Student Technology and Connectivity

Introduction

Since school facilities closed on March 17th, OSPI has initiated a number of data collections from school districts to inform topics that were not included in our standard ongoing data collections. Summary statements about some of the data (below) and the associated Excel file are a compilation of four of these data collections related to technological access for students (see Table 1: Data Source Overview). The data collections were not carried out with adequate time for all districts to respond, so OSPI has created statewide estimates via a weighted adjustment using student enrollment counts. Districts were asked to provide estimates, and their interpretations of questions as well as availability of precise information may have varied. Therefore, one should use caution when interpreting these data, particularly when attributing precision or in looking at specific district information.

Data Source Overview

Data Sources	Number of Districts Responding	Percent of Students Enrolled in Responding Districts	Reporting Timeframe	Intended Use
Spring Survey: Week of April 12–18	237	76%	Week of April 12 through April 18	Weekly data collection during facilities closures
Spring Survey: Week of May 17–23	263	86%	Week of May 17 through May 23	Weekly data collection during facilities closures
Reopening WA Schools	294	92%	Start of 2020–2021 School Year	Component of district reopening plans
Home Digital Access	134	62%	August 2020–September 2020	Inform connectivity RFP

Internet and Device Access

At the start of the 2020–21 school year, between 80–89% of students have adequate technology and connectivity to learn remotely. If we assume it is 84%, a middle part of that range, then around 960,000 students statewide have adequate technology and connectivity to learn remotely at the start of the 2020–21 school year. Conversely, an estimated 16% (estimated 184,000 students statewide) do not have adequate technology and connectivity.

Data Source and Calculations:

- Reopening WA Schools—Start of the 2020–21 school year
    - Please identify the percentage of students that you believe have adequate technology and connectivity to learn remotely during the 2020–21 school year
- Districts were asked to select a response from the following options: 0–30%, 31–40%, 41–50%, 51–60%, 61–70%, 71–80%, 81–90%, 91–100%
- Percentages were converted to counts based on April 1st CEDARS enrollment.
- The statewide estimate assumes that reporting districts are representative of all districts.

Internet Access

Several factors result in a margin of error around student connectivity estimates. Districts may have made estimates without current information from families, some districts were not able to complete the survey within the timeline, and calculation methods can have a minor impact on totals. The data cited below reflect the information collected in the different surveys.

When school facilities closed in March, 76% of students (estimated 870,000 students statewide) had adequate internet access.

Data Source and Calculations:

- Home Digital Access Data Collection
    - What percentage of students do you estimate had adequate internet services when school facilities closed in March?
- Percentages were converted to counts based on April 1st CEDARS enrollment.
- The statewide estimate assumes that reporting districts are representative of all districts.

In May, an estimated 81% of students had reliable broadband internet connectivity.

Data Source and Calculations:

- Spring Survey—May 17 through May 23
    - What percentage of your students do you estimate have reliable broadband (high-speed) internet connectivity adequate to support synchronous online learning (real-time video) from home?
- The estimate assumes that reporting districts are representative of all districts.

In August, reporting districts indicated 74% of students had adequate internet to support synchronous online learning. Around 18% of students had internet that was inadequate for synchronous online learning and 8% did not have internet.
Data Source and Calculations:

- Home Digital Access Data Collection—August
    - Of enrolled students, how many do not have internet access?
    - Of enrolled students, how many do you estimate have adequate internet access to support synchronous online learning?
    - Of enrolled students, how many do you estimate have inadequate internet access to support synchronous online learning?
- Percentage is based on the numbers of students reported within these three questions.

At the start of the 2020-21 school year, an estimated 80-89% of students had adequate technology and connectivity to learn remotely. (see above in "Internet and Device Access")

Devices and Access

In April, 84% of students (estimated 965,000 students statewide) had a device adequate for online learning. Conversely, 16% of students (estimated 184,000 students statewide) did not have a device adequate for online learning.
Data Source and Calculations:

- Spring Survey—May 17 through May 23
    - What percentage of your students do you estimate currently have a device (district-issued or owned by the student) at home that is adequate for online learning?
- Percentages were converted to counts based on April 1st CEDARS enrollment.
- The statewide estimate assumes that reporting districts are representative of all districts.

In August, an estimated 3% of students (estimated 30,000 statewide) did not have a learning device available. An additional 10% of students (estimated 115,000 statewide) were thought to be sharing a learning device.
Data Source and Calculations:

- Home Digital Access Data Collection
    - Of enrolled students, how many do you estimate have no device available?
- Percentage is based on student enrollment counts for the 2020–2021 reported by districts in the Home Digital Access Data Collection.
- The statewide estimate assumes that reporting districts are representative of all districts.

District-Issued Devices

In April, 48% of students (estimated 545,000 students statewide) had a district-issued device to use at home.

Data Source and Calculations:

- Spring Survey—April 12 through April 18
    - Of the students who have a desktop or laptop computer at home, please estimate the percentage that are district-owned.
- Percentages were converted to counts based on April 1st CEDARS enrollment.
- The statewide estimate assumes that reporting districts are representative of all districts.

In May, 61% of students (estimated 705,000 students statewide) had a district-issued device to use at home.

Data Source and Calculations:

- Spring Survey—May 17 through May 23
    - What percentage of your students do you estimate currently have a district-issued device to use at home?
- Percentages were converted to counts based on April 1st CEDARS enrollment.
- The statewide estimate assumes that reporting districts are representative of all districts.

In August, 74% (estimated 820,000 students statewide) had a district-owned device for use at home.

Data Source and Calculations:

- Home Digital Access Data Collection
    - Of enrolled students, how many do you estimate have a school/district-owned learning device for use at home?
- Percentage is based on student enrollment counts for the 2020–2021 reported by districts in the Home Digital Access Data Collection.
- The statewide estimate assumes that reporting districts are representative of all districts.