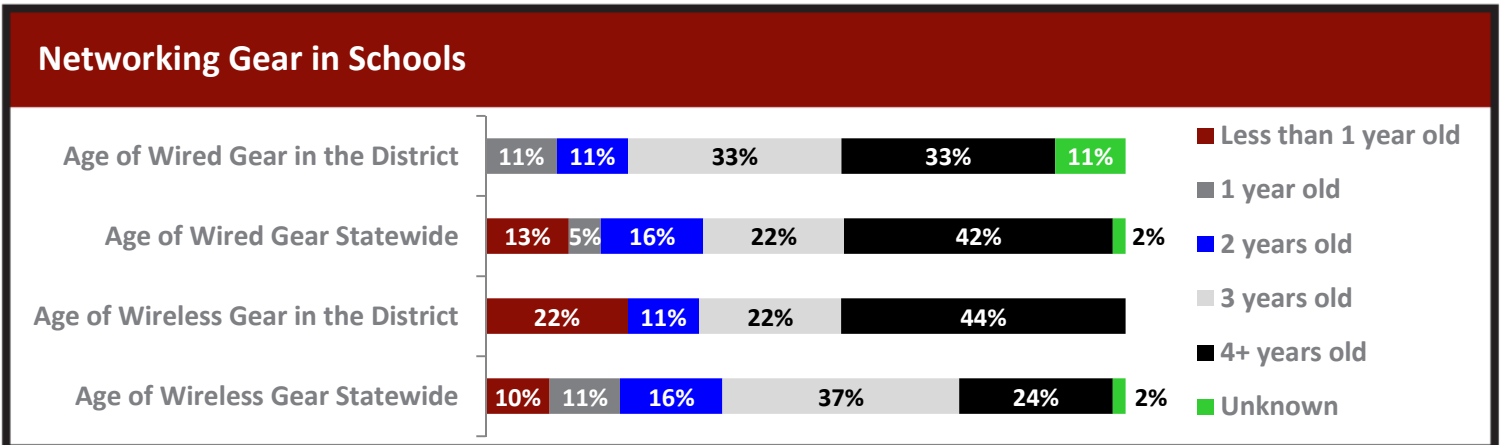
Computing Devices Used in Schools

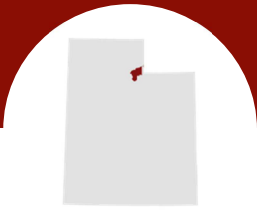
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	141	5
Laptops Using Windows OS	0	3
Mac Desktops	419	19
Mac Laptops	399	177
Google Chromebooks	216	10
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	1,098	150

0.66 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	12,093
Student Body Size	2,567
Number of Schools	9
Urban/Rural	Rural
Median Household Income	\$48,067
Poverty Rate	12.0%
Free/Reduced Lunch Eligible	57.3%





UTAH

School Technology Inventory

North Summit School District

Computing Devices per Student



Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	0	2
Laptops Using Windows OS	0	0
Mac Desktops	280	40
Mac Laptops	346	98
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	548	80

0.38 Wi-Fi Access Points

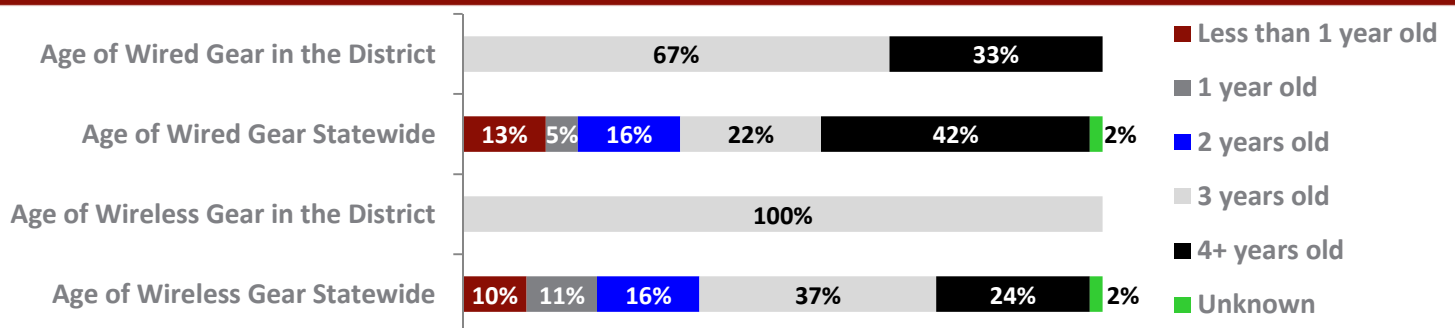
Per Classroom Compared to

0.58 Statewide

District Facts

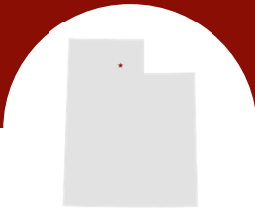
Population	5,519
Student Body Size	1,036
Number of Schools	3
Urban/Rural	Rural
Median Household Income	\$59,558
Poverty Rate	11.0%
Free/Reduced Lunch Eligible	27.8%

Networking Gear in Schools

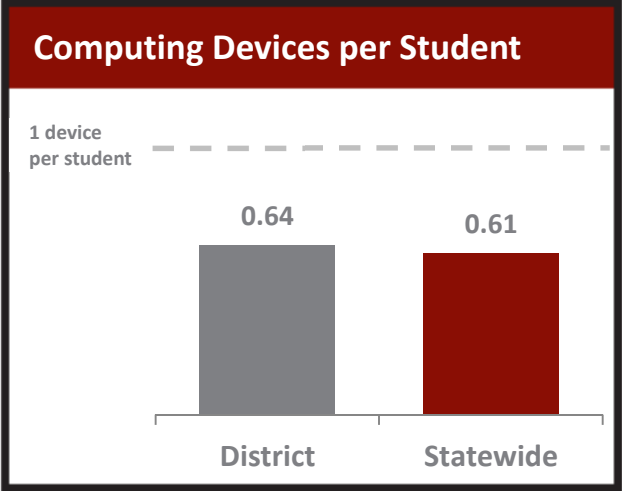


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Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Ogden School District



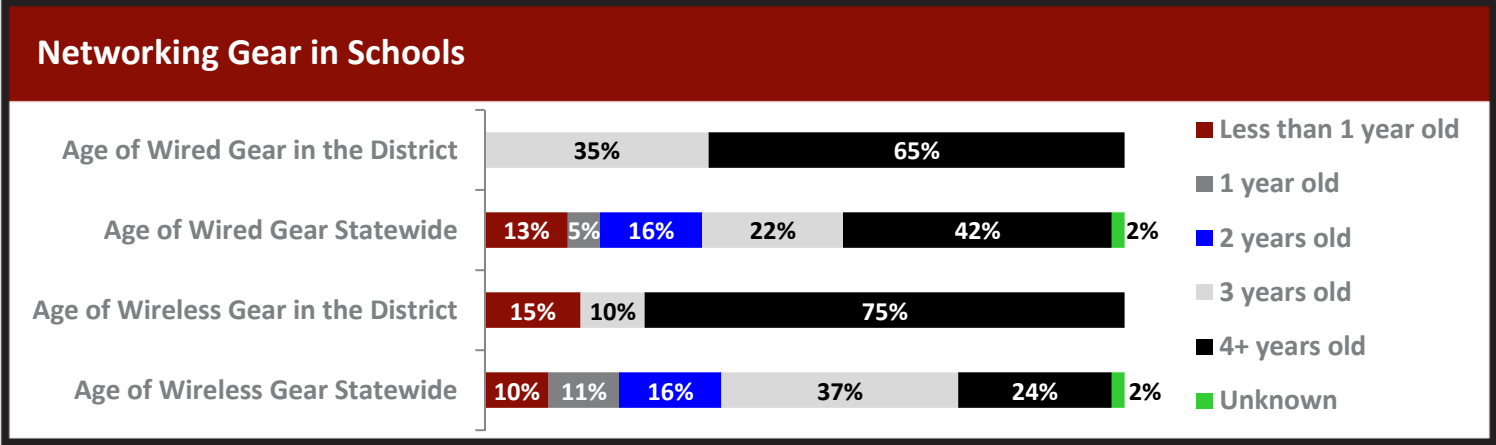
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	3,960	948
Laptops Using Windows OS	1,048	180
Mac Desktops	64	6
Mac Laptops	0	19
Google Chromebooks	1,809	45
Windows Tablets	0	12
Android Tablets	127	13
iOS Tablets	999	561

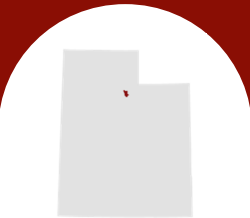
0.47 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

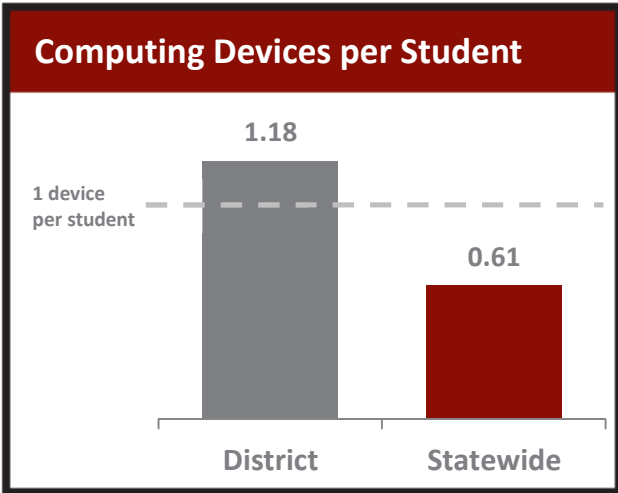
Population	83,767
Student Body Size	12,485
Number of Schools	20
Urban/Rural	Urban
Median Household Income	\$41,031
Poverty Rate	23.3%
Free/Reduced Lunch Eligible	74.9%



For more information, visit www.uen.org/digital-learning
 Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Park City School District



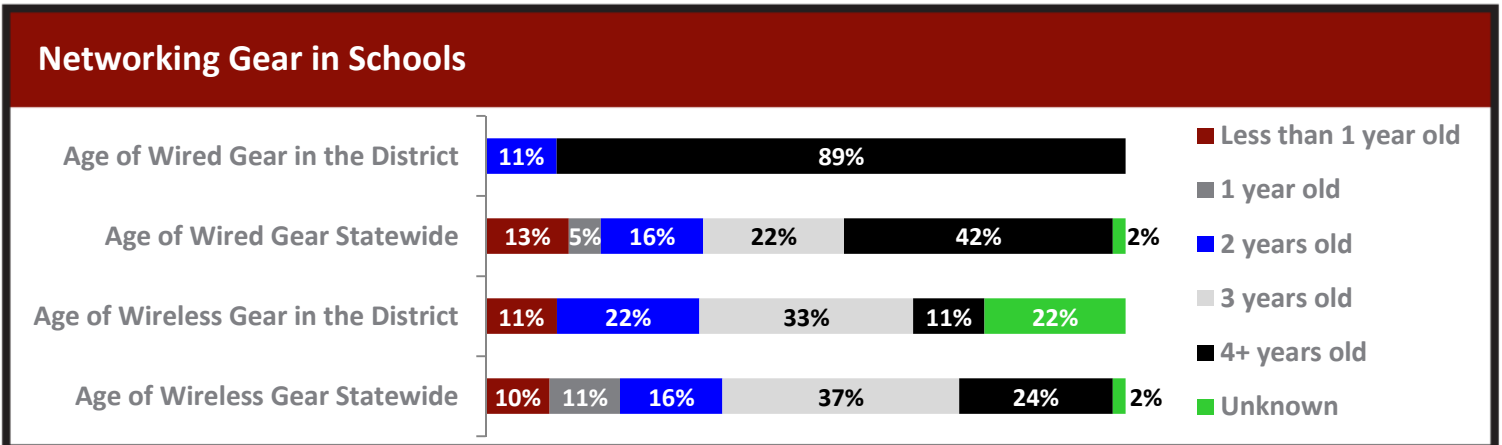
Computing Devices Used in Schools

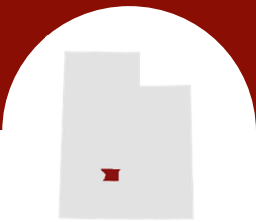
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	44	8
Laptops Using Windows OS	12	4
Mac Desktops	459	38
Mac Laptops	4,785	371
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	352	202

0.49 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	24,896
Student Body Size	4,779
Number of Schools	9
Urban/Rural	Rural
Median Household Income	\$102,360
Poverty Rate	8.5%
Free/Reduced Lunch Eligible	20.6%



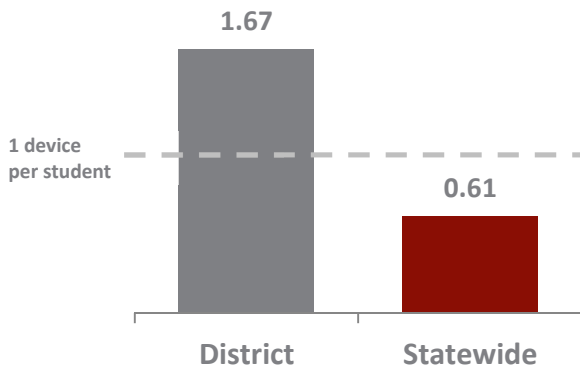


UTAH

School Technology Inventory

Piute School District

Computing Devices per Student



Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	8	1
Laptops Using Windows OS	0	0
Mac Desktops	73	36
Mac Laptops	155	0
Google Chromebooks	73	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	195	32

1.48 Wi-Fi Access Points

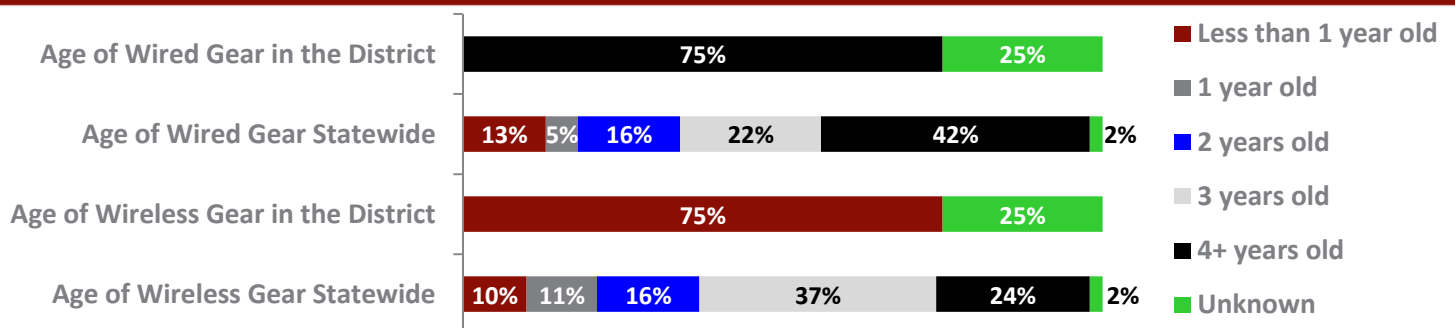
Per Classroom
Compared to

0.58 Statewide

District Facts

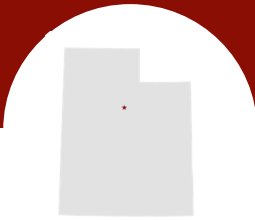
Population	1,921
Student Body Size	302
Number of Schools	4
Urban/Rural	Rural
Median Household Income	\$38,500
Poverty Rate	25.4%
Free/Reduced Lunch Eligible	73.6%

Networking Gear in Schools

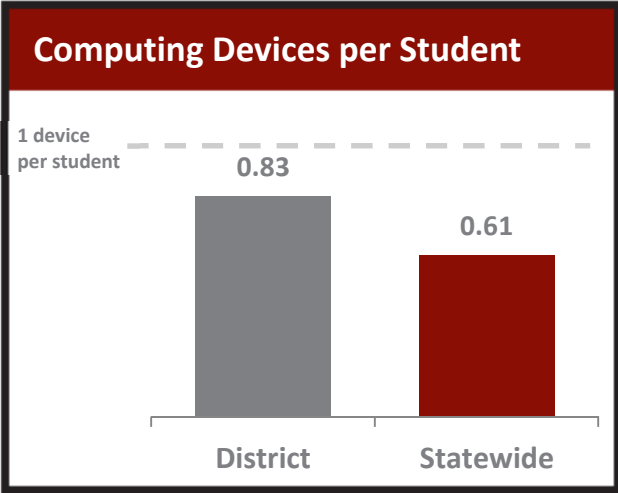


For more information, visit www.uen.org/digital-learning

Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Provo City School District



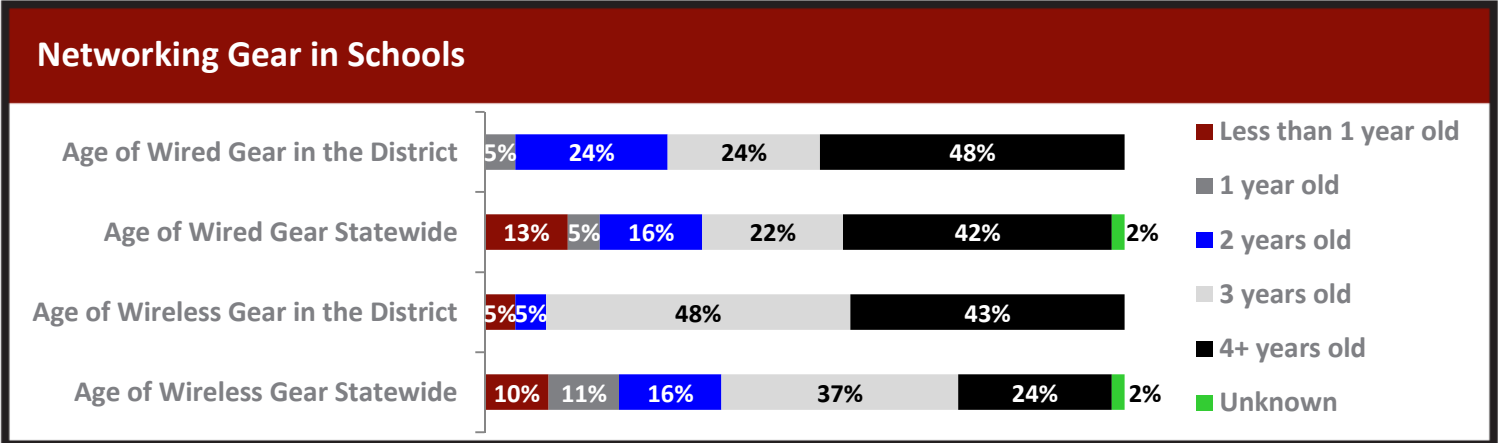
Computing Devices Used in Schools

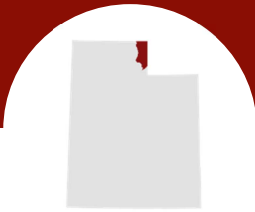
	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	933	140
Laptops Using Windows OS	20	67
Mac Desktops	2,902	110
Mac Laptops	1,819	1,036
Google Chromebooks	3,458	73
Windows Tablets	3	3
Android Tablets	1	2
iOS Tablets	2,727	486

0.73 Wi-Fi Access Points
Per Classroom Compared to
0.58 Statewide

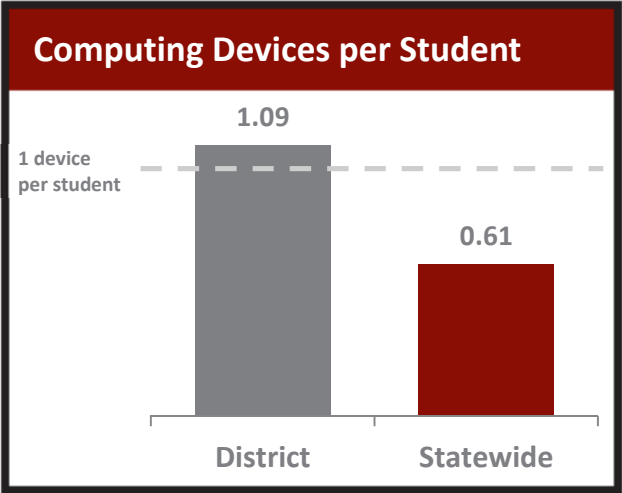
District Facts

Population	114,441
Student Body Size	14,351
Number of Schools	21
Urban/Rural	Urban
Median Household Income	\$39,653
Poverty Rate	31.9%
Free/Reduced Lunch Eligible	47.5%





Rich School District



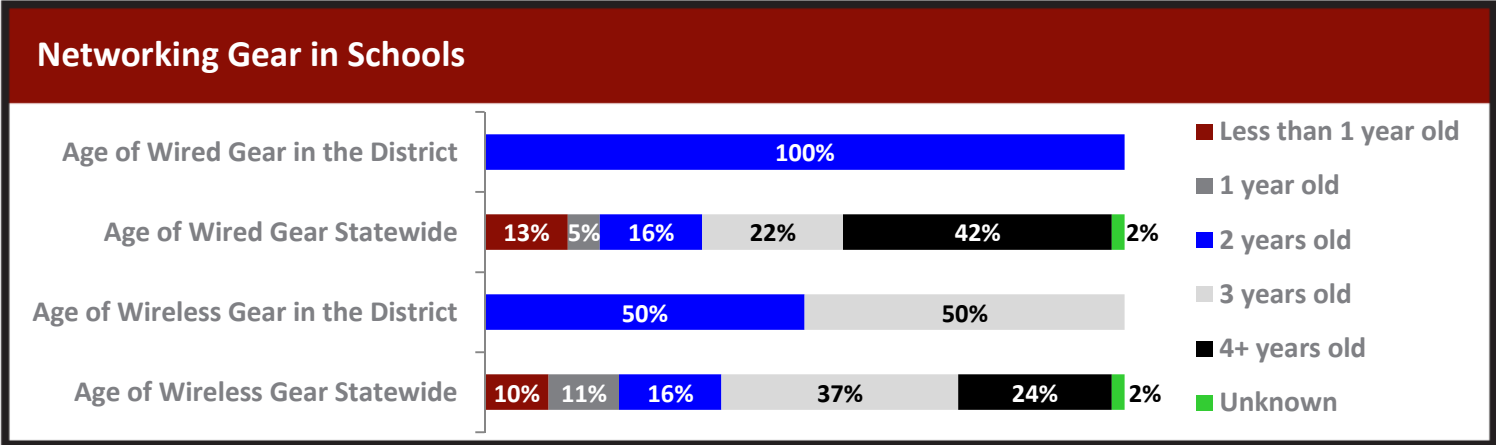
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	96	35
Laptops Using Windows OS	306	18
Mac Desktops	0	0
Mac Laptops	0	1
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	121	18

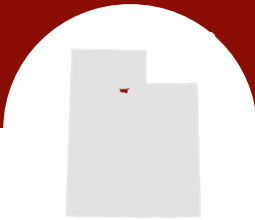
0.67 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

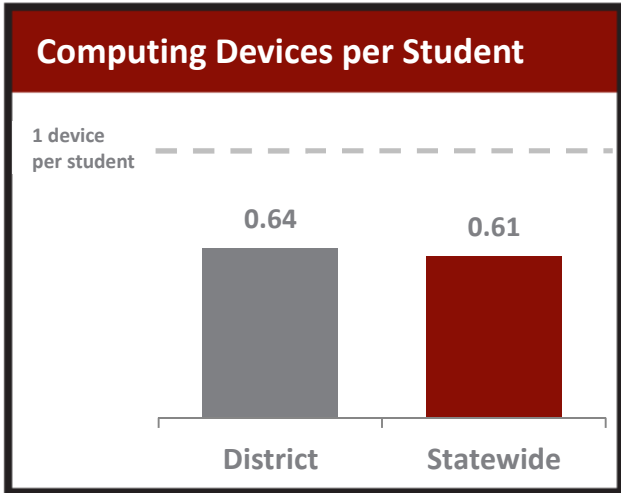
Population	2,285
Student Body Size	478
Number of Schools	4
Urban/Rural	Rural
Median Household Income	\$50,000
Poverty Rate	7.0%
Free/Reduced Lunch Eligible	35.6%



For more information, visit www.uen.org/digital-learning
 Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Salt Lake City School District



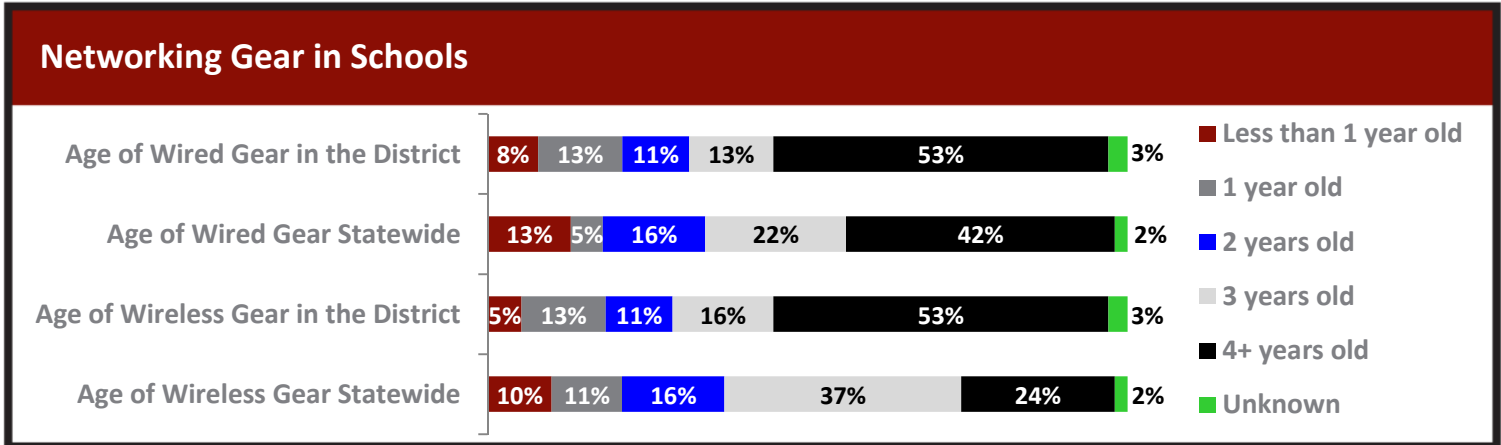
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	6,401	2,649
Laptops Using Windows OS	6,128	443
Mac Desktops	445	42
Mac Laptops	81	35
Google Chromebooks	1	1
Windows Tablets	52	110
Android Tablets	1	2
iOS Tablets	1,814	344

0.71 Wi-Fi Access Points
 Per Classroom
 Compared to
0.58 Statewide

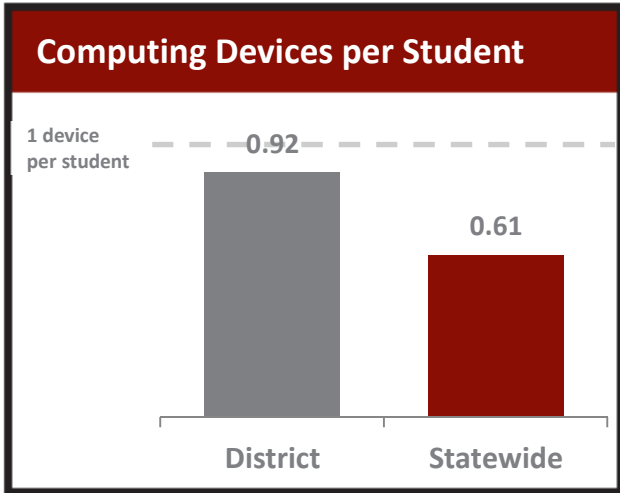
District Facts

Population	189,267
Student Body Size	23,179
Number of Schools	38
Urban/Rural	Urban
Median Household Income	\$45,862
Poverty Rate	19.9%
Free/Reduced Lunch Eligible	60.9%





San Juan School District



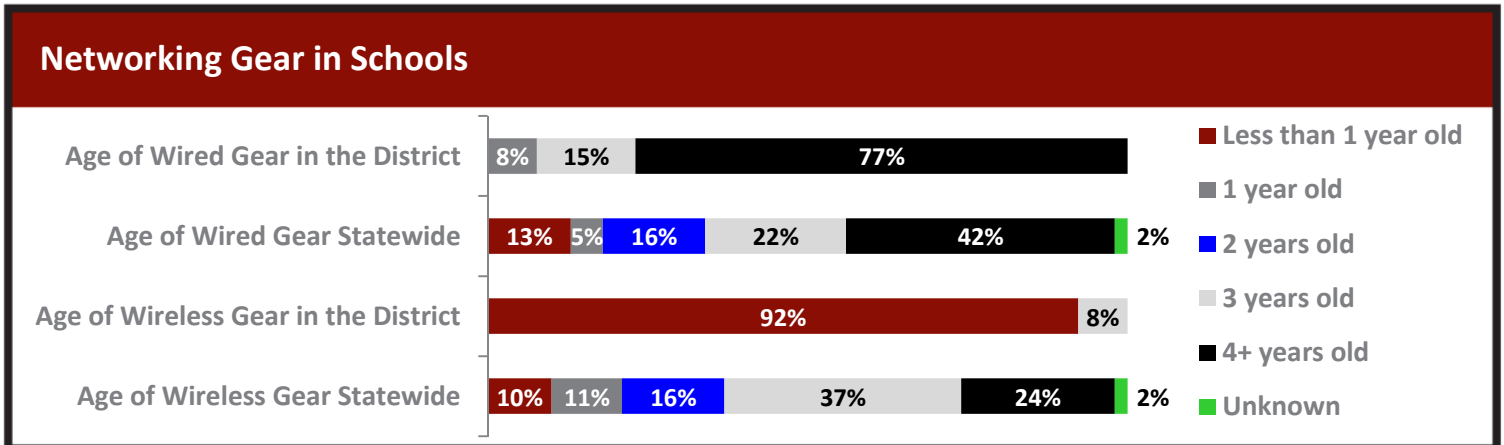
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	1,719	283
Laptops Using Windows OS	329	77
Mac Desktops	0	0
Mac Laptops	0	0
Google Chromebooks	469	16
Windows Tablets	26	1
Android Tablets	0	0
iOS Tablets	84	30

1.01 Wi-Fi Access Points
Per Classroom Compared to
0.58 Statewide

District Facts

Population	14,636
Student Body Size	2,849
Number of Schools	13
Urban/Rural	Rural
Median Household Income	\$40,383
Poverty Rate	27.7%
Free/Reduced Lunch Eligible	78.5%

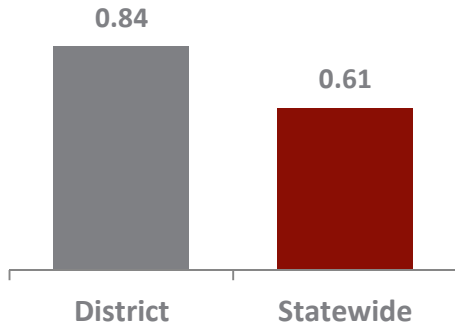




Sevier School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	223	7
Laptops Using Windows OS	0	2
Mac Desktops	992	251
Mac Laptops	62	44
Google Chromebooks	1,643	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	960	232

1.25 Wi-Fi Access Points

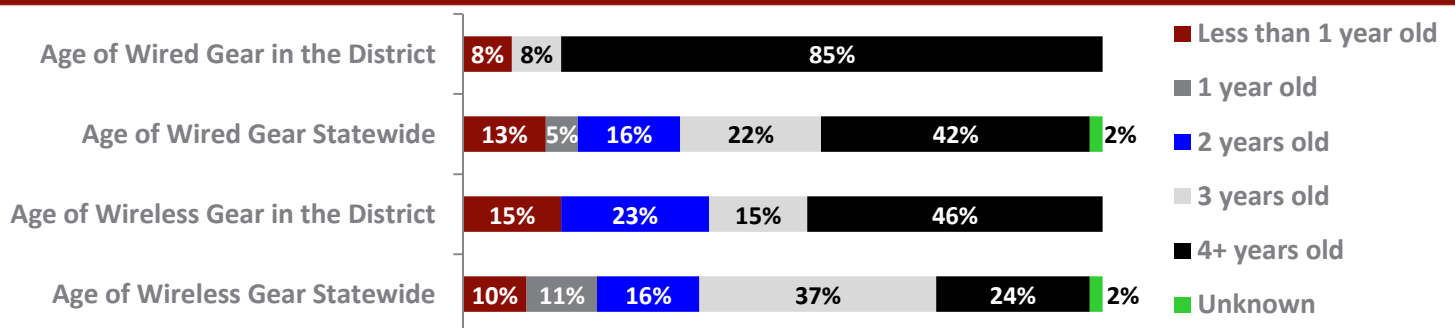
Per Classroom Compared to

0.58 Statewide

District Facts

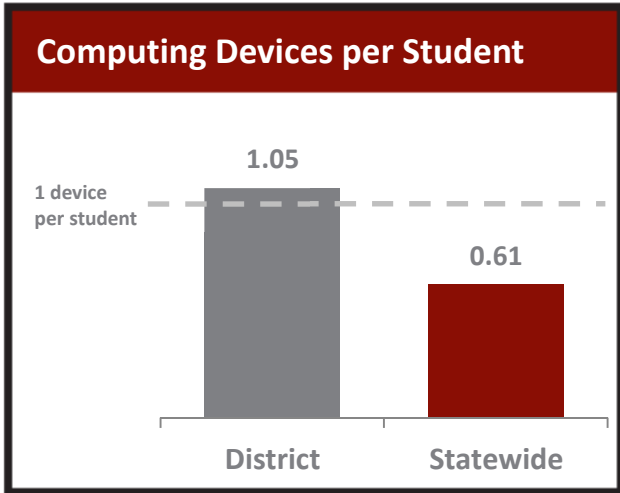
Population	20,812
Student Body Size	4,602
Number of Schools	13
Urban/Rural	Rural
Median Household Income	\$46,229
Poverty Rate	15.4%
Free/Reduced Lunch Eligible	46.4%

Networking Gear in Schools





South Sanpete School District



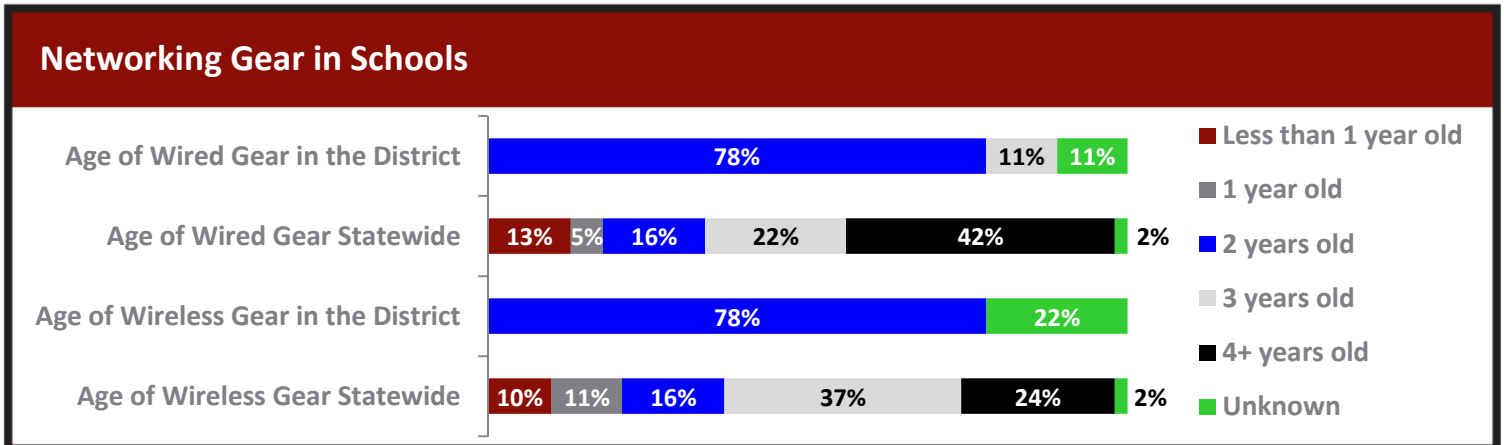
Computing Devices Used in Schools

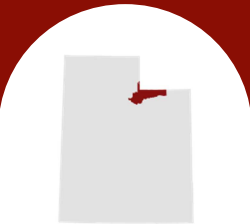
Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	78	17
Laptops Using Windows OS	0	2
Mac Desktops	528	221
Mac Laptops	255	64
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	2,452	230

0.90 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

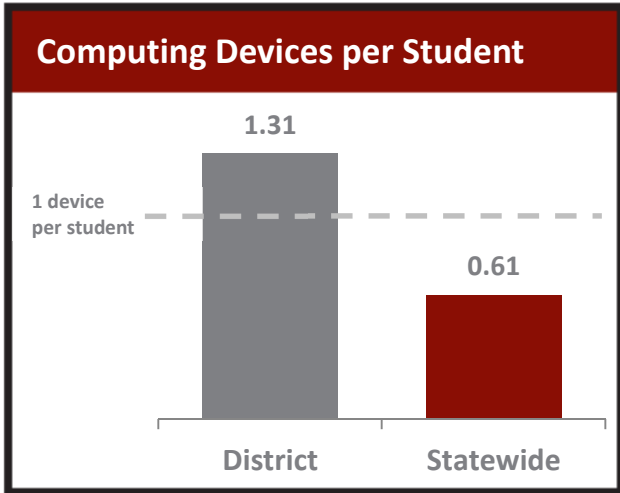
District Facts

Population	16,036
Student Body Size	3,169
Number of Schools	9
Urban/Rural	Rural
Median Household Income	\$48,598
Poverty Rate	18.7%
Free/Reduced Lunch Eligible	53.7%





South Summit School District



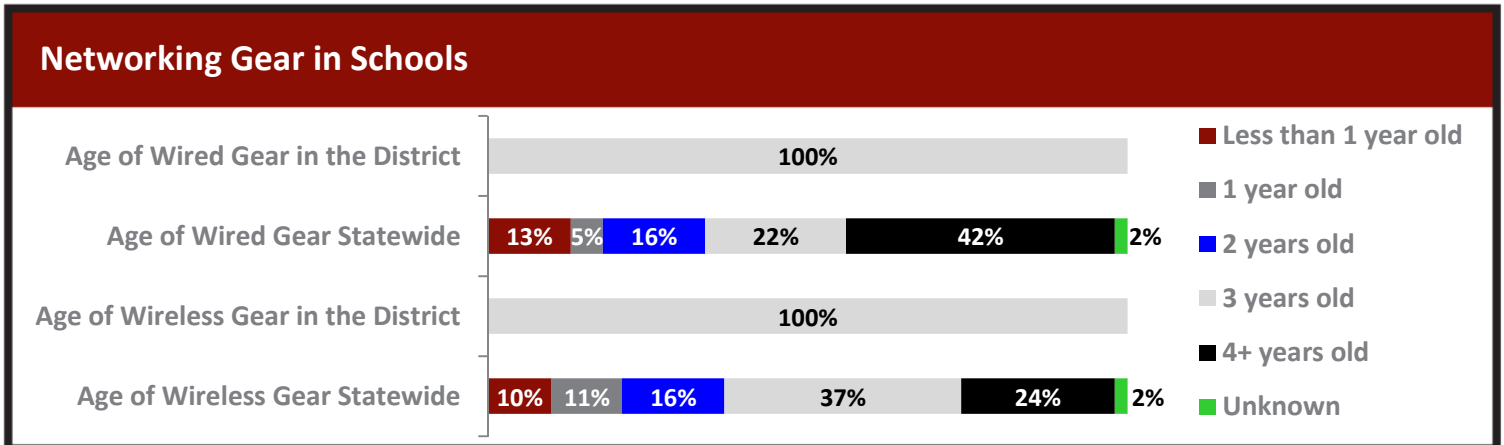
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	35	0
Laptops Using Windows OS	0	1
Mac Desktops	326	104
Mac Laptops	1,530	104
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	90	104

0.57 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

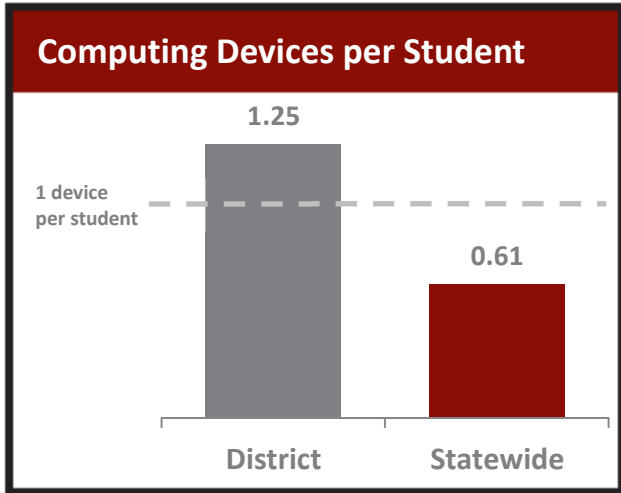
District Facts

Population	7,462
Student Body Size	1,510
Number of Schools	3
Urban/Rural	Rural
Median Household Income	\$60,036
Poverty Rate	6.6%
Free/Reduced Lunch Eligible	22.5%





Tintic School District



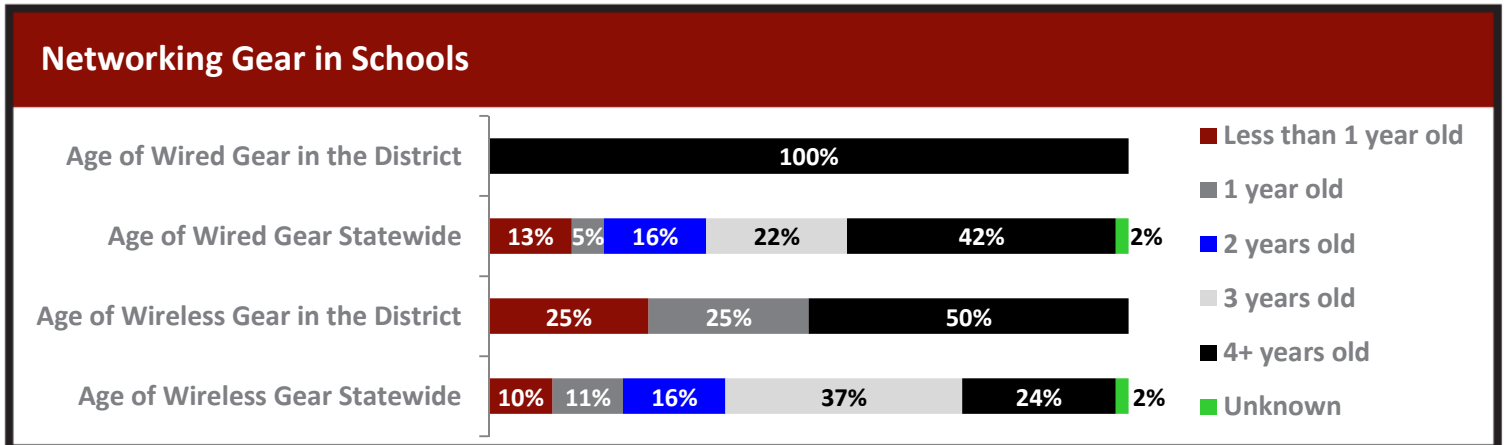
Computing Devices Used in Schools

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	84	26
Laptops Using Windows OS	45	20
Mac Desktops	6	4
Mac Laptops	0	7
Google Chromebooks	182	9
Windows Tablets	0	1
Android Tablets	11	1
iOS Tablets	1	6

0.54 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	777
Student Body Size	263
Number of Schools	4
Urban/Rural	Rural
Median Household Income	\$40,833
Poverty Rate	14.9%
Free/Reduced Lunch Eligible	47.7%

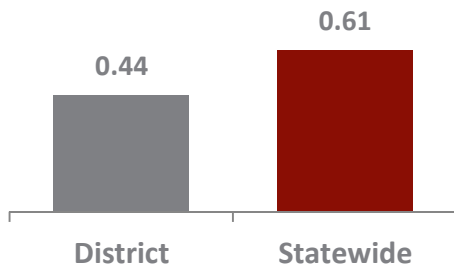




Tooele County School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	3,006	945
Laptops Using Windows OS	2,019	214
Mac Desktops	185	14
Mac Laptops	128	33
Google Chromebooks	30	1
Windows Tablets	0	0
Android Tablets	78	3
iOS Tablets	652	295

0.57 Wi-Fi Access Points

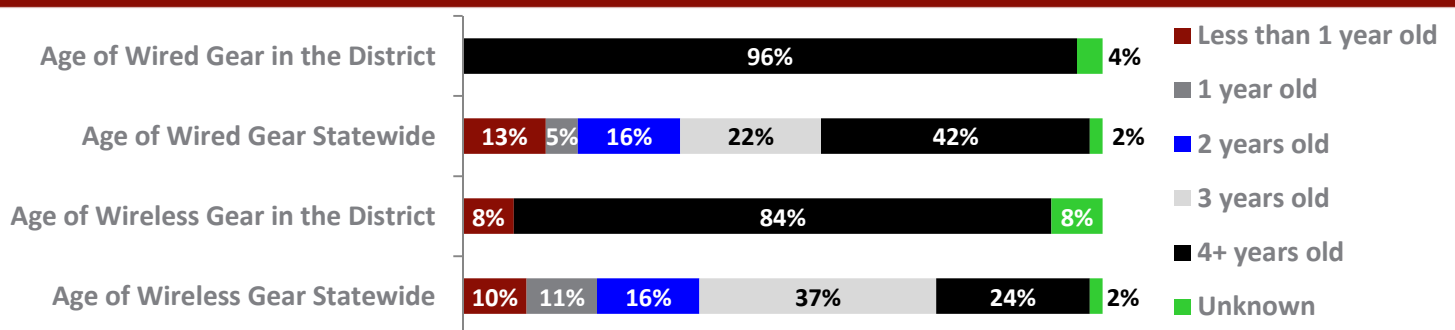
Per Classroom Compared to

0.58 Statewide

District Facts

Population	59,973
Student Body Size	13,870
Number of Schools	25
Urban/Rural	Urban
Median Household Income	\$61,412
Poverty Rate	8.7%
Free/Reduced Lunch Eligible	38.0%

Networking Gear in Schools





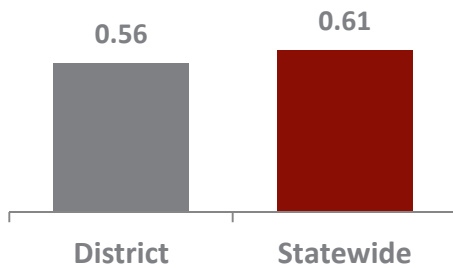
UTAH

School Technology Inventory

Uintah School District

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	1,968	589
Laptops Using Windows OS	71	99
Mac Desktops	74	24
Mac Laptops	5	13
Google Chromebooks	1,419	35
Windows Tablets	0	6
Android Tablets	0	0
iOS Tablets	917	254

0.28 Wi-Fi Access Points

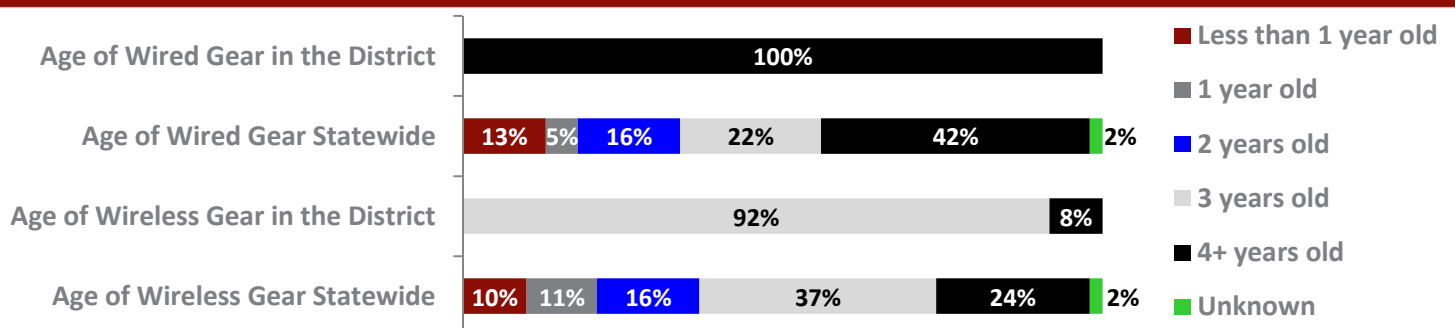
Per Classroom Compared to

0.58 Statewide

District Facts

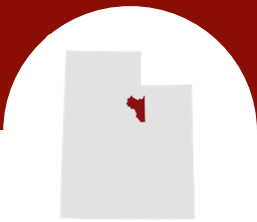
Population	34,576
Student Body Size	7,895
Number of Schools	12
Urban/Rural	Rural
Median Household Income	\$62,067.00
Poverty Rate	11.6%
Free/Reduced Lunch Eligible	34.9%

Networking Gear in Schools

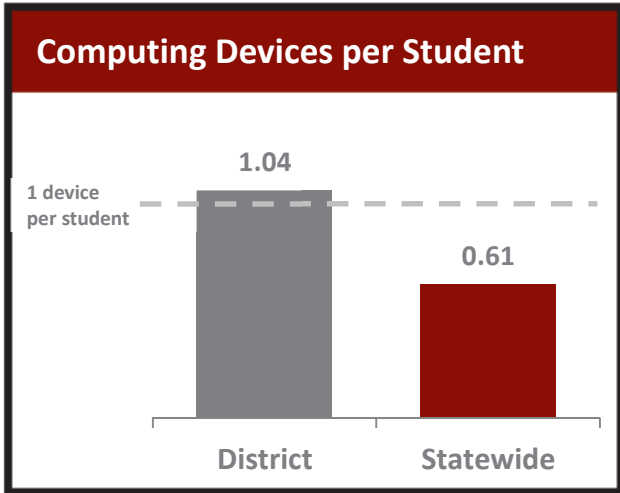


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Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.



Wasatch County School District



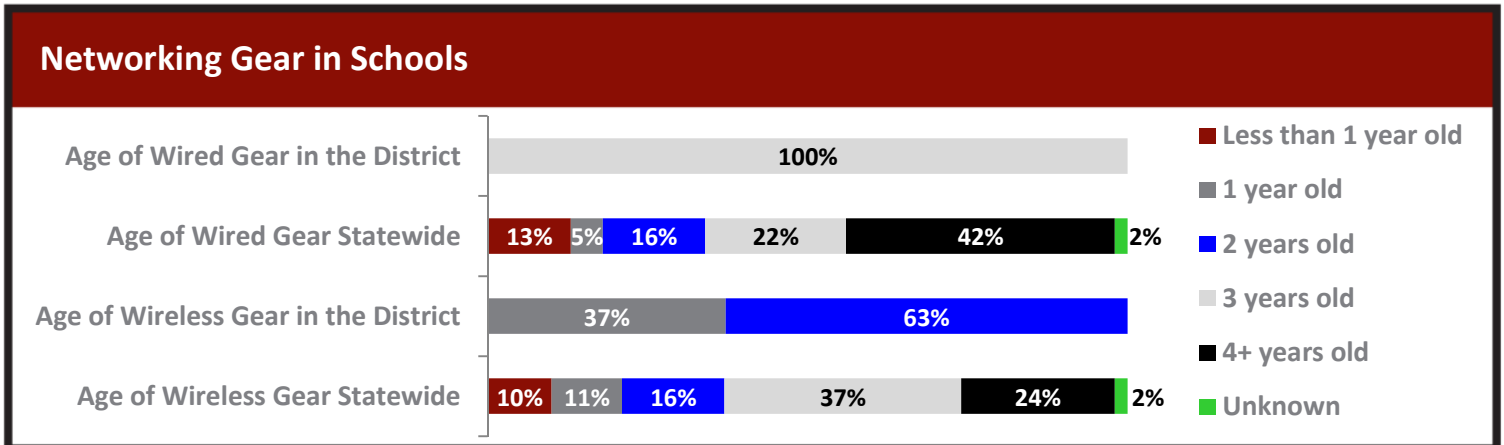
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	544	100
Laptops Using Windows OS	5,894	651
Mac Desktops	86	6
Mac Laptops	0	8
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	30	244

0.74 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

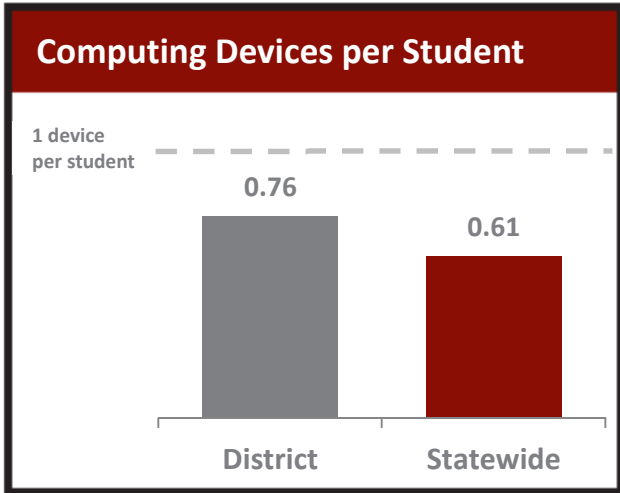
District Facts

Population	25,550
Student Body Size	6,311
Number of Schools	8
Urban/Rural	Rural
Median Household Income	\$65,050.00
Poverty Rate	9.5%
Free/Reduced Lunch Eligible	32.3%





Washington County School District



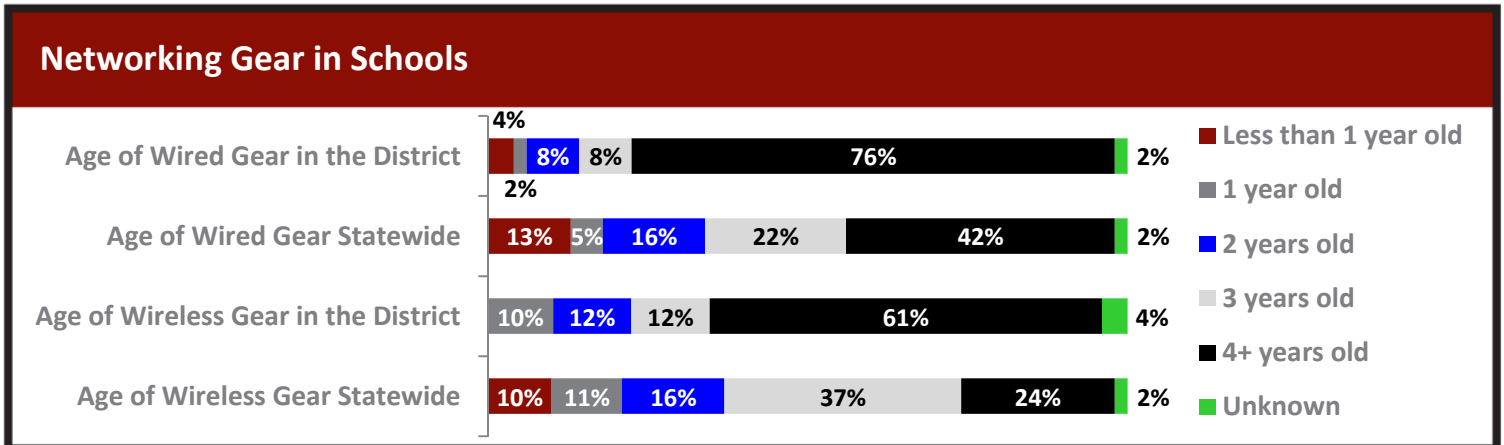
Computing Devices Used in Schools

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	5,099	1,758
Laptops Using Windows OS	2,033	523
Mac Desktops	311	58
Mac Laptops	51	92
Google Chromebooks	9,941	114
Windows Tablets	5	10
Android Tablets	506	42
iOS Tablets	2,902	852

0.54 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

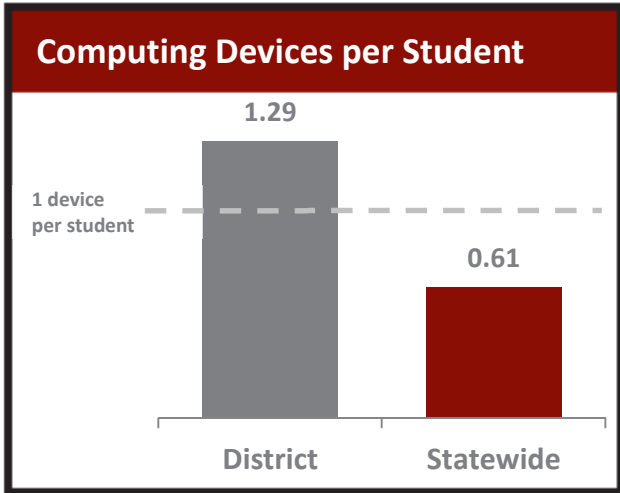
District Facts

Population	144,844
Student Body Size	28,076
Number of Schools	49
Urban/Rural	Urban
Median Household Income	\$49,279.00
Poverty Rate	15.3%
Free/Reduced Lunch Eligible	44.2%





Wayne County School District



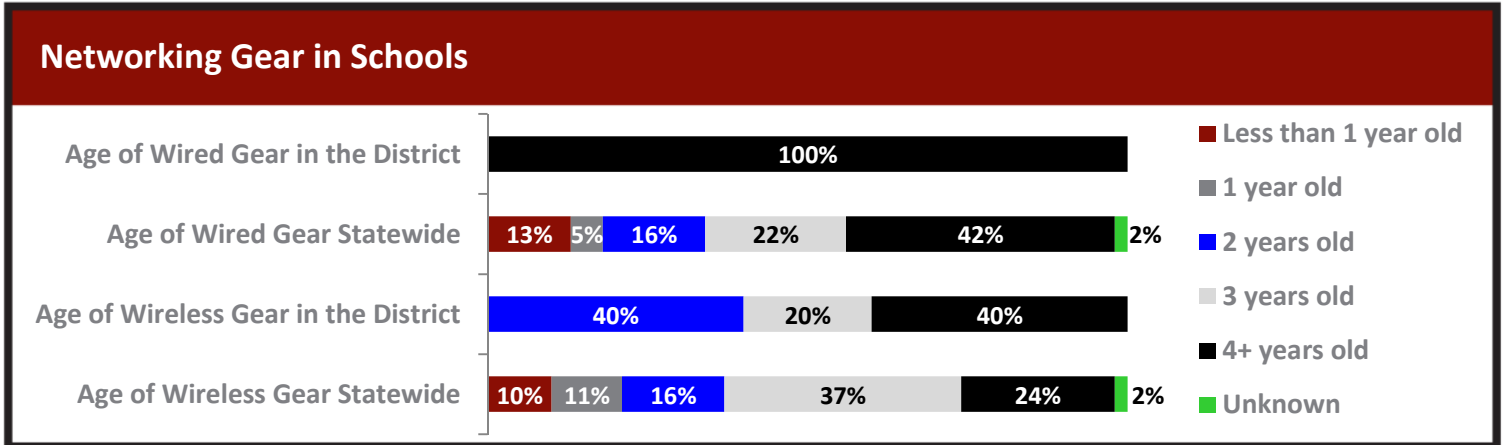
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	66	13
Laptops Using Windows OS	0	2
Mac Desktops	52	47
Mac Laptops	27	10
Google Chromebooks	0	0
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	482	50

0.60 Wi-Fi Access Points
 Per Classroom
 Compared to
0.58 Statewide

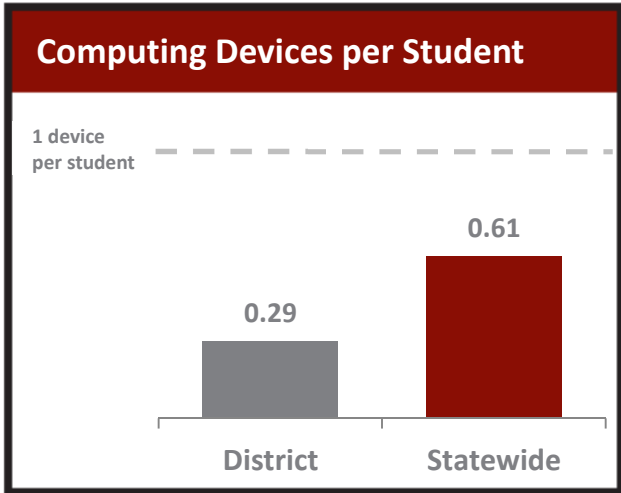
District Facts

Population	2,742
Student Body Size	485
Number of Schools	5
Urban/Rural	Rural
Median Household Income	\$41,458.0
Poverty Rate	18.2%
Free/Reduced Lunch Eligible	45.6%





Weber School District



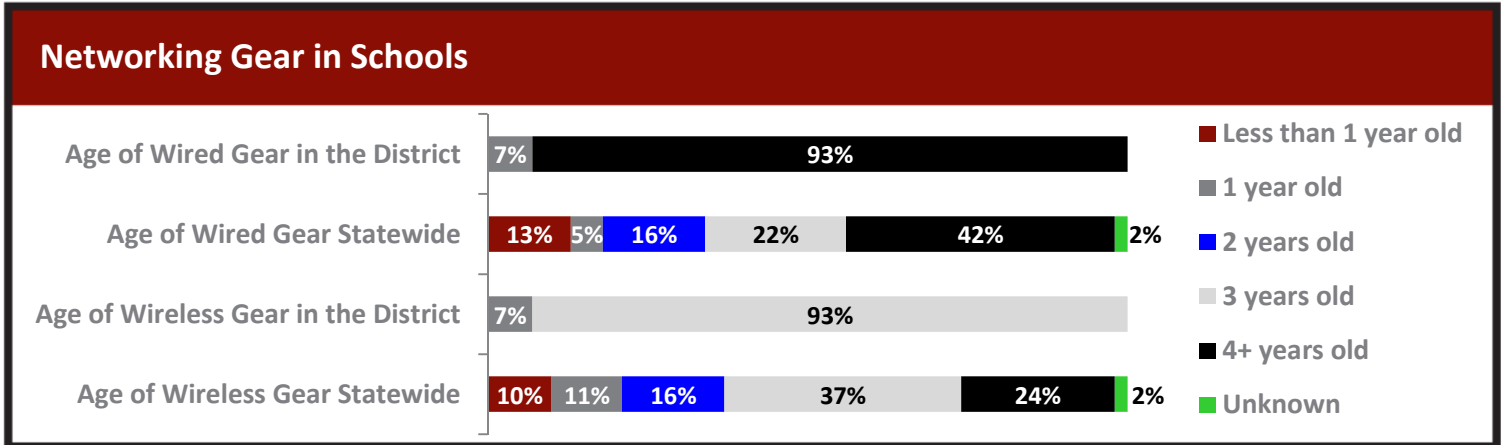
Computing Devices Used in Schools

	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	4,454	2,052
Laptops Using Windows OS	666	340
Mac Desktops	0	0
Mac Laptops	0	0
Google Chromebooks	1,274	12
Windows Tablets	0	0
Android Tablets	455	74
iOS Tablets	2,303	242

0.55 Wi-Fi Access Points
 Per Classroom Compared to
0.58 Statewide

District Facts

Population	152,540
Student Body Size	31,081
Number of Schools	43
Urban/Rural	Urban
Median Household Income	\$64,670.0
Poverty Rate	7.1%
Free/Reduced Lunch Eligible	37.4%



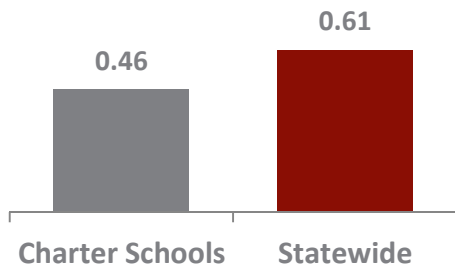
Appendix F: Charter Schools Summary Page



Utah Charter Schools

Computing Devices per Student

1 device per student



Computing Devices Used in Schools

Total for Student Use Total for Teacher or Administrator Use

Desktops Using Windows OS	4,009	1,554
Laptops Using Windows OS	7,178	2,483
Mac Desktops	698	215
Mac Laptops	2,092	1,376
Google Chromebooks	10,591	205
Windows Tablets	151	46
Android Tablets	600	40
iOS Tablets	3,843	1,541

0.54 Wi-Fi Access Points

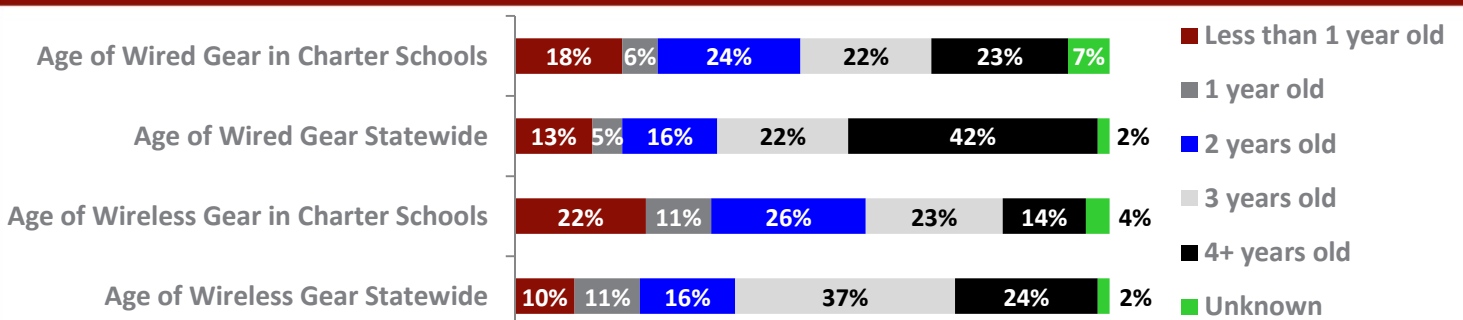
Per Classroom Compared to

0.58 Statewide

Charter School Facts

Student Body Size	64,416
Number of Schools	121

Networking Gear in Schools



Appendix G: Regional Map

Map of Regional Breakdown

